A CRM APPROACH TO BUYER-SELLER RELATIONSHIPS IN WHITE GOODS SECTOR: A CASE ANALYSIS

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FOREWORD

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CONTENTS

ABBREVIATIONS  VI

LIST OF TABLES  VII

LIST OF FIGURES  VIII

ÖZET  IX

SUMMARY  X

1. INTRODUCTION  1

2. THE ESSENTIALS OF INDUSTRIAL MARKETING  4
   2.1. Industrial Marketing Characteristics  4
   2.2. Developments in Procurement  5
   2.3. Purchase Situation Classification Dimensions  8
       2.3.1. Product Characteristics  8
       2.3.2. Market Characteristics  11
       2.3.3. Supplier Characteristics  13
       2.3.4. Relationship Characteristics  15

3. BUYER-SELLER RELATIONSHIPS IN INDUSTRIAL MARKETS  21
   3.1. Industrial Buying Behaviour  21
       3.1.1. The Buying Process  21
       3.1.2 The Buying Center  28
           3.1.2.1 Dimensions of the Buying Center  28
           3.1.2.2 Roles in the Buying Center  30
       3.1.3 Other Factors Affecting the Buying Process and the Buying Center  31
       3.1.4. Selection Criteria in Buying Process  32
   3.2. The Interdependency Framework in Industrial Markets  34
       3.2.1. Interdependency Cube  36
       3.2.2. Strategies for Industrial Markets  40
           3.2.2.1. Coercive Strategies  40
           3.2.2.2. Competitive Strategies  41
           3.2.2.3. Cooperative Strategies  42
           3.2.2.4. Supportive Strategies  43
       3.2.3. Relationships in Industrial Markets  44
3.2.3.1. Command Relationships 44
3.2.3.2. Divergent Relationships 45
3.2.3.3. Coordinative Relationships 47
3.2.3.4. Keiretsu Relationships 48
3.3. CRM in Industrial Buyer-Seller Relationship Context 49

4. CRM IN BUYER-SELLER RELATIONSHIPS IN INDUSTRIAL MARKETS 51
4.1. Definition of CRM 51
4.2. Customer Life Cycle and Customer Lifetime Value 52
  4.2.1. Customer Acquisition 52
  4.2.2. Processing Customer Contracts 53
  4.2.3. After Sales Phase of Customer Life Cycle 54
4.3. Customer Relationships 57
4.4. CRM Development Process in Buyer-Seller Relationships 59
  4.4.1. Awareness 59
  4.4.2. Exploration and Expansion 60
    4.4.2.1. Attraction 61
    4.4.2.2 Communication and Bargaining 61
    4.4.2.3. Expectation Development and Norms 62
4.5. Commitment and Trust in CRM Development 63
  4.5.1. Commitment 63
  4.5.2. Trust 65
    4.5.2.1. Organizational Trust 65
    4.5.2.2. Personal Trust 67
    4.5.2.3. Trust Building Measures 68
4.5.3. Bonds in Buyer-Seller Relationships 69
  4.5.3.1 Technical Bonds 70
    4.5.3.2. Time Bonds 70
    4.5.3.3. Knowledge Bonds 71
    4.5.3.4. Social Bonds 71
    4.5.3.5. Legal and Economic Bonds 71
    4.5.3.6. Other Bonds 72
4.6. Capabilities of Electronic Vehicles in Buyer-Seller Relationships 74
  4.6.1. Electronic Vehicles 75
  4.6.2. Extranet 76
    4.6.2.1. Extranet Applications 78
    4.6.2.2 Extranets’ Impact on Business Relationships 79
4.6.3. Evaluation of Electronic Vehicles and Extranets 79
4.7. An Integrated Model for Industrial Markets 81
  4.7.1. Factors Determining The Level of the Demand For Knowledge And Cost Sharing 81
    4.7.1.1. Nature of the Product and Process 83
    4.7.1.2. Buyer Product Specific Competence 84
    4.7.1.3. Turbulence in the Buyer’s Environment 84
  4.7.2. Factors Influencing the Level of the Capacity Of Knowledge And Cost Sharing 85
    4.7.2.1. Seller’s Competence Buyer Relationship Management 85
5. FIELD RESEARCH: CASE STUDY ON CRM IN BUYER-SELLER RELATIONSHIPS IN WHITE GOODS SECTOR

5.1. Methodology

5.1.1. Research Purpose
5.1.2. Research Approach
5.1.3. Research Method
5.1.4. Data Collection Method
5.1.5. Sample Selection
5.1.6. Analysis of Data

5.2. Findings of the Research Study

5.2.1. Presentation of the Case Company
5.2.2. Characteristics of Products of E.G.O.
5.2.3. Characteristics of White Goods Market from a Supplier View
5.2.4. Characteristics of the Relationships with the Manufacturers
5.2.5. The Selected Buyers’ Perceptions of the Case Company
5.2.5.1. Characteristics of Buyer A and Its Perceptions of the Relationships with E.G.O. Turkey
5.2.5.2. Characteristics of Buyer B and Its Perceptions of the Relationships with E.G.O. Turkey
5.2.5.3. Characteristics of Buyer C and Its Perceptions of the Relationships with E.G.O. Turkey
5.2.5.4. Characteristics of Buyer D and Its Perceptions of the Relationships with E.G.O. Turkey

5.2.6. The Interdependency Framework of the Case Company
5.2.7. CRM aspects of the relationships of E.G.O. Turkey with the buyers
5.2.7.1. Electronic Vehicles regarding the Buyer-Seller Relationships

5.3. Managerial Implications for the Application of the Integrated Model to E.G.O. Turkey

5.3.1. Demand for Knowledge and Cost Sharing
5.3.2. Capacity of Knowledge and Cost Sharing
5.3.3. Success of the Buyer-Seller Relationship

6. CONCLUSIONS AND IMPLICATIONS

6.1. Conclusions
6.2. Managerial Implications
6.3. Further Research Directions

REFERENCES

APPENDICES

Appendix A. Buyer Questionnaire Form
Appendix B. Seller Questionnaire Form
Appendix C. Product Portfolio of E.G.O. Turkey
ABBREVIATIONS

CRM : Customer Relationship Management
E-Trade : Electronic Trade
R&D : Research and development
E-Business : Electronic Business
E-direct marketing : Electronic Direct Marketing
E-mail : Electronic mail
ROI : Return on Investment
CEO : Chief Executive Officer
DMU : Decision Making Unit
GM : General Motors
EDS : Electronic Data Systems
CD-ROM : Compact Disc-Read-Only Memory
EDI : Electronic Data Interchange
CAM : Computer Aided Manufacturing
LIST OF TABLES

Table 3.1. Buying Tasks and Priorities ................................................................. 27
Table 3.2 Dickson's Vendor Selection Criteria .................................................. 33
Table 4.1. Trust building measures ..................................................................... 68
Table 4.2. Stability of bonds in industrial relationships ....................................... 73
Table 4.3. Similarities and differences between Internet, intranets, extranets ....... 77
Table 5.1. Alternative Data Collection Methods in Case Study Approach .......... 93
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Title</th>
<th>Page Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Structure of the thesis</td>
<td>2</td>
</tr>
<tr>
<td>2.1</td>
<td>ABC Analysis Sample (Leenders and Blenk horn, 1988)</td>
<td>9</td>
</tr>
<tr>
<td>2.2</td>
<td>Types of Relationships (Bensaou, 1999)</td>
<td>16</td>
</tr>
<tr>
<td>3.1</td>
<td>The Interdependency Cube (Dabholkar and Neeley, 1998)</td>
<td>37</td>
</tr>
<tr>
<td>3.2</td>
<td>The Temporal Grids (Dabholkar and Neeley, 1998)</td>
<td>39</td>
</tr>
<tr>
<td>4.1</td>
<td>Process for specific customers/customer groups (Greenberg, 2001)</td>
<td>55</td>
</tr>
<tr>
<td>4.2</td>
<td>Customer life cycle (CLC) and customer lifetime value (Rackham, 1999)</td>
<td>55</td>
</tr>
<tr>
<td>4.3</td>
<td>Stages of a Buyer-Seller Relationship. (Dwyer et al., 1987)</td>
<td>58</td>
</tr>
<tr>
<td>4.4</td>
<td>Relationship between trust and commitment (Sharma, 1993)</td>
<td>64</td>
</tr>
<tr>
<td>4.5</td>
<td>An Integrated Model of Buyer-Seller Relationships in Industrial Markets (adopted from Shi and Doll, 2001)</td>
<td>82</td>
</tr>
<tr>
<td>5.1</td>
<td>Selected Research Methodology</td>
<td>90</td>
</tr>
<tr>
<td>5.2</td>
<td>Matrix organization of E.G.O. Turkey</td>
<td>97</td>
</tr>
<tr>
<td>5.3</td>
<td>Supplier Evaluation Criteria in White Goods Sector</td>
<td>101</td>
</tr>
<tr>
<td>5.4</td>
<td>Market Share of the White Goods Manufacturers</td>
<td>105</td>
</tr>
<tr>
<td>5.5</td>
<td>Purchasing Interfaces of Buyer A and E.G.O.</td>
<td>106</td>
</tr>
<tr>
<td>5.6</td>
<td>Purchasing Organization of Buyer B</td>
<td>109</td>
</tr>
<tr>
<td>5.7</td>
<td>Purchasing Organization of Buyer C</td>
<td>111</td>
</tr>
<tr>
<td>5.8</td>
<td>Purchasing Interfaces of Buyer C and E.G.O.</td>
<td>112</td>
</tr>
<tr>
<td>5.9</td>
<td>Purchasing interfaces of Buyer D and E.G.O.</td>
<td>116</td>
</tr>
<tr>
<td>5.10</td>
<td>Responsible staff involved in the relationships with the International Customers</td>
<td>120</td>
</tr>
<tr>
<td>5.11</td>
<td>Responsible staff involved in the relationships with the National Customers</td>
<td>120</td>
</tr>
<tr>
<td>5.12</td>
<td>Login page to ERP-EGOnet</td>
<td>122</td>
</tr>
<tr>
<td>5.13</td>
<td>Link to order entry</td>
<td>123</td>
</tr>
<tr>
<td>5.14</td>
<td>Order Entering</td>
<td>123</td>
</tr>
<tr>
<td>5.15</td>
<td>Product Complexity Ranking</td>
<td>125</td>
</tr>
<tr>
<td>5.16</td>
<td>The Relationship Between Cost and Knowledge Sharing and Product</td>
<td>125</td>
</tr>
<tr>
<td></td>
<td>Complexity of the Buyer</td>
<td></td>
</tr>
<tr>
<td>5.17</td>
<td>The Relationship Between Cost and Knowledge Sharing and the Buyers’ Competence on the Products of E.G.O.</td>
<td>126</td>
</tr>
<tr>
<td>5.18</td>
<td>The Relationship Between Cost and Knowledge Sharing and the</td>
<td>127</td>
</tr>
<tr>
<td></td>
<td>Turbulence in Buyers’ Environment</td>
<td></td>
</tr>
<tr>
<td>5.19</td>
<td>The Relationship Between Cost and Knowledge Sharing and the IOS Usage</td>
<td>129</td>
</tr>
<tr>
<td>5.20</td>
<td>Success of Buyer-Seller Relationship Between E.G.O. and the Selected Buyers</td>
<td>130</td>
</tr>
</tbody>
</table>
ÖZET


Bu tezin bulguları endüstriyel pazarda alıcı-satıcı ilişkileri için geliştirilen bir modelin beyaz esya sektörü göz önünde tutularak özelleştirilmiş şeklindedir, beyaz esya sektöründeki alıcı-satıcı ilişkilerinin incelenmesine yönelik bir vaka çalışması ve vaka çalışması yapılan şirketin analizi olarak değerlendirilebilir. Model, vaka analizi yapılan ve beyaz esya sanayiinde tedarikçi olarak faaliyet gösteren şirketin gözünde bulundurularak geliştirilmiştir ancak beyaz esya sektöründe faaliyet gösteren şirketlerin alıcı-satıcı ilişkilerine yönelik olarak genelleştirilebilir. Tez, ampirik bir çalışmayı kapsamakta olup yapılan görüşmeler ve ikinci veri baz alınarak hazırlanmıştır.

Bu tezde, aşağıdaki belirtilen konulara değinilmiştir:

- Endüstriyel pazarlamanın temelleri
- Endüstriyel alıcı-satıcı ilişkileri
- Endüstriyel pazarı yönelik CRM konuları
- Endüstriyel pazarda alıcı-satıcı ilişkilerini ve sonuçlarını etkileyen faktörler
- Endüstriyel pazarda beyaz esya sektörüne özel alıcı-satıcı ilişkilerinin vaka analizi yapılmış şirket esas alınarak değerlendirilmesi

ix
SUMMARY

The relationship between suppliers and industrial buyers has changed, so nowadays stable relationships between suppliers and customers is a prerequisite for a good business climate. Demand for lower prices, decrease in profit margins, shorter product life cycles and global competition are some of the forces affecting suppliers and customers in the industrial market to have stronger relationships. As a result, the management of relationships between companies has become more important since success of the relationships is one of the factors that determine the competitiveness of both the buyer and the seller.

The findings of this thesis are a customized model for buyer-seller relationships in white goods sector; considering a developed model for industrial markets, a case study about the analysis of the buyer-seller relationships in white goods sector and the analysis of the case company. The model is developed considering the case company, who is operating in white goods sector as a supplier, but can be generalized to the whole white goods sector. This thesis includes an empirical study based on the interview findings and secondary data.

This thesis reveals insights about the following subjects:

♦ Essentials of industrial marketing

♦ Industrial buyer-seller relationships

♦ CRM issues in industrial markets

♦ Factors influencing the outcomes of the buyer-seller relationships in industrial markets

♦ Evaluation of buyer-seller relationships in industrial markets specific to white goods sector taking the case company into account
1. INTRODUCTION

Buyers in industrial markets have several options for controlling access to key resources: vertical integration through entry into new businesses; mergers with, or acquisition of suppliers; domination through size; or contracting and structuring relationships with independent suppliers. These strategies, however, are most likely beyond the financial constraints, narrow managerial expertise, or limited business objectives of most seller firms.

The tendency of most of the buyers is to outsource the activities and to focus on their core business. To achieve this, they have to be involved in consistent relationships with the suppliers. The success of the buyer-seller relationship will definitely impact the competitiveness of both the buyer and the seller. Considering this situation, this thesis focused on buyer-seller relationships within the customer relationship management (CRM) scope.

The main purposes of this thesis is to analyze buyer-seller relationships in industrial markets, to integrate CRM aspects to buyer-seller relationships, to develop a model on buyer-seller relationships in white goods sector and to adapt this model to a seller company, which is the supplier of white household appliance manufacturers.

The thesis is structured on basis of these issues in sequence: Introduction, theoretical framework, case study, evaluation of the theory and case analysis, conclusions. The structure of the thesis is revealed by Figure 1.1.
In this thesis, the essentials of industrial marketing were mentioned in detail, the types of buyer-seller relationships and strategies were defined within the interdependency context, the definition and stages of CRM and the aspects of CRM also covered by the industrial markets were mentioned. The bond types were analyzed. The case company was analyzed in accordance with the theory base of the thesis. Finally a model was developed considering the aspects of industrial markets and CRM issues. Taking the model as basis the case company was analyzed.

In the 2nd section, the essentials of industrial marketing are mentioned. This section gives the insight about the recent developments in procurement, purchase situation classification criteria.

In the 3rd section, general aspects of buyer-seller relationships in industrial markets are mentioned. The factors that determine the buying behaviour in industrial markets
are defined. The relationship types and the strategies for the relationships in industrial markets are mentioned in detail within the interdependency context.

In the 4th section, the principles of CRM are explained. The electronic vehicles in CRM applications and the CRM stages are mentioned. Trust and commitment aspects are explained in detail. The classification and the aspects of bonds are mentioned. An integrated model for industrial markets, specific to white goods sector, is demonstrated.

In the 5th section, the methodology of the research is defined in detail, the case company is introduced and evaluated taking the theoretical basis of the thesis into consideration. The theoretical model, developed in the 4th section, is applied to the case company and the evaluations on this application are mentioned.

Finally, comments on the findings of the study, own evaluations and suggestions of the researcher and further research directions are stated.
2. THE ESSENTIALS OF INDUSTRIAL MARKETING

To give a fundamental understanding of the marketing environment of industrial markets, it is crucial to explain industrial marketing, its characteristics and how it differentiates from traditional consumer marketing. Industrial marketing is often called business-to-business marketing or organizational marketing. These concepts will be treated as similar and the term industrial marketing will be used. Reeder, Brierty, and Reeder (1987) define industrial marketing as all activities involved in the marketing of products and services to organizations that use products and services in the production of consumer or industrial goods and services, to facilitate the operation of their enterprises. Industrial marketing can be therefore more briefly defined as all activities that are directed toward satisfying wants and needs of organizations. (Baker, 1994)

2.1. Industrial Marketing Characteristics

The characteristics of industrial marketing and what distinguishes it from consumer marketing are several. Below present the main characteristics of industrial marketing.

The main market characteristic is that the number of companies supplying a market, and the number of customers that constitute the market for a specific segment, product or service are usually much smaller than in consumer marketing. The products in an industrial market are not purchased for personal use and there is a greater concern for the technical performance, delivery times, and other service and support of the products. The buying procedure is more complex, includes larger volumes, takes longer time and involves more buyers and specially trained people than in consumer markets. Demand is derived and usually economic cycle dependent. (Kotler and Armstrong, 1996)

The seller and buyer also usually engage in deep and stable relationships over a longer period. Physical distribution is very important and in industrial markets, the
channels are more direct. The way to reach the customer in industrial marketing is mainly through personal selling. Price tends to be less important in industrial markets, as quality of the products, delivery procedures, service, and technical support are more critical factors. Price stabilization is common and the low number of firms in one industry (oligopoly) willingly responds to competitors’ moves in price. (Reeder, 1987; Hutt and Speh, 1995; Webster, 1984)

2.2. Developments in Procurement

The field of procurement has evolved significantly in the last two centuries. The growing pressure of global competition and less internal value creation has led both, academics and practitioners, to the recognition, that procurement is an important contributor to a firm’s competitive advantage (Reck and Long, 1988). An appropriate sourcing strategy can contribute significantly in order to increase profitability, market share and technological innovation. This increased importance of procurement relates to three classic criteria of industrial performance as “cost, quality and technology” (Donada, 1999). Clear developments include supply base rationalization, longer-term contracts and relationships, increased outsourcing of professional and staff functions and acquisition of components rather than individual parts (Lyons, Kranchenberg and Henke, 1990). Companies increasingly outsource activities to suppliers in order to specialize and to focus on their core competences and thereby become more effective and efficient (Gupta and Zhender, 1994). Due to this increased outsourcing of production to external suppliers (Brandes, 1994) and the decreased degree of vertical integration (Grant and Gadde 1984; Ford, 1992) the suppliers are pushed to cooperate (Lilliecreutz, 1998). Specialization has been an industry trend for some time however it accelerated in recent years. “Increasing technical complexity and diversity that makes it more and more difficult for a single company to be at the edge of several different technological areas at the same are pointed out as rationale” (Gadde and Snehota, 1999). Because purchase costs account on average for more than 40% of total expenses, they are clearly a major area for potential cost savings. Besides cost benefits purchasing and supply management has a major impact on quality. Companies have tended to concentrate on their core competences with the aim to increase effectiveness and efficiency. The need to nurture core competences has lead to an increased emphasis on outsourcing
(Venkatesan, 1992). This development reduced a company’s internal added value in the product value chain to its core competences and at the same time the supplier’s influence on quality increased to a dominant role in some cases. A further lever for growing importance of procurement has been the shortening life cycles of new technologies.

Companies have focused on highly customized supplies instead of purchasing commodities. They have handed-over product responsibility and risk to their suppliers to cope with increased product development pressure (McMillan, 1990). Early and extensive supplier involvement has shortened the product development process and has been an important source of innovation (Gadde and Mattsson, 1987). Especially the need to ensure manufacturing flexibility, which enables a firm to introduce new products more quickly and to parry competitive threats by modifying existing products has also necessitated a more intense interaction with suppliers (Carter and Narasimhan, 1990).

By means of information systems integration, concepts such as vendor-managed inventory and continuous replenishment, have lead to tremendous cost savings. Suppliers have been able to provide information about experience with competitors (Scott-Morton, 1991). By implementing concepts, such as simultaneous engineering with the supplier, the innovation process has been speeded up. “Time is the secret weapon of business” (Womack, 1990). Apart from shorter cycle times in the development phase, intensive cooperation with suppliers can increase the product quality and the probability of technical product success. The uncertainties that are inherent market relationships coupled with the bounded rationality of decision makers have made it likely, that suppliers and buyers will seek to standardize their transactions by developing more established repeat relations with each other (Provan, 1993) based on a long term perspective (Kalwani and Narayandas, 1995).

Additional to improved product quality, a joint product development with the supplier has lead to more commitment of both parties. The focus of attention has shifted towards the significance of cooperative buyer-seller relationships to “enable purchasing to support a firm’s strategic positioning”. (Based on these trends one of the most important objectives of the purchasing function is the development of a supplier network, since a firm’s ability to produce a quality product at a reasonable
cost and in timely manner is mainly influenced by its suppliers’ capabilities. A company’s strategy to operate with various suppliers utilizes a portfolio of relationships to meet the requirements of different types of transactions. (Robert and Mackay, 1998) Cooperation with suppliers becomes a critical process, “which can significantly contribute to reaching the company’s objectives in terms of cost, quality and time to market and to hedging risk, in particular strategic risk, in sharp increase as a result of the growing interdependence between the companies and their suppliers”. (Bouchard, 1998) Sheth and Sharma (1997) point out four underlying reasons for supplier relationships: “increased cost efficiency, increased effectiveness, enabling technologies and increased competitiveness”. Firms conclude that they will more readily attain long-term cost reduction by forming closer working relationships with “key” suppliers. However, partnering does not necessarily guarantee success as it causes costs, high resource intensity and risk of dependency. The relationships need to be adapted to the specific purchase situation. Araujo (1999) provides evidence through a case analysis, that the efficiency of the relationships is greatly dependent on matching the management of the interface with its requirements. Productivity-targeted relations require a different management than relations established for creation innovations.

Depending on external contingencies for the development of appropriate relationship types, different governance structures and relational designs might be used. Bensaou (1999) showed, that firms “balance a portfolio of different types of relationships rather than rely on one type” which leads to the key question: Which kind of supplier cooperation needs to be established in which purchasing situation to contribute to the success of a company? Or in other words, under which circumstances should a firm try to establish a relationship with its suppliers?

The appropriate analysis of the purchasing situation is even more important since the establishment of electronic marketplaces and web-supported trading, builds a new dimension for purchasing with reduced interpersonal contact but transactional focus. In a nutshell E-trade offers an even more different approach to do business and as such decision of how to interact with the supplier base or parts thereof becomes more critical. (Kaplan and Sawhney, 2000)
In the literature various dimensions for structuring the purchasing situation have been developed. However an integrated model is missing. For classifying industrial goods, Copeland developed already in 1924 the "commodity approach". Based on this product typology various approaches for structuring industrial goods have been developed in the late 1960s and 1970s in the Industrial Marketing literature.

It is necessary to integrate several aspects by building a systematic and consistent framework, which enables managers to identify the appropriate purchasing strategy depending on the situational circumstances.

2.3. Purchase Situation Classification Dimensions

In the past, portfolio models have been successfully used for assessing more efficiently a company's position in respect to its current position, the projected future and the future desired positions in various dimensions (Markowitz, 1952). The pioneering portfolio theory for management of equity was developed by Markowitz in 1952. In the field of industrial marketing and purchasing, several portfolios have been developed for evaluating customer and supplier relationships since the early 1980s. The different approaches can be structured by four dimensions: product, market, supplier and relationship characteristics.

With the term purchase situation all relevant forces and influences related to the acquisition of required materials, services and equipment, which have a potential impact on the way buyers and sellers work together are considered. The following four dimensions underline the magnitude of various aspects impacting the sourcing environment.

2.3.1. Product Characteristics

The most frequently cited product characteristic affecting the purchase situation is the purchasing volume (Robinson 1967), which can be measured in three dimensions: monetary spent, number of parts or physical size. The economic volume is analyzed by applying an ABC analysis, which clusters the money spent in three categories (Leenders and Blenkhorn 1988). A sample ABC analysis, evaluating the correspondence between the number of suppliers and the spent
money, is revealed in Figure 2.1. The biggest share of the money spent on materials is caused by a few suppliers, while the rest of the money spent is allocated to higher number of suppliers.

![Diagram of ABC Analysis Sample (Leenders and Blenkhorn, 1988)](image)

This classification differentiates suppliers with significant spent from the mass of suppliers with only small purchase volume and clearly demonstrates the economic importance of the supplier. Especially in the industrial production industry the ABC-analysis is very helpful, since the majority of the purchase spent is usually caused by only few material categories in this industry.

Number of parts can be mentioned as a second characteristic of volume, which is particularly important in discrete production. But besides economic volume and number of parts, a third volume characteristic; the physical size can also have an important business impact, especially for products, which need large storage space. In order to reduce inventory carrying cost for large products, just-in-time order policies are widely applied. Therefore, some authors not only categorize the monetary sourcing spent, but also number of parts and physical volume.

Nevertheless, relying on purchase volumes alone can sometimes be misleading. The cheapest component is, in the long run, not necessarily the least expensive. Once the cost of poor quality is factored, the cheapest component may well be the most expensive one (Burt 1989). Decisions on sourcing strategies cannot only be
based on purchase value or volume; the perceived risk has to be evaluated (i.e. financial risk, performance risk, social risk etc. Therefore Olsen and Ellram (1997) emphasize the necessity to evaluate product and purchase importance concurrently. Not only the value of the product but also the risk of the purchase should be considered. The purchase importance is detailed by economic factors in terms of "dollar value and the impact on the company's profits", by competence factors, which "describe the extent to which the item purchased is part of the company's core competences". (Olsen and Ellram, 1997) The closer the purchased product is to the core competences of the firm, the greater is the strategic importance of the purchased good. Product importance as "the extent to which a consumer links a product to salient enduring or situation specific goals" is a broader definition for product characteristics. Measuring the product importance by assessing the centrality of the product to the customer's goals with the dimensions; "neither important nor unimportant" to "absolutely essential" is suggested. (Bloch and Richins, 1983) This evaluation criterion is based on the industrial marketing literature, where authors argue the "degree of essentiality".

The product importance is not an inherent product characteristic. The way it is perceived by the buyer will rather depend on the "product's ability to satisfy the goals of the buying firm". Product importance is also influenced by the risk of the supply for the production process, if the delivery is delayed. However, not only risks due to delays have to be included in the product importance evaluation, but also functional and qualitative aspects relating to product performance, financial factors or social effects. (Metcalf and Frear, 1993) The potential risk or uncertainty can be differentiated in exogenous or endogenous components. Exogenous uncertainty cannot be influenced by buyer or supplier, since it is more market driven, whereas endogenous uncertainty can be influenced by buyer or supplier. Product importance also refers to the position of the supply in the value chain of the producing company, which then determines a potential impact of short innovation and product cycle of the supply.

The last characteristic, determining the purchase importance, is the number of purchase transactions caused by a supply. Products with an extremely high number of transactions have a high importance, as they cause a dominant amount of
transactions costs. Correspondingly, the organizational buying behaviour theory distinguishes between "heavy versus light" used products. (Webster and Wind, 1972) The number of purchase transactions determines the intensity of personnel involvement, which has a direct impact on the purchase importance.

Another product segmentation dimension that is used to evaluate the product complexity and standardization is the “degree of product customization”, which can be reflected in product specification, delivery agreements and specific payment schemes (Hakansson and Östberg, 1975). Hakansson and Östberg (1975) differentiate in three product categories: completely standardized products, moderate complex products and highly complicated products. Depending on the complexity of the purchased goods they separate three organization types along with the marketing functions: N-organization (i.e. referring to the exchange of a completely standardized product), A-organization (i.e. referring to the exchange of a product of moderate complexity) and C-organization (i.e. for exchanges of highly complicated products). Ford (1980), Metcalf and Frear (1993) mention adaptations, which occur, when "one party in a relationship alters its processes or the item exchanged to accommodate the other party". Adaptations develop over time by implying cost intense learning process. Some of the adaptations take place in form of specific investments or projects, such as the acquisition of particular machinery or a change of systems. Adaptations can be grouped in different types, such as technical, knowledge-based, administrative, economic and legal adaptations (Johanson and Mattsson, 1987) and may include customizing products, financial terms, information sharing routines, pricing, inventory stocking policies, delivery schedules and production processes. Johanson and Mattsson (1987) go further by specifying adaptations between buyers and suppliers in terms of knowledge by acting together in some technical development matters. The product specification dimension is frequently used in the automotive industry, where only a limited number of suppliers deliver highly customized products.

2.3.2. Market Characteristics

For classifying a supplier relationship, not only the product specific characteristics are important. Many different market aspects influence the purchasing situation, although they may not be fully influenced by both parties of the procurement
process. One frequently used segmentation dimension is the "supply risk" determined by production shortages, product availability and availability of alternatives, which is the "degree to which a buying firm has alternative sources of supply to meet a need", on time delivery, quality acceptance or seasonality. The differentiation is made between "internal and external supply risk". Company external risks are influenced by supply problems with substitutes, seasonality, transport logistics complexity and delivery time, whereas internal risk factors comprise the possibility of indoor production, availability of production know-how and product and production complexity (Lamming, 1996).

The second market characteristic besides supply risk is the buying power. (Lamming, 1996) For defining the buying power, which describes the governance in the purchasing situation, several market indicators have to be summarized, such as industry growth and exit barriers, number of competitors, the number of suppliers and all understanding of the rivalry in the market. Following traditional economic theory, when many suppliers compete to sell comparable goods, the market becomes a ready source of information on prices and quality, which strengthens the position of the buyer. The opposite occurs if only limited suppliers are in the market and the buying company has to cope with the uncertainty and dependence. The buying power is further described with three characteristics: dominant size of the buying company compared to the supplier, market knowledge advantage of the buyer and the service function of the supplier ("customer is king"). The geographic spread is a further sub-criterion of the buying power, which defines the buying company's opportunities concerning global sourcing strategies. Similar to the buying power definition, Watts (1992) talks about situational factors such as dynamism of price and quality. Especially if a buyer is implementing a multiple sourcing strategy, this is an indicator that the buyer's power is dominant to the seller's power. Thus, the buyer's bargaining position is particularly advantageous in a short-term and operational perspective. (Watts, 1992)

The third individual category of market characteristics represents the legal regulation factors. An identification of all legal aspects, that affect both the way commercial affairs should be conducted and also the way organizations should be managed, is relevant. The present legislation of the countries involved in the purchasing process clearly has to be taken into account in the development of
strategies for organizations in general and purchasing and supply management in particular. Specific regulations such as company law and laws governing the operation of public sector organizations, commercial and consumer law, health and safety legislation, employment and industrial relations and last but not least the law of carriage and transport have to be taken into account when characterizing the supplier market (Saunders, 1997). Summarizing the market attributes characterizing the purchasing situation, these factors are highly correlated to the product characteristics. As such they need to be integrated in all evaluation model together with the product aspects.

2.3.3. Supplier Characteristics

Supplier characteristics are only used by a few researchers for supplier relationship classification, whereas many supplier aspects have been evaluated in the literature dealing with the supplier evaluation and selection process. (Saunders, 1997; Bensaou, 1999)

The first group of characteristics is the supplier's resource base by means of revenues, assets, employees, R&D, production capacity and information. The definition of resources goes along clustering the resource base in four groups: financial resources, physical resources, personnel resources and information resources. In business market the buying company depends in part on these resources of the supplier. (Ford and Hakansson, 1999) Further the extent to which a trade partner provides important and critical resources by measuring the "interdependence magnitude" is discussed. Standard performance indicators as given in the annual report enable a differentiated judgment for the procurement management concerning financial stability of the supplier. For a better basis of price negotiation, supplier's margins need to be recalculated or at least estimated. The resource potential describes the supplier's commercial and financial competence, but the technical perspective is important as well. (Olsen and Ellram, 1997) The resources are clustered depending on their sustainability for the relationship. Less-sustainable resources as financial, special and human resources, e.g. diverse locations or managerial skills are defined. More sustainable resources are relational and organizational resources, e.g. cooperation and loyalty or operational linkages. Information sharing is considered to be the most sustainable resource.
The second group of supplier characteristics is the "supplier's competences"; including product, process, support functions and management capabilities, which is correlated to the previously mentioned dimension resource base. On the one hand the production process needs to be described concerning specific technology, but also reliability in respect to quality, delivery and punctuality of delivery is included in this segmentation dimension. An overall strategic fit between buyer and supplier has to be approved. Additionally, characteristics such as flexibility, service and communication are integrated in the competence perspective. Another main competence characteristic is the innovation competence of the supplier, which is a "longer-term factor". Due to expanded emphasis on outsourcing the supplier's impact on a buyer's value chain has increased tremendously. Suppliers, who are delivering complete system solutions, have major influence on the buyer's product and process innovativeness. Therefore the supplier's innovation potential can be critical to the buyer's innovation success. (Lamming, 1996)

A further supplier characteristic is the company network, in which the supplier is embedded. The network of further relationships of the supplier can be described by the effect, these other relationships may have on the buyer: "neutrality effect, duplication effect, reference effect, prohibition effect, combination effect, deficiency effect, competition effect, access effect, avoidance effect and hierarchy effect". These criteria evaluate the benefits of the supplier's network for the buying company and influence the buying company's network position. Based on its network position, the buying company gets access to external resources, which it is depending on. (Johanson and Mattsson, 1987)

For evaluating the future potential, the dimension of supplier development potential by classifying the supplier as "standard" or "key supplier" can be mentioned. This development potential of the supplier company has to be determined along the supplier’s business processes in production, logistics and R&D. Olsen and Ellram (1997) measure a similar aspect, which they call "relative supplier attractiveness" with respect to future changes. They use factors such as "the ability to cope with changes in technology, the types and depth of supplier's current and future technological capabilities, the supplier's current and future capacity utilization, supplier's speed in development, ability to cope with changes in the environments" (Olsen and Ellram, 1997). In this dimension the learning potential is also integrated,
which the supplier offers to the buying company. These factors make a company choose a specific supplier. Some of the factors increasing supplier’s attractiveness are also used in a supplier selection situation. The last supplier dimension is the supplier value, which summarizes the various reasons why a buyer should work together with a certain supplier. Along with Walter (2000), who analyzes the value functions from a supplier perspective, the value functions are differentiated in direct (profit, volume and safeguard function) and indirect ones (innovation development, market, scout and access function). Direct value functions such as purchase cost savings, large purchase volume and safeguard suppliers (i.e. suppliers who deliver even if it may be a relatively unfavourable deal), contribute directly to the buyer's profitability independent from further supplier relationships. Indirect value functions such as joint innovation development with the supplier, development of further sources due to the reference of a supplier or information gathering due to the supplier's scout function capture connected effects in the future or in further supplier relationships. (Walter, 2000). The fulfilment of these various value functions determines the buyer value of a certain supplier relationship.

2.3.4. Relationship Characteristics

In the past decade relationship characteristics supporting the success of relationships have been in focus of relationship marketing research (Walter, 2000).

Basis of any form of cooperation is trust. Trust issues will be briefly mentioned in the following sections of the thesis. Smeltzer (1997) describes a trustworthy supplier with the following attributes: "does not act in a purely self-serving manner, accurately discloses relevant information when requested, does not change supply specifications, standards or costs to take advantage of the other parties and generally acts according to normally accepted ethical standard". Another definition of trust is "confidence or predictability in one's expectations about another's behaviour, and confidence in another's goodwill". Morgan and Hunt (1994) conceptualize trust in terms of one party having confidence in an exchange partner's reliability and integrity. Trust occurs for Smeltzer (1997) because of corporate identity, image and reputation. On the one hand a set of perceptions or personal constructs about the own company are important (corporate identity), on the other hand the outside view of the company (corporate image) are levers for trust. Additionally "supplier
reputation" Smeltzer describes the actual attributes outsiders ascribe to the company. This describes the extent to which "firms and people in the industry believe a supplier is honest and concerned about its customers". (Smeltzer, 1997) Smeltzer (1997) is linking trust with corporate identity, image and reputation as follows: "Identity equals the extent to which we believe we can be trusted. Image equals the extent to which we believe others think we can be trusted. Reputation equals the extent to which others actually trust us". Butler (1991) identifies ten conditions of trust, namely availability, competence, consistency, discreetness, fairness, integrity, loyalty, openness, promise fulfilment and receptivity. Trust in supplier relationships is an important source of competitive advantage, since it "lowers transaction costs, facilitates investments in relation- specific assets and leads to superior information sharing routines". Especially for specific sourcing approaches such as "open book negotiations", where the supplier is required to "open its books" and expose secret and sensitive information to the customer, a trustful relationship is required for taking the explicit risk of information transparency. (Lamming, 1996) A trustworthy party is "known to reliably make good faith efforts to behave in accordance with prior commitments, makes adjustments in ways perceived as fair by the exchange partner and does not take excessive advantage of an exchange partner even when the opportunity is available". Trust in supplier relationship includes a certain degree of optimism, that vulnerable know-how will not be exploited or transferred to third parties without prior consent. The degree of trust can be measured by social embeddedness, institutionalized processes or routines for fairly and reliably dealing and alignment of economic incentives between the business partners. "Social relations, rather than institutional arrangement or generalised morality are mainly responsible for the production of trust in economic life." (Dyer and Chu, 2000)

Another aspect of trust is the environmental conditions in which, both the buyer and the seller are operating. Mutual trust between buyers and the sellers is likely to prevail under reasonably stable environmental conditions. Suppliers, that are working under highly uncertain environment may not foresee the trends in their market, can not accurately forecast demand. Specifically, the effects of trust and accordingly dependence on the buyer-seller cooperation are expected to be different in high and low environmental uncertainty cases. In the high uncertainty case, buyers need to develop strong relationships with their suppliers in order to be able to
survive in such a dynamic environment. This will require some basic level of
dependence on the supplier in the first place. But later in the development process of
the relationship in the long run, parties will learn each other’s tactics, behaviours
and future plans. This improvement lowers the effects of uncertainty for both the
supplier and the buyer because they now have reliable partners. In this phase of the
relationship, trust becomes a more influential factor. Based on this reasoning,
dependence on supplier is more important than trust in supplier in causing a buyer’s
cooperative behaviours when buyers perceive their environment highly uncertain.
On the other hand, as the environment becomes more stable, trust in supplier
emerges as a more important factor in generating cooperative behaviours (Sezen and
Yılmaz, 2001).

The second important lever for successful relationships is commitment.
Commitment issues will be briefly mentioned in the following sections of the thesis.
Commitment is defined along with Walter (2000) as a “kind of lasting intention to
build and maintain a long term relationship”. They differentiate between three types
of commitment: affective commitment, i.e. the positive attitude towards the future
existence of the relationship, instrumental commitment, i.e. whenever some form of
investment (time or other resources) is made and temporal commitment indicating
the timely component of the relationship. These three types point out, that "the
exchange partner believing that an ongoing relationship with another is so important
as to warrant maximum efforts at maintaining it". (Morgan and Hunt, 1994)
Bensaou (1999) refers to the instrumental dimension by analyzing the buyer’s and
supplier’s willingness for specific investments. However, once specific investments
have been committed, the buying situation becomes fundamentally transformed.
(Stump, 1995) Due to higher switching costs the specific supplier is not one
alternative out of several any more. The relationship types defined by the degree of
buyer’s and the supplier’s specific investments are presented in Figure 2.2.
Figure 2.2. Types of Relationships (Bensaou, 1999)

High commitment reduces the possibility to break a supplier relationship and increases the tendency to adapt to organizational and environmental changes. Due to high commitment the willingness is intense to accept common norms, procedures and interfaces.

This high level of commitment creates stability or continuity, which is another segmentation dimension of relationships. (Dyer and Chu, 2000) In their study Dyer and Chu refer to the automotive industry, where continuity is extremely important due to the regular model change and the need for a supplier to re-win the business. Continuity cannot only be expressed by re-winning the business after a model change, but also by the overall length of the relationship. Researchers have proved a strong correlation between the length of a relationship and trust, since trust develops and builds over time. Another lever for continuity is the reinforcement of relationships through adaptations; those adaptations make the relationship more endurable. Suppliers are especially committed to make "expensive adaptations when it is assured that the relationship will last long enough, so that the relationship specific investment will pay off ". (Johanson and Mattsson, 1987)

In Dyer's (1994) study of the Japanese automotive industry, Japanese suppliers reported, that roughly 22% of their total capital investments were so dedicated to their primary customer, that these customized physical assets could not be redeployed if the customer walked away. They fall in the "keiretsu- category", with roughly 30 suppliers of more than 300 suppliers. Keiretsu suppliers in the
automotive industry deliver parts, such as engine parts, body panels or seats. The relationships to those keiretsu-suppliers can be characterized by a "particularly high degree of stability and structure. The degree of customization underlines the supplier willingness to invest in the relationship. On the other hand it shows the trust and commitment of the buying company to rely on a single source, which decreases its replaceability of a certain supplier. (Dyer, 1994)

Gadde and Snehota (1999) define the fourth dimension of relationships as involvement by three characteristics: "coordination of activities, adaptations of resources and interaction among individuals". The activities carried out by the supplier and buyer can be more or less tightly coordinated, more or less specifically adapted to the requirements of the counterpart and the interactions can be more or less intense. Gadde and Snehota (2000) underline that close interaction among supplier and buyer makes their choices more interdependent and affects both, commitment and trust, in the relationship, which in turn influences coordination and adaptations.

The fifth factor characterizing a relationship is satisfaction. Satisfaction can be defined as "the degree to which the business transaction meets the business performance expectations of the partners". (Wilson, 1995) Wilson (1995) specifies satisfaction with the addition performance satisfaction, which includes both product-specific performance and non-product attributes. The level of performance satisfaction in the relationship is determined by the resources committed to the partnership and by the degree a commitment of the parties involved. Unless the buyer's needs can be satisfied, it is doubtful, that the relationship can achieve the desired level. For Gruen (2000) satisfaction is "the member's assessment of the relative value of the basic exchanges in the relationship". Satisfaction includes various characteristics of a relationship, such as "rewarding, profitable, instrumental, frustrating, problematic, inhibiting", thus dissatisfaction with an exchange partner may hinder morale, impede cooperation, precipitate litigation and fuel initiatives for protective legislation. The primary linkage between satisfaction and suppliers and buyers behaviours is generally considered to be loyalty, which is a sub-dimension of commitment. Satisfaction is likely to have some impact on retention and co-production. A relationship will not endure, if the supplier is unable to meet the buyer's expectations, then the buyer will seek alternative partners.
A sixth relationship characteristic is the existence of relationship promoters. Since all previously mentioned dimensions are subjective and dependent on personal judgment a relationship promoter has the important role to manage the interaction between supplier and buyer, so that trust, commitment, satisfaction, involvement and continuity can be built. The relationship promoter influences the stability effect of these characteristics, which guarantees a successful supplier relationship. He acts as an intermediary between supplier and buyer, who supports information exchange, identification and meeting of key players, coordination of activities and realisation of negotiation results. (Walter, 2000)

Reviewing the relationship characteristics emphasises the correlation and interdependence of all participating groups. Little satisfaction has a negative impact on the degree of trust, which then has an impact on and also describes the degree of involvement. (Walter, 2000)

All in all, these six factors need to be integrated within one dimension to be able to judge the weakness or strength of the relationship and its easiness or problematic nature.
3. BUYER-SELLER RELATIONSHIPS IN INDUSTRIAL MARKETS

3.1. Industrial Buying Behaviour

In industrial markets, the buying behaviour of the buyers is complex and has various affecting factors. The factors that determine the buying behaviour are more objective than in consumer markets. They are structured and can be categorised as; the buying process, the buying center and other factors, that affect the buying process and the buying center.

3.1.1. The Buying Process

In the following sections studies are reviewed that are related to the buying process in industrial markets. The emphasis is set on the buygrid framework elaborated by Robinson (1967) due to the acceptance of the model; it is also commonly referred to in literature (Moriarty, 1983). Buying is not an event, buying can be seen as a process where separate steps, stages and/or phases can be identified. "From the time at which a need arises for a product or service, to the purchase decision and its subsequent evaluation, a complex myriad of activities can take place" (Wind and Thomas, 1980). Cyert (1956) described the decision-making as three processes: 1) common processes, 2) communication processes and 3) problem-solving processes. Webster (1965) developed a four elements model to describe the buying process: "1) problem recognition 2) organizational assignment of buyer responsibility, 3) search procedures for identifying product offerings and establishing selection criteria, 4) choice procedures for evaluating and selecting among alternatives". Two years later, Robinson (1967) introduced the buygrid framework. The buygrid framework provides a frame of reference where the purchasing situations are designed to be general enough to apply to all purchases (Robinson 1967).

Weber, Current and Benton (1991) consider the selection of suppliers to be the most important part of the buying process selection is a process that involves careful
consideration of a number of factors, all of which will affect the definition of a quality resource for the service.

A description of the eight buy phases in the buygrid framework by Robinson (1967) is presented as follows:

- Phase one consists of two parts, the recognition of a problem and awareness that the solution may take the form of filling the need with a purchase.

- In phase two the decision-makers that are involved must in a specific way determine how the problem is to be solved. The buying influences seek answers to questions such as: "What application requirements must be met? What type of goods and services should be considered? In what quantities?"

- The third phase is in the beginning of an extension of the previous phase. The phase entails a translation of the need into a solution, which can be communicated to others.

- Phase four is related to the qualification of suppliers. The criteria for qualifying suppliers varies with the buying organization, the buying situation and the influences involved. The alternative sources are at this stage screened and evaluated.

- Phase five may in standardised procurements just involve checking a catalogue or telephoning the supplier in order to obtain information about prices and deliveries. In more complex situations the interaction may involve a series of counter-proposals and new offers with activities extending over many months.

- In phase six the offers from potential vendors are weighted and analyzed. During this phase the supplier is selected when the buying organization approves a proposal and rejects the others.

- Phase seven begins when an order is given to a vendor. However, the procurement is not completed until the item actually is delivered and accepted for use. The order routine involves internal and external activities.
• Phase eight includes questions such as how well the product solved the problem and how well the vendor performed. The feedback is of high importance if future procurement problems are to be handled more effectively.

These eight buy phases all explain how the buying process proceeds, but the buy-phases are closely interrelated. In practice, according to Robinson (1967), it may be difficult "and probably pointless" to derive every single phase and specify where it starts and ends.

The buying situation has long been recognised as vital. (Robinson, 1967; Webster and Wind, 1972). The eight buy-phases described previously in the buygrid framework can be combined with three basic buy-classes: 1) new task, 2) modified rebuy and 3) straight rebuy.

The buy-classes in Robinson (1967) can be described as follows:

**Straight Rebuy (SR):** The straight rebuy situation is the most common in industrial purchasing (Robinson, 1967). "The straight rebuy purchases describe the buying situation where the purchasing department reorders on a routine basis" (Zinszer, 1996). Most of the purchases are made on a routine basis no further information requirements and little effort in general. In this buy-class a "list" of acceptable suppliers exists, suppliers not on the list are not considered. In a straight rebuy there may occur some variations from time to time in the quantity, physical or chemical properties, delivery time, method of shipment or the price, so long as these changes does not entail a re-evaluation of the purchasing alternatives nor cause any changes in the procurement process and patterns (Robinson, 1967). A business buyer’s automated repurchases are the most sought after goal for any business marketer. Retention can only be achieved through repeated communication. These casual purchases involve very little information search and analysis and are of minor importance to the buyer, even though some routine low priority purchases are somewhat more important involving a moderate amount of analysis. At the minimum, such transactions require an offer and an acceptance as well as agreeing to terms used for continuous buying cycles. The growth of e-commerce means that more and more firms will be required to sustain buyer relationships for near repetitive buying through formal continuous process systems. Business buying firms are using the Internet to streamline the purchasing process through electronic procurement systems (i.e., automated order-reorder), joining
trading communities and turning to electronic trading marketplaces designed specifically for their industry (e.g., chemicals). The sales, even when routinized and repetitive, periodically requires after-purchase service. Post-service sales and support are costly due to their salient characteristics of variability and intangibility. Buyer after-purchase service requests must be tracked across all departments and therefore the many faces of the buyer. There has been a shift from phone and fax based service to e-mail and web-based access. Call centers and Web-based technologies now occupy a strategic position and affect buyer relations and corporate reputation. These operations are increasingly ensconced as integral part of business buyer relationship management. This approach allows the business marketer to learn about emerging service problems thereby an early warning system for detecting buyers who might slip into a modified rebuy mode (i.e., reconsidering vendors or even buying criteria) (Pawar and Driva, 2000).

**Modified Rebuy (MR):** The modified rebuy involves a somewhat familiar purchase with some new information requirements and some further evaluation of alternatives" (Dholakia and Johnson, 1993). The purchase can be an "upgraded straight rebuy" or a previously new task that has become more regular. The modified rebuy does not necessarily infer that the buyer will change either the item purchased or its source (Robinson, 1967). The result may be that the buyer purchases the same item from the same source. The distinctive element is the re-evaluation of alternatives, often of new ones.

Every buying situation can be characterised according to three factors: 1) newness of the problem, 2) information requirements and 3) considerations of new alternatives. Modified rebuy is a business buying situation that requires business marketers sustain interest in their firm's offering, so buyer loyalty does not waver, as well as luring active buyers from competitors. The simple modified rebuy involves a narrow set of choice alternatives and encompasses a moderate amount of search and analysis while the complex modified rebuy involves a larger choice set and has some uncertainty for the buyer. These buying situations represent key areas for sustaining financial performance through business buyer relationship management. The focus is on keeping buyers once obtained while attracting others from competitors. An important step in properly crafting e-business processes is providing the buyer with a single point of contact, either through the website or through contact with one, and
only one representative of the company. It is found out that many firms have streamlined buyer-related processes with 75% of firms surveyed providing one-stop contact while 81% resolve buyer complaints with only a few steps that are often hidden from the buyer. Such resolutions help to insure business buyers will not question or wander from their quasi-automatic buying mode. Equally important for the business marketer, these internal processes should be coordinated so that a business buyer’s request filtered through the contact point results in their receiving immediate assistance. By extension, e-direct marketing also helps sustain business buyer relationships. As a form of direct response marketing e-direct marketing can be used for obtaining and sustaining regular buyers helping to quantifying ROI for Internet relationship-based business. As a lowest cost structural tie, e-direct fosters the frequency of contacts at lower cost. Hence, continuous dialogue and realtime buyer service becomes viable. Lag times are forgotten, phone lines are no longer clogged and the potential for conflict is reduced making it less likely for buying firms to consider switching brands.

New Task (NT) Buying The new task refers to requirements or problems that have not arisen before. An internal stimulus or an environmental factor may trigger the recognition of a requirement or a problem. This type of buying situation requires extensive information and extensive evaluation of alternatives (Dholakia and Johnson, 1993). New tasks occur infrequently but are of high importance because the purchase sets a pattern for the more routine purchases that will follow (Robinson, 1967). Industrial buyers regard new tasks as important and associate them with high risk. New task is the most complex buy-class because of the large number of decision makers and buying influences that are involved. (Dholakia and Johnson, 1993)

New task buyers are an ongoing part of a mature business’s market development. First time buyers to a product class or a particular brand are inevitable over time. Relationship acquisition is an important part of a mature firm’s strategy. The greatest level of uncertainty confronts buying firms in a judgmental new task situation because of the technical complexity of the product class, the difficulty in evaluating alternatives and the heightened unpredictability of unproven suppliers. Strategic new tasks require even more effort invested given the extreme importance of the purchase to the firm’s overall well being. In either instance, the business marketer must be
able to "walk" buying center members through derivation of criteria and setting specifications given their respective emphasis on different buying criteria in this group choice-task process. For the business marketer, filtering these prospects can be costly, but less so, if done by e-mail, website visitor monitoring and visiting buyers' sites for market intelligence. Lead and opportunity management for the most qualified buying organizations, based on prior or emerging segments, can often prove useful for business marketers who want to capture new business. This approach can augment traditional sales force tele-prospecting methods for proactive identification and screening of new accounts. With no prior experience, a trust gap may occur given the physical separation of the seller and the buyer, the physical separations of the buyers from the sellers merchandise, and the overall perceptions of insecure transactions over the Internet fostering trustworthiness is required to make the initial sale. Three variables enhance trust: personal integrity, upheld promises and forgone opportunistic behaviour, all of which can only be determined over time. As the business buyer relationship matures and is enhanced, "past experiences" of the buyer, may come to include favourable perceptions, buyer loyalty and retention. New buyers are harder and more expensive to acquire than retained buyers and new products are harder and more expensive to sell than established products (Freidman and Furey, 1999). The cure for unfocused buyer relationship management is to balance the seeking of whole new vistas of opportunity, while assessing carefully where the bulk of profitable sales growth is really located. The further a firm gets away from its core base of existing buyers and products, the more likely it will lower profitability and weaken relationships with buyers. Such incremental steps must be taken slowly while mindful of current strengths on both sides of the seller-buyer dyad.

Another area, which can be viewed as a quasi - new task is "build to order manufacturing." The buyer has product class experience and brand familiarity but has decided to make their purchase with specifications not fully articulated. In order to build-to-order, companies (and their suppliers) must understand what buyers want (Holweg and Pil 2001). Product flexibility relates how well the company adapts a product to meet buyer specifications. By bringing customization closer to the buyer and managing product variety, buyers have an asset in what they obtain, minimizing production and supply chain costs. A business-marketing firm must not lose sight of
buyer requirements as they are ever changing. Table 3.1. presents a comparison of the core issues between the traditional and the contemporary perspective for each type of buying task.

Table 3.1. Buying Tasks and Priorities

<table>
<thead>
<tr>
<th>Buying Task</th>
<th>Traditional Perspective</th>
<th>Current Priorities</th>
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<tbody>
<tr>
<td>Casual repurchases-Straight Rebuy (No information search or analysis)</td>
<td>Buying center user or buyer reorders; sales representative stays in touch</td>
<td>Trading communities, automated reorder, e-procurement, inventory management</td>
</tr>
<tr>
<td>Routine low priority-Straight Rebuy (review options, non-routine some importance)</td>
<td>Sales representative keeps in regular contact with buyer; in supplier reinforce existing relationships; out supplier tries to break buyer routine</td>
<td>Trading market places(industry), online auctions, third party sites, offer &amp; acceptance needed for repurchase; 24/7, self service</td>
</tr>
<tr>
<td>Simple Modified Rebuy (evaluation of a narrow set of choice alternatives)</td>
<td>In supplier must prevent or precipitate; “first with the most”, our suppliers holds there until the buyer examines alternatives</td>
<td>Web pages central component of offering strategy, think like users, determine product &amp; site features, online catalog searches through “1000”s of pages, technical data updated in real time at lower cost.</td>
</tr>
<tr>
<td>Complex Modified Rebuy (a larger set of choice alternatives, criteria change)</td>
<td>The marketer’s task is similar, but greater effort required &amp; over a longer time frame</td>
<td>The marketer’s task is similar and may also include use of extranets, account tracking, supplier scorecards all with sales report augmentation</td>
</tr>
<tr>
<td>Judgmental New Task (unfamiliar with technology, criteria &amp; suppliers)</td>
<td>Early stages of involvement, mindful of changing needs, advantage to “first in offer” or in supplier on other items.</td>
<td>Synchronize web with traditional strategies &amp; one component of overall communication strategy, prospect identification and qualification</td>
</tr>
<tr>
<td>Strategic New Task (and the decision is extremely important to the firm)</td>
<td>Careful monitoring of changing needs</td>
<td>Cross organizational and cross functional dialogues Internet and Extranets augmented.</td>
</tr>
</tbody>
</table>


Even though the buygrid framework is the most widely accepted model within the research area of the buying process, it is not without criticism. The criticism is primarily focused on the handling of the buyclasses. Choffray and Lilien (1978) and
Johnston (1981) state that the buygrid oversimplifies a complex phenomenon, overstates the role of newness in the process and neglects important issues such as the importance of the acquisition. Bellizzi and McVey (1983) concluded that the buy classes might be useful when explaining the general importance of a purchasing decision; they should not be used to infer other buyer behaviour concepts such as the influence on purchases.

Another study by Ghingold (1986) found that the buygrid better represents the purchases of some products than it does for others. As for example, it was concluded that the process was quite representative for an informational process system but less representative for the purchase of replacement office furniture. There exist some criticism towards the buygrid, but the framework is still useful for the understanding of the buying process (Haas, 1995).

### 3.1.2 The Buying Center

There is an extensive agreement that industrial buying involves multiple participants (Wind and Thomas, 1980). Cyert (1956) was the first to emphasize the multipersonal involvement in industrial buying. The term "buying center" was first used by Robinson (1967, p. 101), he defined the buying center as "The individuals who are related directly to the purchasing process, whether users, buying influences, decision makers, or actual purchasers [...]".

#### 3.1.2.1 Dimensions of the Buying Center

Even though the concept of buying center is widely accepted, little is known about the dimensions of the buying center. It is found out that the dimensions of the buying center vary by organization, even within an organization and by buying situation. (Wind and Thomas, 1980)

Gronhaug (1975) came to the conclusion that the size of the buying center was influenced by perceived product importance, degree of routine in the purchase and the resources available to carry out the purchase.

Wind (1978) conducted an empirical study including 171 manufacturing companies regarding the purchase of a scientific and technical information system. The findings concerning the composition of the buying center are presented underneath:
• The multiperson nature of the purchasing decision was clearly evident.

• The responsibility for the buying decision is shared among two or more positions, which increases the complexity of the process.

• The findings showed a low involvement by the research librarian and a high involvement of the purchasing agent.

• Differences were found due to company size. As the size of the organization increases from small (0-99 employees) to medium sized or large (100-999 and over 1000 employees respectively), the responsibility shifts down in the organization.

Johnston and Bonoma (1981) hypothesised that five dimensions of the buying center could be specified and measured:

-Vertical involvement refers to the number of the organization's authority hierarchy exerting influence and communications within the buying center. They defined six levels of authority: Ownership (board of directors), Top management (CEO, President, Executive, Vice President), Policy level management (functional vice presidents, general managers), Upper level operating management (directors, managers), Lower level operating management (supervisors, product managers) and Production work / clerical employees.

-Lateral involvement represents the number of separate departments, divisions, or firm functional areas involved in the purchase decision.

-Extensivity is characterised by the total number of individuals involved in the buying communication network.

-Connectedness corresponds to the degree to which the members of the buying center are linked with each other by direct communications concerning the purchase.

-Centrality denotes the degree of centralisation of the purchasing manager in the buying communication network.
3.1.2.2 Roles in the Buying Center

Webster and Wind (1972) indicated that only a subset of the organizational actors are involved in a buying situation. Further, they proposed five roles performed by buying center members. Wind (1978) found that the importance of the different organizational roles varies by the buy-phase and the size of the organization is an important factor.

Bonomo (1982) added one role (initiator) to the five roles described by Webster and Wind (1972), which gave this set of six roles, resulting:

1. Initiators: recognise the company’s need and they are more active in the beginning of the buying process

2. Deciders: they make the actual buying decisions and are able to do so due to their formal or informal authority within the buying organization. It is difficult to identify them, but usually are the higher officers with their formal authority and the engineers with their role as product specification deciders.

3. Influencers: who influence the decision process, may have origin from inside or outside the company, and can be technical people (engineers) as well as purchasing agents working from outside the company.

4. Users: who use the product, sometimes they initiate the process to the occurrence of a usage need, and in some cases they are only consulted by the other members of the buying center.

5. Buyers: who have the formal authority in the selection of suppliers and implementation of procedures involving purchasing. Their major role is negotiating the purchases made by the organization, they execute the purchase decided by the deciders, and sometimes they coincide like high-level officers.

6. Gatekeepers: who control the flow of information into the buying center. The understanding of the role of the gatekeeper is crucial in the business marketing strategy since they can filter the information and hence, stands between the information source and its destination. The one sorting the mail, as well as the salesperson steering information to the right person are both taking the role as a gatekeeper.
Several individuals may have the same role, e.g. there may be several influencers. Also, one individual may occupy more than one role, e.g. the purchasing agent can be both buyer and gatekeeper.

Moller (1993) performed a study of two product cases of different complexities and distinguished three groups of the DMU participants:

-Executors: those who carry through the processes and are the execution specialists.

-Determinators: potential users and existing users who also decide what to do.

-Gatekeeper: this role is found to be played by more or less all categories involved.

3.1.3 Other Factors Affecting the Buying Process and the Buying Center

It is important for the marketer to know when, how and why buyers make their choices. The marketer needs to understand what influences are involved and how they are likely to impact the decision process. These influencing factors can be divided into different groups, helping the marketer understand and structure the influences. It will be explained the four traditional groups categorized by Webster and Wind (1972). The four most traditional groups are:

Individual factors: This factors deal with personal point of view, concerns personal motivations, perceptions, and maybe most of them, the perceived risk. These factors are influenced by individual's age, income, education, job, position, personality and attitude (Kotler, 1996). All these factors influence the expectations of the buyer.

Interpersonal/social factors: Group membership and members' influences have received most research attention over all factors influencing the organizational choice processes. These factors arise since different members of the buying center have different interests, authority, empathy and persuasiveness, and therefore influence the group structure in different ways. Organizational factors are those influencing the buying organization, such as purchasing objectives, policies, procedures, systems and structures of the buying organization. (Kotler and Armstrong, 1996)

Environmental factors: Are those factors outside the organization that the organization does not have direct influence on them. These include economic factors,
such as level and type of demand, economic outlook and interest rate. Other factors involved are technological change, political and regulatory developments, competitive developments and social responsibility (Kotler and Armstrong, 1996).

Another recent tentative to bring clarity into the area was made by Wind and Thomas (1980) who identified two sets of factors influencing the buying process and the composition of the buying center. These are 1) the different buy-classes and 2) personal, interpersonal, organizational and environmental conditions.

According to Wind and Thomas (1980) the environmental influences are difficult to assess and problematic to measure. They influence the buying process by providing not only information, but also constraints and opportunities. These influences include physical (geographic, climate, and/or ecological), technological, economic, political, legal, and cultural factors. The units exerting these influences consists of various organizations such as business firms (e.g. suppliers competitors, and customers) trade unions, trade associations, and professional groups.

Environmental factors determine values and norms in buyer-seller interaction as well as between competitors. They also influence the flow of information entering an organization. It is considered crucial to understand the impact of technological change in order to make appropriate strategic decisions. Therefore, due to the importance of studying environmental factors, overlooking them can become very dangerous.

An example of technological change is the development of telecommunications that during the late 1950s brought electronic computers and transistors. In the 1960s the first modems were launched and the first data network (telex and packet switching) came online in the 1970s. In the 1990s share of information as per softcopy through internet became possible. And in the late 1990s online purchasing became a rising tendency among the buyers.

3.1.4. Selection Criteria in Buying Process

Weber et al. (1991) consider the selection of suppliers to be the most important part of the buying process. Selection is a process that involves careful consideration of a number of factors, all of which will affect the definition of a quality resource for the service.
The aim of the last phase in the buygrid framework is to determine the optimal supplier who offers the best all-around package of a product. The vendor selection has long been recognized as important and has been a central focus for much of the industrial marketing research over the past three decades (Patton, 1996). "The selection of component suppliers has long been regarded as one of the most important functions to be performed by a purchasing department". (Weber et al., 1991)

When the decision of purchasing a product is taken, the members of the buying center establish a set of evaluation criteria that can be used when comparing potential suppliers.

Dickson (1966) performed a study based on a questionnaire that was sent out to 273 purchasing agents and managers in the United States and Canada. In this study Dickson distinguished 23 selection criteria, the top ten criteria found can be seen in Table 3.2.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Quality</td>
</tr>
<tr>
<td>2</td>
<td>Delivery</td>
</tr>
<tr>
<td>3</td>
<td>Performance history</td>
</tr>
<tr>
<td>4</td>
<td>Warranties and claim policies</td>
</tr>
<tr>
<td>5</td>
<td>Production facilities and capacity</td>
</tr>
<tr>
<td>6</td>
<td>Price</td>
</tr>
<tr>
<td>7</td>
<td>Technical capacity</td>
</tr>
<tr>
<td>8</td>
<td>Financial position</td>
</tr>
<tr>
<td>9</td>
<td>Procedural compliance</td>
</tr>
<tr>
<td>10</td>
<td>Communication system</td>
</tr>
</tbody>
</table>

Source: Dickson, 1966

There are many similarities between Dickson (1966) and other studies, Deng and Wortzel (1995), found that the most important criteria were price and product quality, followed by on-time delivery. Brand name and location of the supplier were of little importance in the supplier selection decision (Deng and Wortzel, 1995). Patton (1996) concluded that vendor selection decisions tend to vary considerably according to the specific situation in which the decision must be made.
Price is important but not only gives a warranty of best value for money. In order to establish a suitable definition for the phrase 'value for money', it is necessary to examine the issues of "value" and "money" (or cost) as well as another important intangible, namely "risk". Price is set where demand intersects supply, in theory, but reality has proven to be a lot messier. Almost any factor can influence the price of a good or service, ranging from a salesperson's negotiating prowess to space availability in certain shipping lanes.

When Internet appears the "traditional" selection criteria could change. In this line, only when a potential supplier is "located" and "registered" could be a supplier of the firm. Even these potential supplier could give more information or in an easier way about a product needed or a service than a supplier who is working now for the firm.

Some issues in this information to select suppliers are:

- Determine the right number of suppliers for a given part, service, or commodity
- Consolidate spend and supplier data located in multiple sources
- Determine whether to make or buy a part
- Capture and analyze supplier performance metrics
- Model or algorithm to transform, categorize, and classify information
- Identify areas for potential purchasing savings
- Understand future purchasing requirements
- Capture approved vendor lists

Then, the key factors in the supplier selection process are generic: the users, the information resources, and the service or product given itself. (Choi and Hartley, 1996)

3.2. The Interdependency Framework in Industrial Markets

Business-to-business interdependencies are based on a number of factors and circumstances. One critical dimension that determines the type of interaction that businesses engage in is the temporal perspective associated with that interaction
(Anderson, Chu and Weitz, 1987). A short-term perspective is one that focuses on a single or a limited set of transactions. A long-term perspective is defined as including repeated transactions between parties, either by choice or because of market conditions, over an indefinite length of time. By changing from a short-term to a long-term perspective, for example, a company is able to examine the benefits of dealing with a particular supplier across a series of transactions rather than concentrating solely on the benefits achieved within a single transaction or within a particular contract.

Adopting a long-term perspective allows a company to view business-to-business interactions as relationship based rather than as contract-based (Corfman and Lehmann, 1993; Dabholkar, Johnston and Cathey, 1994). Contract-based (also called transaction-based) negotiation behaviours have been characteristic of the stereotypical way of doing business, while a relationship based orientation is becoming increasingly adopted by more innovative companies (Frazier, Spekman and O'Neal, 1988). In recent years, even smaller firms are forming partnerships to encourage product innovation, enhance stability, and as a growth opportunity (Maynard, 1996). Contract-based interactions are characterized by “arm’s length transactions” and little sharing of information between business-to-business partners, while relationship-based exchanges often include two-way communication between parties, sharing of strategic information, joint pay-offs, mutual dependence, preferred treatment in case of crises, and particularly, trust (Dwyer, Schurr and Oh, 1987; Ganesan, 1994). It is true that some contract-based interactions may span several years; yet, by working only within the terms of a contract classifies this situation as having a short-term rather than a long-term perspective.

Another dimension that is widely cited in the literature on business-to-business interactions is goal orientation (individual vs. joint gain) (Lyons et al., 1990). As the terms suggest, “individual gain” indicates a focus on the business’s own benefit to the exclusion of it partners’, whereas “joint gain” implies an orientation toward mutual benefit. Business-to-business negotiations based around joint goals have been characteristic of Japanese managers, who have long realized that the secret to long-term success is assuring gain for both parties. (Dyer, 1994) As more and more companies are realizing interdependencies in their supply chains and in many cases
where the sheer number of buyers and sellers in an industry is shrinking, understanding how to structure and maintain relationship behaviours to achieve gain for multiple parties is becoming increasingly important. (Dabholkar et. al., 1994) Examinations of channel negotiation strategies suggest that a joint orientation provides for easier and less aggressive bargaining when faced with challenges from the marketplace, technology and competition, whereas an individual orientation may promote the extraction of more concessions or greater leveraging by one partner over another. Although it may appear that a long-term perspective and joint gain go hand-in-hand, the two seem as independent dimensions.

There are several instances of companies which are involved with each other over the long term but which continue to emphasize their own gains. At the same time, other companies often put great effort into mutually satisfying transactions with organizations, which are not in a long term relationship with them. These two dimensions – temporal perspective and goal orientation – have a strong strategic component, as they are immediately controllable by management and offer possibilities for corporate innovation in business-to-business partnering techniques. The third dimension that stands out in the literature as being relevant for business-to-business interdependencies is the balance of power between businesses. (Corfman and Lehmann, 1993) The two conditions related to this dimension are “balanced power,” where the businesses in the interaction are somewhat equal in power, and “unbalanced power” where one partner is clearly more powerful. Unlike the first two dimensions, balance of power is generally outside the short-term control of corporate management. At the same time, working toward greater power relative to one’s partners can certainly be a long-term strategy; but again, one that is not completely within the company’s control. The importance of this dimension is becoming increasingly apparent to managers faced with changing access to input and output markets, and especially for those experiencing shifts in the balance of power within their supply chains. (Frazier and Antia, 1995; Dwyer et al., 1987)

3.2.1. Interdependency Cube

The balance of power between a set of buyers and sellers, typically influences the starting point at which channel members begin negotiation and generally delineates which member has the most control over the negotiation process. (Weitz and Jap,
1995) Situations of unbalanced power have been associated with negotiation behaviors aimed at individual (as opposed to joint) gains. At the same time, it is evident that some businesses develop joint goals and work toward mutual satisfaction, despite an unbalanced power situation. Thus, balance of power appears to be an independent dimension as well. Based on these three critical dimensions, a framework is developed by Dabholkar and Neeley (1998). The Interdependency Cube can be seen in Figure 3.1.

![Interdependency Cube](image)

**Figure 3.1. The Interdependency Cube (Dabholkar and Neeley, 1998)**

It is proposed that the Interdependency Cube provides a comprehensive typology of classification of business-to-business interdependencies. Using this framework, businesses can determine where they are in relation to a given partner at a given time and compare their strategies to those of competitors. Additionally, they can assess whether a change in strategy is necessary based on changed circumstances and can use the Interdependency Cube framework to determine how to get there, i.e. to another type of interdependency from where they are at present. It is also proposed that using business-to-business interdependencies as a source of competitive advantage includes combining elements of the three dimensions of the Interdependency Cube to achieve the strategic goals of a firm. One way of doing this
would be renouncing the stereotypical base for contract negotiations and trying to understand how multiple partners could benefit from a mutually dependent business-to-business relationship. One of the examples is General Motors, which when faced with excess manufacturing capacity in 1992, offered some of its suppliers the opportunity to use GM’s excess plants and workers. (Woodruff and Schiller, 1992). This unusual outcome of business-to-business partnering demonstrates a successful interdependency with joint benefits for GM, its employees, and its suppliers. GM was able to keep its plants open, employees were not laid off and were able to maintain a consistent work history, and suppliers did not have to incur the fixed costs of acquiring production capacity. By innovating in the short-term, GM was able to develop a mutually beneficial interdependency for all of the players. Interestingly, GM did not follow this innovative method of business-to-business interdependency with all its suppliers. During the same year, rising material costs forced GM’s president Ignacio Lopez to issue price cuts. His solution was to relinquish GM’s long-term agreements with some of its suppliers, and open the contract bids to any supplier who could promise annual price cuts while still maintaining quality parts. This particular action shifted the interdependencies GM had with some of its suppliers from a long-term mutually beneficial orientation to a short term transactional approach. To understand such seemingly inconsistent behaviour, the Interdependency Cube framework is offered as a way to examine company strategies with regard to their business partners in a variety of circumstances. In GM’s case, the company clearly evaluated the circumstances and potential associated with different suppliers and deliberately adopted different strategies with them. The discussion describes each of the business-to-business interdependencies created the framework and draws from actual business examples to illustrate the workings of such interdependencies.

To examine the alternatives for business-to-business interaction created by the Interdependency Cube, first each of its eight cells must be more clearly explained. The eight cells shown in Figure 3.1 represent a summary of the strategic options available to managers looking for opportunities to achieve competitive advantage via the development of innovative business-to-business relationships. By dividing the cube along each of its dimensions, two temporal grids; transaction and relationship grids can be envisioned (Figure 3.2).
Figure 3.2. The Temporal Grids (Dabholkar and Neeley, 1998)

These perspectives; balance of power, transaction grid and relationship grid offer further insights into the positioning of each of the eight strategies in relation to the others. The temporal grids delineate short-term and long-term strategies for interdependencies (see Figure 3.2). For example, a business can employ four types of short-term or transaction strategies (coercive, competitive, cooperative, or supportive) in its interactions with other businesses. Similarly, a business could apply four different approaches to interdependency (command, divergent, coordinative, or keiretsu) without giving up its long term relationship approach. The same arguments
apply to orientation – a business can use four alternative approaches to interdependency while maintaining an individual orientation (and four other approaches if it chooses a joint orientation). Lastly, in an unbalanced power situation, a business has four options to interdependency, as does one in a balanced power situation. By dividing the Cube in this manner along its three dimensions, managers can study movements across temporal perspectives, or goal orientation, or changes in the balance of power. For discussion purposes, Figure 3.2 is used to develop and illustrate the cells in the typology.

3.2.2. Strategies for Industrial Markets

Based on three critical dimensions; balance of power, transaction and relationship the Interdependency Cube is developed. It is proposed that the Interdependency Cube provides a comprehensive typology of classification of business-to-business interdependencies. Using this framework, businesses can determine where they are in relation to a given partner at a given time and compare their strategies to those of competitors. Additionally, they can assess whether a change in strategy is necessary based on changed circumstances and can use the Interdependency Cube framework to determine how to get there, i.e. to another type of interdependency from where they are at present. Using business-to-business interdependencies as a source of competitive advantage includes combining elements of the three dimensions of the Interdependency Cube to achieve the strategic goals of a firm. One way of doing this can be renouncing the stereotypical base for contract negotiations and trying to understand how multiple partners can benefit from a mutually dependent business-to-business relationship. (Dabholkar and Neeley, 1998)

3.2.2.1. Coercive Strategies

Cell (1) of the Interdependency Cube shown in Figure 3.1. represents negotiation strategies oriented toward the short term and motivated primarily by the desire for individual gain. This behaviour is termed as “coercive” (cell 1) under conditions of unbalanced power. The term “coercive” is selected to describe competitive-type behaviours where one negotiator has a clearly superior bargaining position. Coercive behaviours emphasize short term “win-lose” encounters between negotiation parties or teams. A coercive strategy is likely to occur when a buyer and seller are
negotiating for a scarce, but critical, resource. Coercive behaviour implies that only one party can direct the conditions of negotiation. A company engaging in a coercive strategy may be successful in the short term through use of threats and similar behaviours simply because of its power. In the long term, however, another negotiation strategy might prove more successful. The earlier illustration of GM withdrawing from long-term contracts with some of its suppliers, and opening bids based on price cuts, is an example of the coercive strategy. (Stertz and White, 1992) American Airlines' "musical-chairs" construction of a Latin American network also represents a coercive strategy. American has aligned with small, financially weak, airlines in Brazil, Colombia, and Paraguay simply in order to quickly entrench a large share of the Latin passenger airline market; there is clearly no long-term or joint orientation here. (Zellner and Mandel-Campbell, 1997) The case of Totes, Inc. and its relationship with discount stores such as Wal-Mart and Kmart provides an example of the coercive power a large merchandiser can have over a smaller production company. Although this relationship may not be optimal for the smaller company, many of these smaller entities realize their position within the marketplace and accept the unbalanced power position as part of doing business in the highly competitive merchandising environment. In the late 1980s, Totes Inc. developed its slipper-sock design which paired a traditional sock with rubber traction treads. The company negotiated agreements for distribution through mass discount chains such as Kmart and Wal-Mart. Within a year after introduction, slipper-socks were selling at a rate of 14 million pairs per year. Kmart and Wal-Mart contributed 1.5 million sold pairs to that number. However, within two years of their introduction, both Kmart and Wal-Mart had rescinded their contracts with Totes, Inc. and had found other companies who would produce the slipper-socks at a much lower price.

3.2.2.2. Competitive Strategies

Cell (2) represents negotiation strategies oriented toward the short term and motivated primarily by the desire for individual gain. This behaviour is termed as "competitive" (cell 2) where balanced power exists. The term "competitive" is used in the literature to describe balanced-power negotiation behaviours that are directed toward maximizing individual gain (Perdue, Day and Michaels, 1986). Competitive behaviours emphasize short term "win-lose" encounters between negotiation parties.
or teams. Competitive strategies, for example, might occur when a buyer and seller of relatively equal size bargain for the "lowest price" on a certain item. Under conditions of competitive behaviour, both parties have the option of introducing competitive activities. The primary objective of both coercive and competitive approaches is to achieve individual gain rather than to build relationships, and business-to-business interactions are based around single transactions or short-term contracts. Typical negotiation behaviours found under coercive or competitive conditions include threats, promises, persuasive arguments, and positional commitments. Yet, competitive strategies may yield successful negotiation outcomes (i.e. higher profits and greater satisfaction) for both parties, particularly when there are many players in an industry and/or switching costs are low.

3.2.2.3. Cooperative Strategies

Cells (3) and (4) offer strategic options for business-to-business interdependency that are also short-term in nature, but are attributed to companies that emphasize gain for both parties in their negotiations. Where a balance of power exists, this type of strategy is termed "cooperative" (cell 3), as both parties tend to willingly develop goals of benefit to both negotiators. Cooperative behaviours can occur when companies engage in initial trial periods of a strategic alliance. Here, although the focus might be on a long-term relationship, both companies are prepared to end negotiations if positive outcomes do not result within a specified time period. The terms "cooperative" and "coordinative" are used interchangeably in the literature to refer to negotiation behaviours that focus on joint; however, we intend the term "cooperative" only to refer to negotiation strategies where short-term outcomes are emphasized. (Perdue et al., 1986) Examples of companies engaging in cooperative business-to-business strategies, as defined by the Interdependency Cube, are difficult to find since few companies invest resources into a balanced-power, joint-benefit arrangement with the purpose of ending the interdependency within a short period of time. However, an example of a cooperative strategy might be evident in the partnership forged between Digital Equipment and Microsoft in 1995. This agreement between the two computer giants allows Digital Equipment to maintain its strength in business computer systems by offering Windows NT platforms (typically preferred by today's business customer), and allows Microsoft a foray into the
desired enterprise computer market. The two companies currently share intellectual property, technology, and Microsoft-trained and certified engineers. The rationale for classifying this partnership as cooperative is that given the dynamic nature of the computer industry, such an alliance cannot be viewed as truly long-term.

3.2.2.4. Supportive Strategies

Under conditions of unbalanced power, the acknowledgment of joint goals is at the discretion of the more powerful party; thus, this form of short-term interdependency is called as "supportive" (cell 4) negotiation behaviour. Supportive strategies can occur when a company has a general policy of "win-win" negotiation outcomes, but may not require or intend a long-term relationship with a particular supplier. The other earlier example of GM's successful interaction with its employees and suppliers in the use of its excess capacity to support suppliers' production schedules is an example of a supportive business-to-business strategy. A similar example of a supportive strategy is Ford's effort to organize its parts suppliers into unions, partly to keep its own union workers happy. (Woodruff and Schiller, 1992) A third example of a supportive approach is the alliance formed between IBM, Bay Networks, and 3Com in May, 1996. IBM clearly has the power in this arrangement, but is supporting 3Com by building networking hubs around 3Com's products. The three companies have additionally agreed to create a set of common shared standards so each company's local-area network hardware can communicate with the others. (Schonfeld, 1996)

Cells 1-4 together offer a range of business-to-business interactions having a short-term focus. Collectively, these cells are called the Transaction Grid (see Figure 3.2) since these ways of negotiating are focused in form and intent on the outcomes of exchange transactions that occur within a relatively short-term, specified time period. Competitive pressures are encouraging an increasing number of companies to look beyond the options for negotiation presented by the Transaction Grid. These firms are realizing that establishing longer term relationships with partnership members is one way of equipping the firm for long-run survival. To explore the strategic options for longer term business-to-business relationships, the strategies highlighted by cells 5-8 of the Interdependency Cube shall be considered. In this second matrix, the conditions of balanced versus unbalanced power and individual versus joint
orientation still hold. The companies in what is called the Relationship Grid (see Figure 3.2) undertake partnerships for a longer term.

3.2.3. Relationships in Industrial Markets

In the transaction grid, the ways of negotiating are focused in form and intent on the outcomes of exchange transactions that occur within a relatively short-term, specified time period. Competitive pressures are encouraging an increasing number of companies to look beyond the options for negotiation presented by the transaction grid. These firms are realizing that establishing longer term relationships with partnership members is one way of equipping the firm for long-run survival.

To explore the options for longer term business-to-business relationships, four types of relationships are defined; command, divergent, coordinative, keiretsu. These relationships are presented by 5-8 cells of the Interdependency Cube

3.2.3.1. Command Relationships

"Command" relationships (cell 5) result when one party has a dominant position of strength in the negotiation process. Here, the dominant position of one negotiation party arises as a result of unbalanced power, either from individual company strengths (i.e. size or market share) or as a consequence of environmental factors (i.e. market structure or scarcity of resources). A key component of command relationships is that, like coercive (or competitive) bargaining behaviours, they are based around achieving the goals of the dominant partner (or around one's own goals) with limited consideration of the goals of other relationship partners. Command strategies, as with all behaviours in the Relationship Grid, include a focus on all transactions with a particular partner or set of partners over the long-term, or until a change in market conditions is evident. One example of a command relationship would be Hewlett-Packard's successful relationship with Canon, based around laser-jet printers:

In the early 1980s, Hewlett-Packard faced the rapid competitive push to develop and market a new laser printer. The company could, and had, built the entire printer but as it faced growing market competition, decided to capitalize on the strengths of other companies and contracted with Canon Inc. to produce the printer engines. As a
result, the laser printers were introduced onto the market quicker, and Hewlett-Packard was able to focus its efforts on the development of linkage software. The partnership between these two companies allowed Hewlett-Packard to capture the market and define itself as the leader in laser printer technology for several years. (Zachary, 1992)

Boeing’s maintenance contracts with commercial airlines place it squarely in the command position. By providing 77 percent of all maintenance services, Boeing is in a unique position to capture the replacement airplane market, much to McDonnell-Douglas and European rival Airbus, as well as the airlines who dislike being in this unbalanced power position. A third example of a command relationship would be the Maytag Jenn-Aire division’s decision to bypass their distributor network and sell directly to dealers. Jenn-Aire’s attempt to streamline its marketing and distribution, coupled with its dominant power position, enabled the company to bind its distributors into annual contracts with clauses that allowed termination with only 60 days notice. That this type of relationship is long term may appear counter-intuitive, yet in industries where a limited number of buyers and sellers exist, repeated interactions are forced to recur. The current relationship between Electronic Data Systems Corp. (EDS) and its former owner, General Motors Corp. (GM), illustrates a combination of competitive (cell 2) and command (cell 5) strategies. Although EDS is independent, GM still serves as its biggest customer, providing over $4 billion in annual profits. In the short-term, GM is using this leverage in a competitive manner, seeking bids on 25 percent of the work provided by EDS. In the long-term, however, this bid-seeking allows GM to engage in a command strategy and force the lowest price for the remaining 75 percent of its contracts with EDS (Zellner, 1997).

3.2.3.2. Divergent Relationships

Sometimes business-to-business partners engage in repeated “win-lose” negotiation behaviours and thus, although engaged in long-term relationships, often sacrifice the benefits of increased communication and mutual trust. Such interdependencies are called as “divergent” (cell 6) relationships because despite the existence of a relationship, the partners appear to be headed along divergent paths. Divergent relationships may involve behaviours, such as threats, promises, and positional commitments that are similar to competitive behaviours; however, divergent
relationships are long term associations. One example of a divergent relationship was General Motor’s and Daewoo’s joint venture, Daewoo Motor Company. (Treece, 1991)

In 1986, General Motors Corp. launched a partnership with the Daewoo Group in Korea to manufacture a car in Korea, based on a design from a GM plant in Germany, and to be sold in the US market. General Motors believed this arrangement would allow the company to exploit the lower wage costs in Korea in order to compete with the Japanese car companies in the US compact car market. Daewoo saw the partnership as an opportunity to gain recognition in the world automotive markets. While resources were allocated to the long-term project, communication between parent companies was directed toward achieving individual rather than joint goals.

This particular relationship was eventually considered unsuccessful because neither company achieved its goals. The product of this partnership, the Pontiac LeMans quickly gained a reputation for poor quality and GM sold very few cars in Korea. Labor costs in Korea rose, the economy was sluggish, and market conditions changed. In this situation, General Motors and Daewoo had several options: one was to end the relationship (and thus consider the venture unsuccessful), the other was to work together toward developing and meeting joint goals (in which the divergent relationship becomes a starting point for a potentially successful one). The companies soon chose to part ways in 1992, with General Motors selling its half ownership in Daewoo (Treece, Miller and Melcher, 1992). The venture between Sprint, Tele-Communications Inc., Comcast, and Cox Communications provides an example of another difficult divergent relationship. Sprint’s original plan called for the utilization of the cable companies to build local-calling networks as a step towards an integrated digital wireless personal-communications system. Sprint envisioned a goal whereby local phone and wireless communication services would be offered over cable lines, but common goals for the cable companies were not clear. Initial enthusiasm by all partners was high; however, software problems and increasing competition have resulted in launch delays and changing strategic priorities for the partners. Minimal profits have led the cable companies (primarily Cox and TCI) to reconsider continuing the partnership and to threaten selling their
stake of the relationship in order to devote their dwindling resources back on basic cable television service. Although divergent relationships may be unsuccessful, this does not have to be the case. Long-term relationships that emphasize individual gain may be the focus of strategic alliances that occur when companies have different, but complementary reasons, for engaging in the relationship. For example, one company may form an alliance with a second company specifically for the purpose of learning about the technology or skills used by the second company. The second company may not even be aware of the reason why the first company wants to be involved in the alliance, but may benefit financially from the relationship. In this case, each company seeks to maximize individual gain, yet a long-term relationship is employed.

3.2.3.3. Coordinative Relationships

One of the most discussed types of business-to-business relationships seems to be long-term partnerships directed toward achieving joint goals. Companies which, under conditions of balanced power, attempt to engage in mutually beneficial partnering arrangements are considered to be in "coordinative" relationships (Perdue et al., 1986) and are represented by cell 7 of the Interdependency Cube. Again, the terms "coordinative" and "cooperative" are used interchangeably in the literature; however, we use the term "coordinative" to refer to those behaviours directed toward achieving joint goals in long-term relationships. Coordinative relationships begin with shared business goals, and are associated with a problem solving approach and information sharing. The businesses in a coordinative relationship are flexible in resolving issues, engage in two-way communication, understand cultural differences, and display a willingness to explore alternative solutions. An example of a coordinative relationship would be Ford and Mazda's successful 13-year relationship involving partnering arrangements surrounding compact cars, dealerships, and off-road vehicles. (Treece et al., 1992)

In 1983, Ford Motor Company, in an effort to improve on its successful Escort, teamed with Mazda Motor Corp., which it had rescued in 1979, to build a "world car" which could be engineered on one continent, then manufactured and sold in multiple locations in order to reduce costs. Ford was responsible for the exterior styling of the car, while Mazda took the lead in the engine design and production.
The great success of this joint venture led the two companies to partner again on the Mazda MX-6 and Ford Probe. The success of this relationship can be found in the coordination of two companies, each with its own expertise – Ford in marketing and finance, and Mazda in development and production.

Another coordinative relationship is evident in the long-term agreement between nine corporations – Owens Corning, Motorola, General Motors, Deere & Co., Owens-Illinois, Reynolds Metals, 3M, Pilkington, and Aeroquip Vickers. Each of these companies contributes to LearnShare, a system for sharing knowledge, experiences, and procedures related to employee training, in an effort to eliminate expensive consulting services. (Sanders, 1997)

3.2.3.4. Keiretsu Relationships

The idea of emphasizing joint goals over individual goals is not exclusive to business-to-business partners that pursue joint goals under conditions of balanced power. Japanese companies often engage in the type of relationship described by cell 8 – “keiretsu” relationships. Keiretsu is defined as “a web of interlocking long-term relationships between a big manufacturer and its main suppliers”. “Keiretsu ties comprise a complex web of history and tradition, cross-shareholdings, management, cooperative projects, and information swapping”. (Neff, 1992) Keiretsu relationships can occur between companies desiring channel (production keiretsu) or financial (financial keiretsu) partners. Production keiretsu is a distinctly Japanese practice used to manage the “make or buy” decision by focusing on goals of production economies and distribution channel synergies. The relationship between Toyota and its suppliers is traditionally considered to be one of the best examples of a production keiretsu. (Blinder, 1991)

The web of relationships between Toyota and its suppliers takes advantage of the opportunities of lower-cost outsourcing of components, while at the same time ensuring quality and full customization by promising long-term purchase stability. Toyota maintains this web by promising its suppliers access to its expertise, while still keeping them at arm’s reach by careful monitoring and by rewarding the lowest-cost, highest quality suppliers with a larger market share. Additional examples of production keiretsu include: Nissan Motor Company and Fuji Heavy Industries
(maker of Subaru cars) (Neff, 1992), McDonnell Douglas and Taiwan Aerospace, and Ford’s relationship with Excel (Kelly, Treece, DeGeorge and Shiller, 1992). Financial keiretsu involves linkings of a series of companies (often unrelated) with a larger company, usually a bank or giant trading company. Financial keiretsu is based around the premise of long-term return on investment. The parent company provides a “safety net” for its members, in case of misfortune. Keiretsu members “can take big risks, knowing that they will be bailed out if they get in trouble” as the Itoman trading company learned when they were rescued by the Sumitomo Group in 1992. (Neff, 1992) Whereas vertical integration is in fact an extreme form of keiretsu, it is not considered by the Interdependency Cube because the structure of the relationship is such that no inter-firm business-to-business relationship occurs. Vertical integration involves a choice of “make” in the “make or buy” decision, whereas most business-to-business relationships are undertaken when a “buy” decision is made. Interestingly, some business-to-business relationships exist among “competitors” rather than between buyers and suppliers.

3.3. CRM in Industrial Buyer-Seller Relationship Context

Due to the rapid technological progress and the growing globalization of the markets quality and price of competing goods and services are leveling more and more. Increasing availability of information has lead to more demanding customers (Bauer, Grether and Leach, 2000). Discrimination cannot any more be achieved through the competing products alone, but benefits extending the standard product are necessary to fulfill the customers expectation for individualization. (Hippner, Martin and Wilde, 2001)

Acquisition costs for a new customer consume the revenue gained from the relationship for a relatively long period of time. Retaining customers is more profitable than the acquisition of more and more new customers, since the high cost of customer acquisition leads to unprofitable customer relationships in the beginning. (Diller, 2001) Therefore, it is important for the businesses to retain their profitable customers and maximize their customer’s total life-time value. Building and maintaining individualized relationships to profitable customers through the proper usage of information and communication technologies is the essence of CRM. CRM
has evolved to a buzzword being frequently used and many companies have been claiming CRM to be their new business strategy. (Hippner et al., 2001)
4. CRM IN BUYER-SELLER RELATIONSHIPS IN INDUSTRIAL MARKETS

4.1. Definition of CRM

Raising the level of customer orientation has been one of the major challenges of the past few years. Even though the change observed in most markets from a seller's to a buyer's market is by no means a modern development, the willingness to orient business according to customer needs has gained a special dimension. This is manifested at a strategic level, among other things, in the fact that the focus of almost any corporate philosophy is now on (external) customers. Based on the aim to raise the level of customer orientation, the term CRM has established itself for the tasks connected to the management of relations with customers. CRM is a special form of business partner relationship management and signifies continuous development according to corporate goals as well as care and control of customers aimed at maintaining relationships. CRM includes both strategic tasks (e.g. definition of relevant market segments) as well as operative tasks (e.g. processing customer orders). Two factors in particular which differentiate CRM from existing customer-oriented approaches such as key account management are the integration of strategic tasks and devotion to organizational tasks and tasks involving information technology. (Liljander and Strandvik, 1995) The objective of CRM is to maximize the manipulable difference between discounted revenue and costs over the entire life cycle of a customer relationship. Simply put, without regard to the time factor, this aim can also be defined as the maximization of the manipulable difference between the revenue and costs and/or, even more practically, as the consistent increase in the customer's share-of-wallet with calculable expenses.
The objective of CRM is not to maximize customer orientation. As a catch phrase, the following motto could be applied to the intention of CRM: "As much customer orientation as necessary, as little customer orientation as possible". (Rosemann and Bassir, 2000)

4.2. Customer Life Cycle and Customer Lifetime Value

A customer goes through different phases of a customer life cycle from the first, often anonymous acquisition to the continuous after-sales service. This is a major perspective of CRM. Heterogeneous demands are placed on CRM and its different tasks within the customer life cycle. This life cycle is explained in the following in three simple phases.

4.2.1. Customer Acquisition

Customer acquisition represents the beginning of a customer relationship and, therefore, the very start of customer relationship management. It signifies initial contact with the customer and has a great effect on the formation of a company's image in the customer's eye. This is even more important because acquisition is the phase with the least amount of customer knowledge. At the same time, though, it requires an approach to customers which is as individualized as possible. Customer acquisition can be of varying significance depending on the life cycle of the product range being sold. For example, it is extremely important for gaining new customers in rapidly expanding markets such as mobile communications, while traditional markets present other demands (e.g. acquisition of competitors' customers, whereas product information less significant). In the customer acquisition phase, companies usually target an anonymous market. This technique could be based on well-developed approaches for market segmentation provided sufficient data is available and the quality of that data is acceptable. At the same time, successful results depend in large part on efficient research in publicly accessible (by the Internet) and/or purchased stocks of information. Important information systems used in this area are mass databases, which integrate external data stocks, well-developed approaches for market clustering as well as general marketing information systems (especially for sales promotion).
Furthermore, customers must have easy access to information to find out more about a product through attractive and transparent presentation of a product (e.g. on the web). (Werner and Kumar, 2000)

4.2.2. Processing Customer Contracts

The transition from customer acquisition to customer contract processing occurs when a customer submits an inquiry and/or an actual order. This phase is dominated by the operative order-processing procedure, which generally already displays a high degree of computerization—at least in the form of spot solutions. The applications systems used must support the following series documents generated by or for the customer: inquiry, offer, order, order confirmation, delivery notice, delivery note, invoice, payment (and possible payment reminders). In addition, various exclusively in-house documents (e.g. production order) and/or documents (e.g. orders to suppliers) involving interaction with other business partners (especially suppliers) must be put into relation with the ordering customer. In this connection, the customer master data gathered at the start of this process must be continuously updated—automatically, if possible—throughout this process with relevant attributes (check of credit standing, cumulative sales volume, etc.).

The more specific the features of the order-processing procedure for an individual customer, the greater the relation between customer data and product data. For example, it should be apparent which new components have been created for a certain customer and/or customer group. Often, the only way to identify those customers responsible for the most variants is through mainly product-related calculation.

Aside from appropriate business modules for materials management, sales or accounting, cross-platform technology such as work flow management systems, which allow efficient processing of all documents in the ordering process also offers relevant computing solutions for order processing. Internet services are now being used more often to accelerate the ordering process. To ensure the advantages to this are not limited to front-end services, however, it must be integrated with down-
process business-administration systems. One tendency observed in this connection is the Internet-based transferral of all order-monitoring tasks to the customer (so-called order tracking). (Day, 1990)

4.2.3. After Sales Phase of Customer Life Cycle

The after-sales phase involves efficient determination of customer satisfaction in particular. Corresponding figures indicate both customers with potential for additional or new purchases as well as those who will not likely be making any further purchases. This is important data for the calculation of short-term and mid-term need. As before, the after-sales phase also includes all processes related to the management of returns and complaints as well as the first instance of transparent customer support.

Through the knowledge of products purchased by consumers as well as the respective time data of the purchase, companies can specifically advertise more services (e.g. inspection, disposal) and necessary replacement parts based on average maintenance cycles or expected product life cycles in order to drum up secondary sales. The knowledge of this data represents a central, comparative, competitive advantage, which can be derived from CRM. The after-sales phase is when CRM displays the greatest impetus for innovation since, as the name indicates, care of a company's relationship to its customers is the dominating factor. It differs from the previous phases mainly through its optional character. The aim is to use the customer information gained to establish possible new scenarios for tying the customer to the company (e.g. proactive services). As for the design of information systems, relevant demographic data must be recorded for this phase. The efficient utilization of this data entails an added value due to the more profound understanding of customers related to it and enables the continuous examination of defined market segments.

One major effect of CRM is conditioning the database for efficient (market or customer) segmentation. In this regard, all relevant data must be collected according to the processes involved and not just as a matter of function. (Bose, 2002) That is the only way to enable segmentation which takes into account all the organizational
consequences of a particular customer and/or customer group Fig. 4.1. depicts the customer service process for particular customers or customer groups.

![Diagram](image)

**Figure 4.1. Process for specific customers/customer groups (Greenberg, 2001)**

![Diagram](image)

**Figure 4.2. Customer life cycle (CLC) and customer lifetime value (Rackham, 1999)**

The independent life cycle of the customer is usually embedded in the context of a sequence of related business transactions as it is seen in Figure 4.2. This sequence of subsequent customer life cycles yields the customer lifetime value, which is the value of the customer over the entire life of the business relationship (in precise terms: the difference between the discounted revenue and costs connected to a customer at a
certain point in time). For example, the customer lifetime value approach can be used to explain the motivation behind a bank's willingness to accept a negative marginal contribution from a customer (e.g. offering students a free or low-cost account in the expectation of a profitable business relationship once the students enter the business world).

There are two forms of relationships between particular customer life cycles within the customer lifetime value line: upgrading and X-selling. (Rackham, 1999)

a) Upgrading

In upgrading, the customer switches from product A to product B (usually higher in value). Accordingly, the individual customer life cycles are substitutive. Some examples of this are a customer switch to a more expensive car or purchasing a trip abroad after previously only purchasing domestic trips. The special requirement for CRM in this regard involves the fact that a switch in products usually entails a switch in those responsible for customer support at the supplying company. Consequently, all information, which is not stored, must be completely forwarded (e.g. personality impression, innovation mentality) as well as access to all managed customer information. Upgrading in the context of customer lifetime value also offers important clues for decisions related to product policies. For example, Mercedes' entry into the market for compact cars (Smart, A-class) also represents an attempt to acquire customers at an even earlier stage of the customer life cycle, thereby increasing the customer lifetime value. On the other side of things, though, there are also telecommunications providers who manage to gain young customers early on with a clever market appearance (e.g. in the market for mobile communications), but who lack adequate upgrading products to serve the demands of customers sufficiently in later stages (e.g. business customers). CRM should aim at trying to determine the cost of processes triggered by each customer and use this as a basis for designing relationship management. For example, customers displaying a low potential for sales might be required to pay for contacting a call center each time, while other customers who generate more sales are allowed to access various organizational units (customer service, development) more comprehensively, more directly and free of charge. Therefore, one of the tasks of CRM is to assign different "relationship levels" to individual customer life cycles. (Rackham, 1999)
b) X-selling

As opposed to upgrading, X-selling involves several additive customer life cycles. According to this, customers demand an increasing number of products in the course of the business relationship while retaining the products they have already purchased. An example of this is the demand for stocks, real estate funds or mortgages from a customer who, until now, has just maintained a salary account at a bank, or the demand for mobile communications or business lines from a customer who until now only had a normal private line. X-selling from the perspective of CRM runs the risk that the company can no longer maintain its "one face to the customer" philosophy due to the 1 : n ratio between the product and the customer. 1 : n ratio can be explained as one interface to the customer even if he buys "n" types of products. Integrated applications and database management systems must ensure consistent management of customer information in this case. This must be made clear to the customer through general targeting or by designing conditions in sync with overall sales and pertaining to all products. The entire period of a customer lifetime is accompanied by customer-oriented controlling, which supports the customer's operating statement. Customer-oriented controlling requires that the customer and/or customer group as a reference object already be treated as an account object in external accounting. In this regard, it is wise to develop a multi-dimensional, customer-related marginal contribution. The intention of the demand derived from this for more intense integration of financial target variables with customer criteria corresponds to the balanced scorecard approach, which also includes variables for process efficiency as well as knowledge management and a company's ability to develop. (Rackham, 1999)

4.3. Customer Relationships

Management of relationships to customers is necessary in order to retain profitable customers and in this way run a profitable business. The term customer relationship is used frequently in literature, but authors rarely give a definition of the term, generally assuming an implicit and intuitive understanding of it. (Eggert and Fassott, 2001) Eggert and Fassott distinguish two different views on the term customer relationship. From the activity-oriented viewpoint customer relationships are created
through repeated exchanges between the parties. A customer relationship exists, from the state-oriented point of view, if a relationship is perceived to exist by both parties involved. The state-oriented view on a customer relationship takes into account on the one hand, that many buyers do believe they have a relationship to a certain company without having purchased anything from that business; and on the other hand that buyers sometimes neglect to have a close relationship to a company despite frequent purchases. (Eggert and Fassott, 2001) Ways of interaction with the customer are determined by the channels of communication provided by a company. A "channel of communication" can be defined as "path along which information (as data or music) in the form of an electrical signal passes" or as "a fixed or official course of communication", respectively. Hence, telephone, fax, mail, E-mail, and the Internet are possible channels of communication serving as ways to transmit information between customers and a company.

In this thesis a state-oriented view of customer relationships is considered following an approach discussed in (Dwyer et al., 1987). According to this viewpoint a relationship can take up different stages reflecting an increasingly closer relationship between buyer and seller.

![Figure 4.3: Stages of a Buyer-Seller Relationship. (Dwyer et al., 1987)](image)

The relationship development process between a (prospective) buyer and seller can be divided into five separate phases, which represent the differences and transitions in how the parties regard one another (Dwyer et al., 1987): awareness, exploration, expansion, commitment, and trust. These phases can be applied for traditional interactions in 'brick and mortar' industries as well as for relationships between a prospective customer and a business represented on the web using multiple channels of communication. Figure 4.3 depicts the development process, not visualizing the
dissolution phase and extended by the Transaction and After-Sales processes during the commitment phase.

Each relationship to a customer requires both parties to initially become aware of each other (awareness). After having become aware of a possible exchange partner a period of testing and evaluation can follow (exploration), in which both parties consider possible costs and rewards of an exchange.

Utilizing certain channels of communication the relationship can proceed to the next stage, the expansion phase, in which both parties are willing to reveal private information about their interests, because they have recognized an increase in benefits obtained by an exchange. The actual transaction (purchase) takes place in the Commitment phase, in which the parties virtually preclude other possible exchange partners, who could provide similar benefits. Typically, transactions and after-sales services take place periodically during the commitment phase.

Trust and commitment issues are handled in the following sections, since they constitute the main concepts of CRM. The termination phase of a customer relationship is skipped, since CRM focuses on the retaining of (profitable) customers rather than on aspects of disengagement from customer relationships. But the overall development process can be used as a framework for a discussion of vital concepts of customer relationships.

4.4. CRM Development Process in Buyer-Seller Relationships

The steps of the development process of CRM can be listed as: awareness, exploration and expansion. The exploration and expansion step consists of the phases; attraction, communication and bargaining, expectation development and constitution of norms.

4.4.1. Awareness

Every relationship requires the parties first to become aware of each other. Hence, the first phase of the buyer-seller relationship development process is called “awareness”, in which one party recognizes the other as a feasible exchange partner.
It is usually the (prospective) buyer that starts to see or hear of the seller's business. Hence, awareness is often facilitated by "situational proximity" between the parties (e.g. local area, neighbourhood) (Dwyer et al., 1987).

In order to start a buyer-seller relationship, the potential exchange partners first have to become aware of each other by finding each other. This can be done from the side of the prospective buyer by directly looking at an index of sellers. A business therefore should choose a company name that they expect their prospective customers to associate with them. On the Internet, it is even more important to build corporate and product brand awareness, because there is so much competition for "share of customer mind" that individual firms - particularly small ones can find it very difficult to attract customers to their site to begin the customer relationship process. However, the Internet also offers unique opportunities for catching the customers awareness. Targeted advertising in communities and tracking down of individual potential customers for direct marketing initiatives is possible using Web technologies. Additionally, web technologies allow to "draw a direct line from advertisement to sale" as opposed to traditional mass media, such as business magazines, that do not allow to control the success of marketing initiatives.

Considering the side of the seller, the seller has to get in touch with the relevant companies to catch the awareness of them. If there are several competitors in the industry, this becomes more crucial for the seller.

4.4.2. Exploration and Expansion

After having become aware of a possible exchange partner a period of testing and evaluation can follow "exploration", in which exchange partners consider advantages and disadvantages of an exchange. This is the basis for the transition to the "expansion phase", in which both parties recognize an increase in benefits obtained by the exchange. When a buyer, for example, has found a supplier for a specific component, he will communicate with the possible exchange partner and tell him his plans and expectations. The supplier will also start communicating to the prospective customer, giving him information about conditions of a relationship. These increased interdependencies also increase the risk taking between the exchange partners.
4.4.2.1. Attraction

The attraction phase usually initiates exploration and facilitates expansion. The degree of attraction depends on the perceived reward-cost outcome of a possible exchange. Money, time, or inconvenience that need to be invested are considered costs. In general, payment (provided by the customer) and functional benefits (through the delivered product) are perceived as direct rewards. (Dwyer et al., 1987) Intangible assets, such as promoting the image of one exchange partner (e.g. "an official sponsor of the Olympic Games) or social contacts as provided in communities, for instance, can be perceived as reward, too. (Eggert and Fassott, 2001)

In order to evaluate the advantages (rewards) and disadvantages (costs) of an exchange, the parties need to provide one another with the relevant information. Here, a challenge arises for businesses. In the traditional "brick and mortar" buyer-seller interactions, the prospective buyer has been able to get an impression of the business, its reliability and trustworthiness by face-to-face contact with a sales representative and being able to see the product of interest in a store-type environment.

4.4.2.2 Communication and Bargaining

Bilateral communication and negotiation of obligations, benefits, and priorities form an important stage facilitating the relationship development and actual exchange. During this process both parties reveal more and more intimate information about themselves. It is important for this process to be performed bilateral in order to establish and further develop a relationship (Dwyer et al., 1987).

Information on the prospective buyer, such as buyer's operations, field of activity and production volume can be obtained very easily and cheaply using web technology. Bauer et al. (2000) distinguish reactive and non-reactive techniques for information retrieval on customer interests. The most prominent non-reactive technique is the analysis of server log files. The interest of the customer can be determined by analysing the logs on the seller's web site. Questionnaire application is considered as a reactive technique, since it requires the user to actively fill in a web-based form. For example, the cost of time for even a free registration can be
seen as too high by people browsing the web just looking for general information; hence, the cost of time for filling in a form would exceed the perceived rewards in this case. User profiling is a technique usually applied in the expansion phase. Collection and analysis of user data is used by the business to determine users with a high anticipated customer value, and to optimize and personalize the further communication and interaction to prospective buyers. At this point, aspects of privacy and customer data propagation are critical. Analysis of web site usage data also allows for valuable customer segmentation and market research. The process of negotiation and communication is largely determined by the power of each party. Whereas power is understood as the ability to actually achieve intended goals, which is largely determined by the dependence of one party on the other party’s resources (Dwyer et al., 1987). For example, if a customer needs to have a product available in a very short time frame, he is most likely not to switch his supplier because this would increase the risk of not getting the desired product on time. Hence, the supplier would have relatively more power in this situation. The new opportunities for the customer to interactively participate and create coalitions of larger groups of customers over the Internet facilitates more influence and power on the customers’ side. (Eggert and Fassott, 2001)

4.4.2.3. Expectation Development and Norms

The process of expectation development is vital throughout the exploration and expansion phase. Expectations are about possible conflicts of interest, prospective unity and trouble with the other party. Trust is an important concept to understand the expectations for a relational exchange. (Dwyer et al., 1987)

Rules or norms for further exchange are developed at an early stage of the relationship. These “expected patterns of behaviour“ are frequently based on expectations, which largely guide the perception of the social exchange. (Dwyer et al., 1987, p.16) Norms for payment and shipping options, tax regulations, warranty and after sales service need to be known and accepted from both parties in a buyer-seller relationship.

The existence of commitment and trust in buyer-seller relationships is crucial within CRM context. And both of these concepts are vital in development of buyer-seller
relationships. Trust and commitment are widely recognised as critical components in successful customer relationship management. Trust and commitment are believed to be social attributes that generate willingness among companies to sacrifice their short-run individual self interests for the attainment of joint goals or longer term objectives. (Sabel, 1993) Companies, which trust and commit to each other, actively contribute to the continuity of the relationships. Thus trust and commitment lead to higher levels of collaboration between the companies. (Fukuyama, 1995)

4.5. Commitment and Trust in CRM Development

Commitment implies an enduring desire to maintain a valued relationship. It entails a desire to develop a stable relationship, willingness to make short term sacrifices to maintain the relationship and a confidence in the stability of the relationship. (Moorman, Zaltman and Despande, 1992, p. 316)

Trust is a highly complex and multidimensional phenomenon and has been conceptualized and discussed in many different areas of research, such as psychology, sociology and other social sciences (Lange, 2002). The concept of trust is relevant and important throughout the entire buyer-seller relationship development process. Eggert and Fassott (2001), for example, distinguish initial trust, which is required in the beginning phase of the relationship process (awareness), and trust based on direct experience with a certain business, which becomes relevant in later stages of a customer relationship.

4.5.1. Commitment

Morgan and Hunt (1994, p. 23), define what they call relationship commitment as “an exchange partners believing in that an ongoing relationship with another is so important as to warrant maximum efforts at maintaining it.” They find that variation in relationship commitment among customers moderates the effect of relationship marketing practices on customer attitudes and behaviours. They explain that relationship commitment is affected by the degree of understanding and cooperation between buyer and seller. Out from this discussion a direct influence between relationship commitment and trust in the relationship is positted in Figure 4.4.
Commitment has been defined in several ways. Geyskens, Steenkamp and Kumar (1998, p.304) discuss effective and calculative as relatively stable attitudes and beliefs about the relationship that arise, at least in part, out of interaction but clearly arising from different motivations for maintaining a relationship. Kumar, Hibbard and Stern (1994) provide a similar definition of commitment, where calculative commitment is how the parties perceive the need to maintain a relationship given the switching costs associated with terminating the relationship, and affective commitment is the party’s desire to continue its relationship. Ruyter, Moorman and and Lemmink (2001) explain calculative commitment as follows: the more the customer experiences difficulties after a change of supplier, the more the customer feels the need to continue working with the supplier. Cullen, Johnson, and Sakano (2000) discuss commitment in strategic alliances and they have a similar view of commitment, but they call it “rational and attitudinal” instead of “calculative and affective” commitment.

The most advanced phase of a buyer-seller relationship is the commitment phase. Both exchange partners "have reached a level of satisfaction from the exchange process that virtually precludes other primary exchange partners who could provide similar benefits". The partners’ level and consistency of inputs, and the durability of the association over time are considered measurable criteria for the degree of commitment. (Dwyer et al., 1987) For example, typically every household has committed itself to a particular insurance company, bank or car dealer more or less frequently interacting with a representative of this business and purchasing their goods or services on a regular basis. Of course, a consumer is rarely committed to
exactly one particular company, but rather decides to purchase products of a certain type (e.g. health insurance) from a certain business. The customer does not consider alternative exchange partners offering similar products because of his perceived inconvenience and costs for switching to another business.

4.5.2. Trust

Trust is one of the most important antecedents of customer commitment. Once customers trust the selling company, they do not have to invest time, money and effort in control activities which in turn makes the relationship more efficient. A feeling of trust creates a favourable atmosphere in a relationship and contributes to relationship longevity. In contrast, without the customer's trust, successful relationship management becomes extremely difficult and is likely to lack long term orientation. (Dwyer et al., 1987)

Following the interdisciplinary model of trust constructs introduced by McKnight, Cummings and Chervany (1998) are considered relevant for the concept of trust. A person with trusting beliefs feels confident in believing that the other person has favourable or good attributes in the context of a buyer-seller relationship. Someone with trusting intentions is willing to depend on the other person in a given situation (Lange, 2002). In the context of a buyer-seller relationship trust is considered as the belief of one party on the reliability of the other party and its willingness to fulfil his obligations in the exchange relationship. (Dwyer et al., 1987) Trusting beliefs and intentions both imply that negative consequences are possible reflecting the risk inherent in trust situations (Lange, 2002).

Trust is divided into two separate constructs, organizational trust and personal trust. Organizational trust concerns the influence the firm has on relationship commitment. Personal trust reflects the sales representative's influence on the relationship commitment.

4.5.2.1. Organizational Trust

Morgan and Hunt (1994) agree that the definition of trust highlights the importance of confidence. Boon and Holmes (1991, 194) define trust as "a state involving confident positive expectations about another's motives with respect to oneself in
situations entailing risk.” Garbarino and Johnson (1999, p. 74) describe the distinctions between trust and commitment as "customer confidence in the quality and reliability of the services offered by the organization". Similar to overall satisfaction, it is predicted that the trust in quality will be influenced by attitudes toward the major components of the service experience. Commitment is defined as “customer psychological attachment, loyalty, concern for future welfare, identification and pride in being associated with the organization."

Cullen, Johnson, and Sakano (2000) define trust as one of the major components of relationship capital. They distinguish two types of trust: credibility trust and benevolent trust. Credibility trust is the rational or practical type of trust, arising where the skills and resources of an organization have been proven. Benevolent trust is the subjective or emotional type of trust, having more to do with the expectation that the partner will care about the relationship. McKnight et al. (1998) discuss what they call “The Paradox of High Initial Trust Levels” where they identify five research streams:

- Calculative-based trust, develops over by the number of the transactions;
- Knowledge-based trust, based on the assumption that trust develops over time through experience;
- Personality-based trust, which develops during childhood and results in a general tendency to trust others;
- Institution-based trust, which maintains that trust reflects the security one feels in a situation because of safety and guarantees; and
- Cognition-based trust, which means that trust relies on cognitive cues or first impressions.

Rousseau et al. (1998) discuss three different forms of trust: The first is deterrence-based trust emphasizing utilitarian decisions that take into account the switching costs of not being trustworthy. The second, calculus-based type of trust refers to trust that emerges when one party perceives that the other intends to perform a beneficial action, e.g., the parties’ trust is limited to the context special exchanges. The third,
relational-based trust derives from repeated interactions where emotion enters into the relationship; this form is often referred to as affective trust.

Moorman, Deshpande, and Zaltman (1993) define trust as the confidence one channel partner has in the other's ability to provide expertise and/or define trust as the firm’s belief that another company will perform actions resulting in positive outcomes, and not take action resulting in negative outcomes for the firm. According to Geyskens, Steenkamp and Kumar’s (1998, p. 229): “Trust in the partner’s honesty is a channel member's belief that one's partner is reliable, stands by its word, fulfils promised role obligations, and is sincere.”

4.5.2.2. Personal Trust

McKnight, Cummings, and Chervany (1998) discuss three types of personal trust that occur when two parties enter into a new relationship. The basis for their discussion is that the parties have no mutual history, no good or bad reputations to overcome; they are uncertain about each other and the future of the relationship, and finally are vulnerable if they disclose too quickly. The first type of trust is what they call calculus-based trust, which is driven by the value of benefits or the cost of cheating where progress is made in a slow, gradual fashion. Every mistake or incident of inconsistency will set the individuals back several stages, so the trust is thus fragile and partial.

The second type of trust is knowledge-based trust, which is based on the other party’s predictability. The key processes here are regular communication, and courtship where the parties build mutual knowledge. This is done by gathering data, noticing reactions, and observing each other in various situations and contexts. Trust is present and is not necessarily broken by inconsistent behaviour.

The third type of trust is identification-based trust, which refers to both parties’ ability to know and predict the other’s choices and preferences as well as share some of them. McKnight, Cummings, and Chervany’s (1998, p.478) explain it by using a musical metaphor: “The parties learn how to use their voices to sing in a harmony that is integrated and complex. Each knows the others range and pitch, each knows when to lead and follow, each knows how to play off the others to maximize their
strengths, compensate for the others weaknesses, and create a joint product that is much greater than the sum of the parts.” It is suggested that the development of personal trust derives from the networks to which the partners belong and the type of interaction in the exchanges involved.

4.5.2.3. Trust Building Measures

Since trust is built on the basis of experience and the influence of a certain experience grows with the perceived similarity of the current situation to the past experience measures for building trust should include adaptations of concepts familiar to the target customer from his ‘brick and mortar’ experience. (Dwyer et al., 1987). However, the degree of web experience or technological background, which differs depending on the target customer segments, needs consideration (Lange, 2002). Karvonen, Cardholm and Karlsson (2000) have shown in an empirical study that the usage of easily understandable metaphors should be used instead of technical language for the description of security concepts on a web site.

Riemer and Klein (2001) give a comprehensive list of measures for building trust. They distinguish technology-based, communication-based and emotionally affecting measures. Table 4.1. gives an overview of the different measures for trust building.

<table>
<thead>
<tr>
<th>Technology-Based</th>
<th>Communication-Based</th>
<th>Emotionally Affecting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trusted OS</td>
<td>Open Communication and</td>
<td>Look &amp; Feel</td>
</tr>
<tr>
<td>Security Technology</td>
<td>Information policy</td>
<td></td>
</tr>
<tr>
<td>Reliable Web Sites</td>
<td>Self reports</td>
<td>Navigation</td>
</tr>
<tr>
<td>Customer Adequate</td>
<td>Transparency</td>
<td>Personalised Web Sites</td>
</tr>
<tr>
<td>Technology</td>
<td></td>
<td>Customer Community</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Name Brands</td>
</tr>
</tbody>
</table>

Source: Riemer and Klein, 2001

Technology-based measures are those measures based on the usage of particular hardware or software, as for example the usage of trusted operating systems, which are certified operating systems using particular security concepts. A vital technology-based measure for the building of trust is the visible usage of standard security and encryption technology. Sound functioning of the web sites on application level is
necessary to convey a competent and reliable image (Lange, 2002). The technology used should always be customer-adequate, i.e. not asking too much of the standard customer. (Eggert et al., 2001)

Communication-based measures comprise ways the company represents itself and relevant processes towards the customer as well as ways of communication to the customer. Making the privacy policy available is essential to enable the customer an initial assessment of the businesses trustworthiness (Lange, 2002). Usage of standard seals of approval can facilitate a transfer of trust (given that the customer trusts the respective institution).

In order to keep its trustworthy image the business on the web has to prove its reliability after the purchase through transparent order processing and committing to its promises. Egger (2001) suggests that the development of personal trust derives from the networks to which the partners belong and the type of interaction in the exchanges involved.

4.5.3. Bonds in Buyer-Seller Relationships

Bonds can be described as the ties or the links that affect the buyer-seller relationship within the cooperation concern. They also have considerable influence on constitution and sustainability of commitment and trust. Apart from the inherent inclination one may have to trust someone, before trust develops, minimum guarantees should exist. Efficient customer bonding techniques may serve in this direction by reducing the uncertainties of the outcome of the relationship.

There are different kinds of bonds in theory. In the first IMP (International Marketing and Purchasing Group) affiliated papers there were only two bonds present but later the number of bonds was raised to five. Some years later in 1987 there were six of them (Lange, 2002). These six bonds do however not give a picture that would cover industrial relationships completely. Additional bonds have been recognized in the past years in service marketing. Bonds such as cultural, ideological, geographical and psychological bonds has been added to the technical, time, knowledge, social, legal, and economic bonds. (Lange, 2002). By combining the bonds a more complete model has been found. Geographical, cultural, ideological
and psychological bonds are also important from an industrial perspective. (Lange, 2002).

4.5.3.1 Technical Bonds

The technical bonds start to develop in the early levels of cooperation even before a relationship has developed. Already before a supplier is chosen, the customer sends out drawings of how the part should be manufactured to the suppliers and asks for their opinion on the issue. The supplier then comes back with suggestions on how the part could be improved in order to be a better product and in order to fit better into the supplier’s production process. (Lange, 2002). At this stage the technical bond has already started to develop. If the supplier then gets chosen then the supplier strive to fit the product into its own production process as good as possible so that the product should be as efficient to manufacture as possible. Under the development of the relation between supplier and customer the supplier tries to improve the product at all time thereby keeping up in the fierce competition with all the other potential suppliers that could come to replace it. (Lange, 2002)

4.5.3.2. Time Bonds

Time bonds are usually almost nonexistent in the beginning of the cooperation. EDI cooperation does not exist between the two companies but is usually set up quickly in order to cope with the daily business. Some problems may develop with the compatibility of different EDI systems that for instance are used for delivery information (that is how many of the products that are required in the customers production and what day the products should arrive). The problem is that there are many different standards. Usually the supplier must invest in different systems so that he can be compatible with all of the customers. Over time the time bonds grow stronger when the supplier and customer start to exchange information daily and run information on the same systems. (Lange, 2002) Sheth and Sharma (1997) finds that linkages such as for instance EDI will reduce both the suppliers and buyers costs and dramatically shorten cycle times. The reduction of suppliers and buyers costs will also affect the economic bonds in a positive manner. By decreasing the lead-time of the products the supplier can deliver products to the customer on shorter notification and that also strengthens the time bond between the companies.
4.5.3.3. Knowledge Bonds

Knowledge bonds can be latent that is to say they can be present before the supplier is contacted for cooperation.

Knowledge bonds usually start to develop in the absolute beginning of the relationship. Usually the supplier is invited to take part in the development of the product at an early stage of the production. Then the customer gets to know what the supplier is able to do in the relationship and the supplier get to know the requirements that the customer has. The knowledge bond usually strengthens over time when the two cooperating companies learn more and more about each other. The learning curve is positive. When the relationship is terminated then the knowledge bond weaken over time. (Wendelin, 2002)

4.5.3.4. Social Bonds

There may be latent social bonds between the customer and the supplier before the cooperation starts. Social bonds are usually weak or nonexistent when the cooperation starts. These bonds develop over time when people in the companies start to know each other during the cooperation. People that interact with each other often for instance from the selling/buying sides in the company and from logistics, product development and quality assurance tend to have the strongest bonds to each other. By conducting business together and learning to know each other also in the spare time. Through for instance “wining and dining” these bonds grow stronger.

The social bonds weaken when people with good social contacts move to another company sometimes taking the customer with them which could lead to that the relationship ends and leads to that all the other bonds with the buyer and the seller end. (Wendelin, 2002).

4.5.3.5. Legal and Economic Bonds

Legal bonds do fluctuate in stability during the life span of the relationship. The legal bonds are usually renewed on a yearly basis and sometimes on times on up till three years. The legal agreements usually however have clause’s that allow the contract to be renegotiated if the price on raw material on the world market, etc. should change.
The legal bonds are usually quite weak and cannot stop a relationship from ending if for instance the technical quality of the product is poor.

Economic bonds are of a quite unstable nature. For some customers the price on the product is of high importance and if there is a supplier that can supply the product to a lower price taken into consideration that the products on the market are of a homogenous nature then the bond will break. The economic bonds may grow stronger during the relationship due to that the cooperation increases and the supplier sells more and more of its products to one single buyer. (Wendelin, 2002)

4.5.3.6. Other Bonds

Geographical bonds have to do with how suitably located the supplier is from a customer point of view. The view of how suitably located the supplier is can vary over time in the relationship. Depending on the industry the location of the supplier is of different importance. How valuable the products are and how much they weigh plays a part of the importance. In the beginning of the relationship the customer look at issues as the supplier lead-time, geographical distance, costs for transportation of the goods, etc. When the relationship develop and the geographical bond grows stronger then it is usually due to a improvement in lead times in the supplier's production. (Wendelin, 2002)

Cultural bonds are usually stable in the relationship. The language spoken, the religion or other cultural factors such as which country the supplier is situated in are not easily changed. The cultural bonds are latent that means that they exist before the relationship starts and people have understanding for certain cultures, languages or religions or are biased against them. They can develop during the relationship and can increase or decrease in strength as the people in the organizations learn to speak the other language, etc.

Regarding ideological bonds there are two different ways to look at the development of ideological bonds in the relationship. There are two kinds of ideological bonds, stable and dynamic ideological bonds. Ideological bonds that does not increase or decrease in strength during the life span of the relationship can be perceived as stable
ideological bonds. Dynamic ideological bonds in relationships usually develop over time all after the requests for environmental awareness grows stronger.

Psychological bonds usually stay the same during the whole relationship lifecycle. Psychological bonds can for instance be that someone prefers buying a piston made in Germany instead of one made in Japan. These bonds are usually very weak or very strong they are seldom of medium strength.

Stability of bonds can be defined as the tendency of the bonds to increase or decrease in strength during the relationship. The fact that a bond is stable does not mean that the bond is stable in a positive way. Stability in this sense could well mean that the particular bond is extremely weak and continues to be so. Unstable or fragile bonds like for instance technical and economic bonds are bonds that are the most likely to affect relationship termination if that occurs. (Järvinen, 1997)

Bond stability is marked with ++ for stable bonds, + for bonds of medium stability and 0 for unstable/fragile bonds in Table 4.2 reveals the stability of the bonds in industrial relationships.

**Table 4.2. Stability of bonds in industrial relationships**

<table>
<thead>
<tr>
<th>Bonds between companies in dyad</th>
<th>Bond stability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical</td>
<td>0</td>
</tr>
<tr>
<td>Time</td>
<td>+</td>
</tr>
<tr>
<td>Knowledge</td>
<td>+</td>
</tr>
<tr>
<td>Social</td>
<td>+</td>
</tr>
<tr>
<td>Legal</td>
<td>+</td>
</tr>
<tr>
<td>Economic</td>
<td>0</td>
</tr>
<tr>
<td>Geographical</td>
<td>+</td>
</tr>
<tr>
<td>Cultural</td>
<td>++</td>
</tr>
<tr>
<td>Ideological</td>
<td>+</td>
</tr>
<tr>
<td>Psychological</td>
<td>++</td>
</tr>
</tbody>
</table>

Source: Järvinen, 1997
Different bonds tie the customer to the supplier and make it more difficult for the cooperating companies to terminate the relationship and break the existing bonds. This is among other things due to the fact that it would be expensive to build up new relationships with other suppliers or customers. The money and time invested in the relationship would also be lost.

Commitment and trust are two of the basic issues in buyer-seller relationships in CRM context. Another crucial aspect of CRM is the usage and capability of modern information systems. The usage of interorganizational electronic vehicles facilitate the ongoing transactions between the companies. The integration of processes among the buyer and the seller can be boosted by the usage of interorganizational electronic vehicles. As the usage of electronic vehicles becomes denser, the integration of the processes become more intensive. When integration of processes among the companies is under consideration, there exists a high level of commitment. The usage of electronic vehicles among companies is an indicator how committed the companies are, since it requires irreversible and customised investment.

4.6. Capabilities of Electronic Vehicles in Buyer-Seller Relationships

E-business or e-commerce is the new enterprise imperative. The Internet not only allows companies to conduct business in new ways, it requires them to do so to survive. To stay competitive in today's wired world, companies must be able to deliver applications and services digitally to their partners and derive real value from these online partnerships (Ling and Yen, 2001).

In addition to the traditional channels, electronic communication channels are today vital for companies to communicate with the customers and hence stay competitive. There are several different electronic communication channels that can be used as delivery vehicles for sales activities between a buyer and its sellers. Two different types: electronic vehicles (fax, CD-ROM, e-mail), and extranets will be considered.
4.6.1. Electronic Vehicles

Fax

Fax technology that has been in use for several decades allows images of paper documents to be transmitted through telephone lines to a destination where they can be printed (or displayed on a computer screen). Fax is a fast and convenient tool for transmission of information. Its main strength is the fastness and that it is so spread out in the business world, almost all companies have fax machines (Beekman, 1997). The weaknesses are the relative high costs for sending information through this channel and the low quality of printouts. When the printout quality of received information is not of importance, fax works well. But, if for example, detailed pictures are to be sent this communication channel loses its value. The fax machines have become more sophisticated but the print-out quality is still not sufficient.

CD-ROM

A CD-ROM (Compact Disc-Read-Only Memory) is a disc that is identical to a standard audio CD except that it is used to store computer data instead of, or in addition to, music (Beekman, 1997). This electronic media can store large amounts of data, approximately 500 books worth of text. The large amount of data that can be stored is one of CD-ROM’s main strengths. Companies can for example deliver large amounts of product information on CD-ROMs. CD-ROM is especially favourable if a lot of pictures are needed since pictures in data format involve large data files. Other strengths are the lower production and transportation costs compared to traditional printing material. This means that updates of the material become more economic than shipping out new printed material for each update.

Finally, CD-ROM facilitates better search and illustration options than printed material. The dynamics of CD-ROM gives the user possibilities to search by a traditional table of contents and also by using index search functions. The last form means that the user simply types the word or phrase he is looking for, and the CD-ROM then displays the various options available. The major weakness of CD-ROM is that the user needs access to a computer with a CD-ROM drive. This means that a technician must have a laptop with a CD-ROM drive for accessing information out in
the field. It can also be difficult to design the information on a CD-ROM so that it reflects traditional printing material (book interface)

**E-mail**

Electronic mail systems allow users to send messages (mail) from one computer to another. This can be done whether the receiver is logged on to the system or not. The strengths of e-mail are that it is fast and does not depend on location. The delivery takes normally only a few seconds whether it is same office or across the ocean. The receiver can log in and read the message from a computer at the office, at home, or anywhere in the world. E-mail also facilitates group communication, meaning that it is not more difficult or expensive to send the same message to one destination than to several destinations. Further, editing of e-mail is easy and documents, pictures, etc. can be attached (Beekman, 1997). One weakness of e-mail is the restricted amount of data that can be sent.

### 4.6.2. Extranet

Extranets are private networks that use the Internet protocols and the public telecommunications system to securely share part of a business’s information or operations with suppliers, vendors, partners, customers, or other businesses (Ling and Yen, 2001). Another definition of an extranet is: “The extension of a company’s intranet out onto the Internet, e.g., to allow selected customers, suppliers and mobile workers to access the company’s private data and applications via the World Wide Web. This is in contrast to, and usually in addition to, the company’s public web site that is accessible to everyone.” (Ling and Yen, 2001, p. 40) Extranets are often confused with intranets, which are private networks that are used exclusively within a company or organization. The access to an intranet is also limited to employees or organization members only. The main similarities and differences between the Internet, intranets, and extranets are presented in Table 4.3.
Table 4.3. Similarities and differences between Internet, intranets, extranets

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Internet</th>
<th>Intranets</th>
<th>Extranets</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is it?</td>
<td>The information Highway</td>
<td>The use of Internet technology within a company/organization</td>
<td>A network that uses the Internet to link company intranets in order to enhance business to business relationships</td>
</tr>
<tr>
<td>Access</td>
<td>Open</td>
<td>Private</td>
<td>By agreement only</td>
</tr>
<tr>
<td>Users</td>
<td>Public</td>
<td>Organization members</td>
<td>Business partners</td>
</tr>
<tr>
<td>Information</td>
<td>General</td>
<td>Proprietary</td>
<td>Selective</td>
</tr>
</tbody>
</table>

Source: Vlosky, Fontenot and Blalock, 2000

In order to keep up with the increased competition, most companies are continually searching for new and better ways to speed communications between trading partners, establish better relationships with customers, suppliers and partners, improve customer service, and reduce expenditures. An extranet can help a company to realize many of these goals, hence achieve increased revenue and competitive advantages. (Ling and Yen, 2001; Vlosky et al, 2000) Further, extranets may promote customer to member loyalty to high-level commitment and will generally drive much of e-commerce business in the new millennium.

Extranets have several advantages: (Ling and Yen, 2001; Angeles, 2001)

Ready access to information: Information can be provided in a way that is immediate, cost-effective, easy to use, rich in format, and versatile.

Freedom of choice: Web technology is available for nearly all the major operating systems and hardware platforms and can enhance the value of existing database systems.

Ease of use.: Hypertext (searchable Web-site text via links) is a major contribution to the user friendliness factor of a Web-based extranet.

Moderate set up cost: Since extranets use the existing Internet infrastructure, including standard servers, e-mail clients and Web browsers, an extranet is far more economical than creating and maintaining a proprietary network.

Lowering printing and processing tools: Cost savings is a major motivator for implementing extranets. Other fertile grounds for cost savings include delivering
product information, catalogues, news, etc. electronically to intermediates via the extranet. Besides faster delivery times, the company also achieves major cost savings by forgone the traditional printing and mailing costs to intermediates.

Additional extranet advantages are simplified workflow in areas as filing in reports and lowering training costs by using the extranet to deliver just-in-time training, regardless of the geographic location of the trainee. Better group dynamics can also be achieved through discussion groups, mailing lists and different types of online knowledge.

4.6.2.1. Extranet Applications

An extranet can include several business functions and the range of possible extranet applications is almost endless. Examples of business functions are sales and marketing, customer service and support, financial, product development, and human resources (Ling and Yen, 2001).

Sales and Marketing

The sales department faces a continuous challenge delivering up-to-date reference information to customers, often dispersed over a large area. Having the right information available at a critical moment can be the difference between making and losing a sale. Marketing people, meanwhile, need access to database consisting of critical type information on current and potential customers. An extranet can be used for all these scenarios to provide information regarding product specifications and prices, sales leads, competitive information, calendars of sales activities, just-in-time training, and real-time sales presentations.

Customer Service and Support

Extranet applications in this category can have a much broader impact on the quality of internal and external communication. There are many claims made that the real value of Web-based customer service in general is not direct sales, but rather improved customer relations that retain customers. An extranet allows customers or trading partners to find the information they need, in real time, without having to wait on the phone for support. This timeliness of information exchange adds value to
the relationship. Further, the company can for example create community applications, such as newsgroups with discussions forums, for exchanging and enriching knowledge related to various areas.

4.6.2.2 Extranets’ Impact on Business Relationships

Due to the characteristics as a communication tool, extranets promise to have significant impact in building, managing, and strengthening customer relationships. (Ling and Yen, 2001) Communication is a critical factor in the extranet environment. As mentioned above, an extranet will enable trading partners, suppliers, and customers with common interests to form a tight business relationship and strong communication bond. Accuracy and timeliness of information, as well as speed of response, are important to achieve successful extranet relationships.

Extranets facilitates each of these components by allowing business partners to communicate, exchange files, purchase goods or services, conduct information searches, manage businesses, monitor business details, and perform other activities. Additionally, extranets create major opportunities to customize the information available on the network for everyone accessing the system (Vlosky et al, 2000).

The global access, convenience, real time communication that extranets deliver is a very powerful communication channel in today’s fierce competition environment. Successful strategy depends on successful communication, and it hardly needs to emphasize how powerful the Internet can be as a communication tool. Since extranets are web-based and interactive, business partners can dig as deeply as they want, when they want. As a conclusion it can be stated that an extranet as a communication channel fulfills the fundamental principles of relationship marketing and CRM, and hence is very suitable tool for strengthening business relationships

4.6.3. Evaluation of Electronic Vehicles and Extranets

Four different electronic communication channels can be used as delivery vehicles for promotion activities. A comparison is made between the different channels strengths and weaknesses.
The fax is still very much a common and used communication channel for sending short text documents, although most of its functions are being substituted by e-mail. Its suitability for delivering promotion activities is very limited due to its low printing quality and high cost. Concerning the CD-ROM, it is also very present and will probably continue doing so as a storage media for promotion material. In terms of delivering promotion activities to dealers, CD-ROM requires delivery through traditional mail. E-mail is now an established channel and will most probably be around for a very long time.

Finally, the extranet is now an established communication channel but its development process is still in its early stages. The main advantage of electronic channels is that a buyer has global access to the extranet and its latest information. It does not matter where in the world the buyer is located to access the extranet, as long as he has a computer with a modem. The dealer can search for information as deep and often as he wishes.

Another advantage of an extranet is its possibility to store large amounts of information in a structured way. An extranet can consist of infinite numbers of databases loaded with different types of information. Fax, CD-ROM, and e-mail can only deliver a certain amount of information each time they are used. Furthermore, extranets offer an update flexibility that the other channels cannot compete with. Due to that an extranet is build up by databases, information only needs to be changed in one place and all dealers then have immediate access to the new information. The dealers do not need to keep track of old faxes, e-mails, or CD-ROMs to remember which information is the most recent. The information can be much better structured on an extranet. Extranets can facilitate so many different functions, as for example order placement, delivery follow-up, and online training. All these functions aim at strengthening the company’s relationships with its business partners. An optimal extranet should be the single point access to the company for its business partners.

In the thesis, the characteristics of industrial markets, the interdependency framework for the companies operating in industrial markets, commitment and trust issues and the capabilities of electronic vehicles were mentioned in detail. Covering all these aspects a comprehensive model will be presented. This model defines the
interactions between these aspects and these interactions’ impact on the success of the buyer-seller relationships.

4.7. An Integrated Model for Industrial Markets

Zhengzong and Doll (2001) developed a model to integrate the factors that affect the buyer-seller relationship success for industrial markets. For the purposes of this thesis, this integrated model is adopted considering white goods sector in accordance with the issues mentioned above.

According to the integrated model, the success of the buyer-seller relationship is determined by the extent to which the demand for cost and knowledge sharing by the buyer can be met by the seller.

4.7.1. Factors Determining The Level of the Demand For Knowledge And Cost Sharing

The nature of the firm’s product and process determines the absolute level of the necessary cost and knowledge for the buyer (manufacturer). This is the basis to determine the demands for cost and knowledge sharing by the buyer (manufacturer). Manufacturer product/process specific competence will influence the linkage by pointing out the needed competence from suppliers. Environmental factors represent the competition, technology change, and customer demand that will impose the level of emergency for cost and knowledge sharing.
Figure 4.5. An Integrated Model of Buyer-Seller Relationships in Industrial Markets (adopted from Shi and Doll, 2001)
4.7.1.1. Nature of the Product and Process

Clark and Fujimoto (1991, p. 10) developed a framework to classify the complexity of the product from two dimensions, i.e., product-user interface complexity and internal structure complexity. From these two dimensions, they classified products into four categories: simple products, inter-face driven products, component-driven products, and complex products. Chesbrough and Teece (1996) distinguish two types of innovation as autonomous and systematic. Autonomous innovations are those that can be pursued independently from other innovations, thus implying a low level of external structure of the focal innovation. For instance, a new radiant heating element to increase the power of the cooker can be developed without a complete redesign of the radiant heating element or the rest of the cooker. In contrast, systematic innovations are those that a company can gain benefits from through related complementary innovations. One example is induction heating. The white goods manufacturers needed to develop both the induction heating element and the new cooker technology. By their nature, these systematic innovations require information sharing and coordinated adjustments throughout the entire product system, hence the level of knowledge and cost inherent in them.

Hayes and Wheelwright (1979) propose process life cycle stages include jumbled flow (job shop), discontinued line flow (batch), connected line (assembly line), and continuous flow. Kotha and Orne (1989) use the levels of mechanization, systemization, and interconnection to represent the process structure complexity. They propose three stages (i.e. uncoordinated, segmented, and systemic) of process development. Levy (1997) proposes that lean production requires frequent, rapid flows of information and goods along the value chain, which is costly and difficult when value chain activities are geographically dispersed. Firms need different levels of cost efficiency, knowledge volume, and diversity to be successful in the different process stages. Obviously, the more complex the process is, the higher the absolute level of cost and knowledge inherent in the business. Similar to proposition 1, suppliers are significant sources of knowledge and capital.
4.7.1.2. Buyer Product Specific Competence

A manufacturer’s product specific competence reflects the manufacturer’s ability to design, manufacture, market, and distribute the specific product of the seller in terms of cost effectiveness and mastery of necessary knowledge about that product and process. Further, through information exchanges, organizational learning, and knowledge creation processes, manufacturers can learn from their partners, thus changing this competence dramatically. Powell et al. (1996) propose that when the knowledge base of an industry is both complex and expanding and the sources of expertise are widely dispersed, the locus of innovation will be found in networks of learning, rather than in individual firms. This illustrates that the less likely the focal firm is able to individually design, produce, and market products, the higher the need for manufacturers to share cost and knowledge with suppliers. In contrast, the higher this competence, the more likely the manufacturer can provide cost effective quality products itself. And thus, the manufacturer needs less support from its suppliers.

4.7.1.3. Turbulence in the Buyer’s Environment

Environmental factors will certainly influence the manufacturer-supplier relationship by providing a context for the players’ actions. Powell et al. (1996) propose that product innovation will continue going down as the market matures, but process innovation peaks in the middle of the product maturing process. These innovations require information, knowledge, and cost to be successful. The cooperation in buyer-seller relationships is certainly one source for the necessary cost, information, and knowledge. Clearly, when environmental context is favourable to individual firms in terms of complexity, and dynamism, the need for cooperative behaviour is lower. Dollinger (1990) proposes that in fragmented industries, both high and low levels of the environmental factors will impede the evolution of pair-wise cooperative behaviour, but intermediate levels will promote cooperative behaviour.

From here, we can see that the contextual factors have a significant impact on cooperative behaviour.
4.7.2. Factors Influencing the Level of the Capacity Of Knowledge And Cost Sharing

The supplier’s manufacturer management and product/process specific competence determine the capacity of cost and knowledge sharing. The supplier management practices, the usage of inter-organizational systems (IOS), and the trust impact this linkage.

Similar to explanations of the manufacturer competence supplier competence on manufacturer management and component/process is certainly the antecedent of the buyer-seller relationship processes. Suppliers can leverage their competence to negotiate with manufacturers based on the power-based view. In the buyer-seller relationship process, supplier competence is dynamically changing through organizational learning, knowledge creation, and information exchanges. Supplier management practices, IOS usage, and trust will certainly impact information exchange, knowledge creation, and organizational learning, and cost effectiveness.

4.7.2.1. Seller’s Competence Buyer Relationship Management

Various supplier firms with different specific characteristics and features (e.g., firm history, culture, and alliance experiences) understand and learn differently from specific manufacturing firms. Thus, they adapt differently to the emergent needs of the manufacturer. The higher the competence of the supplier to adapt to the emergent needs of the manufacturer, the higher the capacity for cost and knowledge sharing through buyer-seller relationship. Asanuma (1989) developed a concept called relation-specific skill, which describes how efficiently the supplier could respond to the specific needs of the core customer firm. Formation of this skill requires that learning through repeated interactions with a particular firm be added to the basic technological capability the supplier has accumulated. Dyer and Singh (1998) also propose the concept of partner specific absorptive capacity, which refers to a firm’s ability to recognize and assimilate valuable knowledge from a particular alliance partner. They point out that this ability depends on the extent to which partners have developed overlapping knowledge bases and the extent to which partners have
developed interaction routines that maximize the frequency and intensity of sociotechnical interactions.

4.7.2.2. Seller’s Competence on the Components/Processes

Similar to a manufacturer’s product/process specific competence, supplier product (i.e. the components of the manufacturer’s final product) and process specific competence are the supplier’s capability of designing, manufacturing, marketing, and distributing the specific component in terms of cost effectiveness and mastery of necessary knowledge about that product and process. This competence is certainly a source of competitive advantage for suppliers from the point of the resource-based view and is an important leverage over manufacturers from the power-based view.

While the manufacturer product/process specific competence reduces the manufacturer’s demand for cost and knowledge sharing, the supplier’s competence on product/process will set up the maximum buyer-seller relationship capacity for cost and knowledge sharing. The highest potential benefits that the manufacturer can gain are the supplier’s performance based on its competence regarding the product and the process. Recent research by Krause (1997), is investigating antecedents of buying firms’ effort to improve suppliers, current practices and outcomes of supplier development, success factors in supplier development, and the reactive and strategic processes in supplier development. Clearly, this supplier’s product and process competence is an important factor in the buyer-seller relationship.

4.7.2.3. Inter-organizational systems (IOS) Usage

Inter-organizational systems are technologies designed and implemented to operationalize the relationships among partners in the alliance. The structurability of the relationship can be programmed and embedded in the IOS (Zhengzong and Doll, 2001). The fundamental function of IOS is as a media and channel for the socialization, externalization, internalization and combination of information and knowledge between partner organizations. Agents of manufacturers and suppliers can complete business transactions cost effectively through IOS.

Without these activities, organizations just cannot survive, let alone prosper. Every organization has some kinds of inter-organizational systems with varying degrees of
complexity, compatibility, connectivity, security, integrity, efficiency, and effectiveness. IT based inter-organizational systems are able to integrate a set of firms electronically and have the potential to significantly alter the basis of competition in the market place. IOS is now becoming a more and more important resource in the buyer-seller relationship. It is a resource as a communication channel and as a means of exerting power over partners. Further, IOS will facilitate not only business transactions but also knowledge creation and organizational learning. Since different supplier roles (i.e. partners, mature, child, and contractor) have various requirements for information exchange, knowledge creation, and organizational learning, their needs for IOS support naturally differ.

4.7.2.4. Degree of Trust Between the Seller and the Buyer

Hagen and Choe (1998) define trust as the expectation that the promise of another can be relied on and that, in unforeseen circumstances, the other will act in a spirit of cooperation with the trustor. Ring and Van de Ven (1994) propose that trust is a second source of confidence in partner cooperation besides control. As Arrow puts it, “Virtually every commercial transaction has within itself an element of trust” (1972: 357), which is certainly true of any transaction conducted over a period of time. Because it is impossible to monitor every detail in most exchanges, a firm must always have a minimum level of trust. Trust is especially valuable in alliances because, in varying degrees, firms have to rely on and remain vulnerable to their partners’ performance (Kumar, 1996). Different degrees of trust among manufacturers and suppliers will definitely influence the capacity of cost and knowledge sharing, either in the use of existing capacity or the further development of the capacity. A transaction on the basis of trust, with its implicit, pre-existing, and unspecified conditions for cooperation, economizes on the specification and monitoring of contracts (Kumar, 1996). Trust is extremely difficult to imitate and thus should be one source of sustainable competitive advantage. Ring and Van de Ven (1994) argue that the strategic advantages of cooperative buyer-supplier relations can only be realized through an inter-temporal process, which takes the nature of the historical relationship into account. Without a doubt, trust is the critical social capital for leverage in the relationship and dramatically influences the capacity of the manufacturer-supplier relationship. Again, the more complex the outsourcing
component, the higher the level of cost and knowledge inherent in the product development. Thus, there is higher level of need for sharing cost and knowledge through relationship with partners, including component suppliers. Consequently, trust will have a more important impact on the buyer-seller relationship capacity for cost and knowledge sharing.

4.7.2.5. Turbulence in the Seller’s Environment

Similar to the impacts of the final-product industrial environments on the capacity demand, suppliers’ industry environmental factors will certainly influence the buyer-seller relationship capacity through moderating the relationship between supplier competence and the capacity supply.

4.7.3. The Success of the Buyer-Seller Relationship

The success of the buyer-seller relationship can be viewed from a socio-economic perspective. With the emergence and evolution of the cooperation between the manufacturer and the supplier, as argued by Dyer and Singh (1998), buyer-seller relationship success can be expressed as the increasing market share, the deepened trust, and the more cooperative relationship. These success issues are generated through the optimization of both the economic and social utilities of resources in buyer-seller relationship. The continuous interactions among agents across the buyer-seller relationship administrative hierarchy are critical to achieve this success. Clearly, factors such as organizational strategic goals, cultural traditions, and philosophical thinking confront and accommodate each other through the relationship process. Thus, the buyer-seller relationship process not only helps manufacturers and suppliers achieve the immediate goals of sharing cost and knowledge, but also influences the future development paths by providing the social context for the initialization of new and continuation of old buyer-seller relationships. This cumulative nature of the relationship will not only impact the initiation of the new relationship between these two partners but also may facilitate new relationships between one partner and other new manufacturers (suppliers) through the existing partner’s referral. The relationship channels, the information flow and constraints the availability of the new partners because of the embeddedness of the partners in the network of the relationships they have.
A strong existing buyer-seller relationship (i.e. the realized capacity supply equal or greater than the explicit capacity demand) may constrain the reach of potential new partners in the process of discontinuous technology innovation. This is because of the organizational inertia to continue existing relationships. In contrast to strong relationships, weak ties (i.e. the current realized capacity supply is less than or equal to the explicit capacity demand) may have important impacts such as encouraging manufacturers to search fresh ideas through other channels. (Hansen, 1999) Again, the more complex the outsourcing component is, the higher the level of cost and knowledge inherent in the product development. Thus, the strength of the buyer-seller relationship will clearly have significant impacts on the business performance.
5. FIELD RESEARCH: CASE STUDY ON CRM IN BUYER-SELLER RELATIONSHIPS IN WHITE GOODS SECTOR

5.1. Methodology

The selection of the methodology is based on the research problem; a systematic analysis of buyer-seller relationships in white goods sector within the context of the developed model, which is mentioned in the previous section of the thesis. Figure 5.1. gives an overview to the selected research methodology and its alternatives.

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**Figure 5.1. Selected Research Methodology**
The research purpose is explanatory. Justifications for all adopted methodological choices will be given in each section.

5.1.1. Research Purpose

Yin (1994) means that research strategies can be used for three purposes: explore, describe and explain. Among these strategies, explanatory strategy is selected for this thesis.

Which category a study belongs to depends on ambitions and knowledge within the research area. The research purpose of this thesis is mainly explanatory. This is due to the fact that the research purpose is to give an insight to aspects of relationships between buyers and sellers in white goods markets and to gain a better understanding of the determinants of these relationships and their effects on the outcome. This thesis covers the theoretical issues regarding the buyer-seller relationships and comprises conclusions on basis of this theoretical background.

5.1.2. Research Approach

According to Yin (1994), there are two general approaches of a research, qualitative and quantitative. During a qualitative research, one or few objects are studied in depth and the main purpose is to gain a deeper understanding of the problem studied and to acquire a profound knowledge of the studied objects. The qualitative approach is characterised by closeness between the source and researcher, and a low degree of formalisation. (Yin, 1994)

The choice of research depends on the defined research problem and the data needed to solve this problem. In this thesis, a qualitative approach is pursued. This is due to the aim of gaining an understanding of the relationships and outcomes between the buyers and sellers in industrial markets. As a matter of fact, comprehensive information on buyer-seller relationships, CRM issues in white goods sector are comprised in this thesis.
5.1.3. Research Method

Yin (1994) lists four research strategies that a researcher can choose between in social science. There are experiments, surveys, histories and case studies. Yin claims that the selection of one of these strategies depends on (1) the type of research question, (2) the extent of control of researcher has over behavioural events, and (3) the degree of focus on contemporary versus historical events.

Among other alternatives, one strategy seems to be appropriate for this research; a case study. Yin describes a case study as: “An empirical inquiry that investigates a contemporary phenomenon within its real life context, especially when the boundaries between phenomenon and context are not clearly evident” (Yin, 1994)

However, Yin notes that the preferred strategy when the question is “how” there is no control over behavioural events, and contemporary events are studied, is the case study. Therefore, the case study is selected as research strategy in this study. According to Yin (1994), a case study can be either a single-case or a multiple-case study. To gain a comprehensive understanding one case study is conducted and the relations between one sole supplier and its four most important buyers, who can be regarded as a homogeneous group regarding their importance to the supplier, are analyzed in detail.

5.1.4. Data Collection Method

When conducting case studies, Yin (1994) asserts that the data collection can rely on six different sources. These resources include documents, archival records, interviews, direct observation, participant observation and physical artifacts. Table 5.1. shows the alternative data collection methods in case study approach.
Table 5.1. Alternative Data Collection Methods in Case Study Approach (Yin, 1994)

<table>
<thead>
<tr>
<th>Source of Evidence</th>
<th>Strengths</th>
<th>Weakness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documentation</td>
<td>Stable – can be reviewed repeatedly, Unobtrusive – not created as a result of the case study, Exact – contains exact names, references, and details on an event, Broad coverage – long span of time, many events, and many settings</td>
<td>Retrievability – can be low, Biased selectivity, if collection is incomplete, Reporting bias – reflects (unknown) bias of author, Access – may be deliberately blocked</td>
</tr>
<tr>
<td>Archival records</td>
<td>Same as above for documentation, Precise and quantitative</td>
<td>Same as documentation, Accessability due to privacy reasons</td>
</tr>
<tr>
<td>Interviews</td>
<td>Targeted – focused directly on case study topic, Insightful – provides perceived causal inferences</td>
<td>Bias due to poorly constructed questions, Response bias, Inaccuracies due to poor recall, Reflexivity – respondent gives what interviewer wants to hear</td>
</tr>
<tr>
<td>Direct Observations</td>
<td>Reality – covers events in real time, Contextual – covers context of event</td>
<td>Time consuming, Selectivity – unless broad coverage, Reflexivity – event may proceed differently because it is being observed, Cost – hours needed by human observers</td>
</tr>
<tr>
<td>Participant Observations</td>
<td>Same as above for direct observations, Insightful into interpersonal behaviour and motives</td>
<td>Same as above for direct observations, Bias due to investigator’s manipulation of events</td>
</tr>
<tr>
<td>Physical Artifacts</td>
<td>Insightful into cultural features, Insightful into technical operations</td>
<td>Selectivity, Availability</td>
</tr>
</tbody>
</table>

In this research, the sources of documentation and interviews are used, allowing for multiple resources of evidence. Documentation that is used is mainly in the form of company information material. Documentation material provides more information about the company, allowing to obtain a clearer picture of the relationships of the supplier with the significant buyers. Interviews were used due to their ability of providing a deep insight.

In this study, in-depth interviews with the professional managers were conducted since a certain set of questions needed to be answered during a limited period of time, in order to obtain data on the research questions. Since the research purpose has an explanatory nature, the questions enabled the acquirement of an in-depth view to the buyer-seller relationships. The answers to these questions provided a brief explanation to buyer-seller relationships in white goods sector. The interviews also
had to be relatively open-ended, since the aim was to preserve the interview flexibility.

5.1.5. Sample Selection

In order to suit to the research purpose, the sample selection followed some judgemental criteria. The first sample selection criterion was to select a supplier operating in white goods market, serving six product groups for heating with different technical aspects and functions to the buyers. The most institutionalized industrial markets in Turkey are white goods and automotive. Among these two sectors white goods sector was chosen, since the players in this sector are mostly national and have been operating in Turkey longer than the companies in automotive sector. As a matter of fact, these companies are involved in long term relationships with their suppliers. As a second criterion, the selected supplier would have to be serving the biggest manufacturers of the white goods sector. Four manufacturers were selected as sample buyers. These buyers, in total, hold 96% share of the Turkish white goods sector. The third criterion, taken as basis during sample selection, was the ease of contact with the selected company, to be able to analyze the relevant issues of the research in detail. In selection phase of the buyers, the customers with the highest turnover were chosen. After determining the buyers with highest turnover, the customers who constitute a homogeneous group regarding buyer-seller relationships were chosen as sample. These four buyers have the same product mix; ovens, washing machines, dish washers, refrigerators, hoods and small household appliances.

In choosing the contact people to conduct interviews, the sales manager, the technical director, sales engineers, south European marketing manager of the supplier company and the purchasing and the planning managers and responsible staff of the buyer were chosen, since they are deeply involved in buyer-seller relationships. The buyer and the seller questionnaire forms are presented in Appendixes A and B.
5.1.6. Analysis of Data

There are basically three different ways to draw conclusions, the inductive, the deductive or the abductive way. (Yin, 1994) Deduction implies the drawing of a conclusion perceived as valid if it is logically connected. Usually in studies of a deductive nature, already established theories and literature are used as foundation for the research.

This research follows a deductive approach. The preparation of this thesis started by studying already established theories within the area of different types of buyer-seller relationships, reviewing the relevant literature and continues with theories regarding management of customer relationships. It was found appropriate to start with the theories to get a foundation for the research to be able to construct the structure of the empirical findings and then later on try to draw conclusions based on knowledge and empirical findings on a logical basis.

- Marshall and Rossman (1998) say that data analysis is the process of bringing order, structure, and meaning to the mass of collected data. This is an important and time consuming part of research. They continue to state that qualitative data analysis is a search for general statements about relationships among categories of data; it builds grounded theory. Furthermore it is important to realize that the samples are smaller in a qualitative research than in a quantitative one, but it may be more subtle and complex. That will affect the data analysis. Yin (1994) claims that every investigation should start with a general analytic strategy, yielding priorities for what to analyze and why.

In this research, a case analysis will be conducted. This thesis will follow the pattern: generating categories, indicating emergent theory, searching for alternative explanations and finally stating the conclusions. The case will be analyzed and then will be compared with the previous theory. Within the case analysis, the collected data will be compared with previous theory taking the structure of the same frame of reference as basis.
5.2. Findings of the Research Study

Since this research study aims to give a comprehensive insight to the buyer-seller relationships in white goods sector, the relationships of the selected four buyers with the selected supplier are analyzed in detail. The findings that take part in this section are: the presentation of the case company, product characteristics of the case company, characteristics of white goods market from a supplier view, characteristics of the relationships with the manufacturers, the manufacturers' perception of relationships with the case company, the interdependency framework for the selected case company, CRM aspects of the relationships of the case company with the selected buyers, managerial implications for the application of the integrated model to the case company.

5.2.1. Presentation of the Case Company

E.G.O., founded in Germany, is a company, which operates as a supplier in white goods sector. It produces hot components for the white household appliances. The components of E.G.O. are in principal embedded in ovens, washing machines, deep fryers and in all household appliances which require heat. Nowadays, the white household appliance sector is facing with a switch from electromechanical applications to fully electronic applications. E.G.O. group had foreseen this switch a couple of years ago and initiated its investments for the production of electronic components. Nowadays 50% of the turnover is gained via electronic products.

The financial headquarter of the group is situated in Switzerland. The affiliates of the group operate in more than 20 countries. There are more than 30 companies of E.G.O. worldwide. The company was founded by Karl Fischer 75 years ago in Oberderdingen in Germany. He invented cast iron hotplates, in the time period when the usage of electricity in household appliances was not common. Later on, the company started to produce switches, thermostats for ovens and cooktops and this trend was followed by the production of tubular heating elements for ovens and by another innovation; radiant heating elements. In the beginning, the company focused on hot applications, with the introduction of wet applications to the market, it also started to concentrate on the components for wet applications as well.
Research & Development Center of the group is in Oberderdingen. This center is responsible for developing products and solutions for the customers. For every product group, a product management team is assigned. The whole organization has a matrix structure and the part of this structure, valid for E.G.O. Turkey can be seen in Figure 5.2.

<table>
<thead>
<tr>
<th></th>
<th>International Sales (CH)</th>
<th>Central Development (DE)</th>
<th>International Quality Management (DE)</th>
<th>International Purchasing (DE)</th>
<th>Sales (Local)</th>
<th>Production (Local)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiant Heating Elements</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Hotplates</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Tubular Heating Elements</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Energy Regulators &amp; Switches</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Thermostats</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Electronics</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 5.2. Matrix organization of E.G.O. Turkey**

E.G.O. Turkey was founded in 1989 as a sales office in Istanbul. In 1990 the first plant of the company in Çorlu started producing tubular heating elements, 2 years later the production of hotplates in Turkey was introduced. And in 1997 Foundry plant, the cast iron factory, was established. The capital of E.G.O. Turkey is 100% German.

In tubular heating elements plant of E.G.O. Turkey, tubular heating elements for ovens, washing machines, radiators, hot water heaters and small household appliances are being manufactured.

In hotplates plant, hotplates for the cooktops are produced.
The company aims to operate in the countries with high potential for white household appliance production, instead of operating only in Germany and distributing its components. The company benefits from logistics advantages through this worldwide operation.

The contact of E.G.O. with the Turkish manufacturers has a long history, beginning with the foundation of Arçelik. In 1987 the group decided to establish an affiliate in Turkey, having realized the white household industry’s potential for growth. E.G.O. Turkey is the biggest supplier of the manufacturers regarding its product portfolio. The company exports 30% of its production.

The company is certified with ISO 9000:2000 certificate. It also holds the “Golden Q” reward from Bosch-Siemens. The customers of E.G.O. Turkey are in cooperation in designing their products and to some extent in determining their marketing strategies.

5.2.2. Characteristics of Products of E.G.O.

E.G.O. produces heating components for white household appliances. Considering the purchasing volume of these components, they can be categorised as “A” group within the ABC analysis scope. The number of the parts is not high in the quantity, but the cost is considerable.

The products of E.G.O. constitute the most necessary parts of the final products. Without the existence of these components, the final product can not perform its main function. In addition to this, the purchase of these components requires high number of transactions. Considering these facts, the strategic importance of these components can be regarded as “absolutely essential”.

Since these products are embedded in a variety of final products, the products of E.G.O. require high level of customization. There are six product groups. The list of the product types of E.G.O. can be seen in Table 5.3. Among these six product groups, the level of customisation can be ranked as: (1) Electronics, (2) Tubular Heating Elements, (3) Thermostats, (4) Switches & Energy regulators, (5) Radiant Heating Elements and (6) Hotplates. Among all these product groups, electronics is the most customization demanding product group. In the production phase of these
products, adaptations must be taken in form of specific investments or projects. Considering the relationships with the selected buyers, when such an adaptation is under consideration, the cost of the adaptation is shared between the buyer and the seller and in some cases the cost is burned by the buyer. But in this case, when the buyer burns the cost, the supplier can not offer the corresponding product to the other buyers.

Table 5.2. Product Classification of E.G.O.

<table>
<thead>
<tr>
<th>PRODUCT GROUP</th>
<th>PRODUCT TYPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOT PLATE</td>
<td>Commercial HP</td>
</tr>
<tr>
<td></td>
<td>HP</td>
</tr>
<tr>
<td></td>
<td>Cast Iron Grate</td>
</tr>
<tr>
<td>RADIANT HEATING ELEMENTS</td>
<td>Radiant Heating El.</td>
</tr>
<tr>
<td></td>
<td>HiLight</td>
</tr>
<tr>
<td>TUBULAR HEATING ELEMENTS</td>
<td>EGOTherm</td>
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<tr>
<td></td>
<td>THE</td>
</tr>
<tr>
<td></td>
<td>Thick Film</td>
</tr>
<tr>
<td>THERMOSTAT</td>
<td>Regulation onepole TH</td>
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<tr>
<td></td>
<td>Regulation threepole TH</td>
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<td></td>
<td>Limiter onepole TH</td>
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<td></td>
<td>Limiter dualpole TH</td>
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<tr>
<td></td>
<td>Limiter threepole TH</td>
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<tr>
<td></td>
<td>Fixing Temperature onepole TH</td>
</tr>
<tr>
<td></td>
<td>Fixing Temperature threepole TH</td>
</tr>
<tr>
<td></td>
<td>Other Thermostats</td>
</tr>
<tr>
<td>SWITCH-REGULATOR</td>
<td>Energy Regulator</td>
</tr>
<tr>
<td></td>
<td>Other Energy Regulators</td>
</tr>
<tr>
<td></td>
<td>Switches for Hobs</td>
</tr>
<tr>
<td></td>
<td>Switches for Ovens</td>
</tr>
<tr>
<td></td>
<td>Other Switches</td>
</tr>
<tr>
<td>ELECTRONICS</td>
<td>Sensor Switches</td>
</tr>
<tr>
<td></td>
<td>Pan Detection Electronics</td>
</tr>
<tr>
<td></td>
<td>Induction modules</td>
</tr>
<tr>
<td></td>
<td>Touch Control</td>
</tr>
<tr>
<td></td>
<td>Twist TC</td>
</tr>
<tr>
<td></td>
<td>Timer</td>
</tr>
<tr>
<td></td>
<td>Other Electronics</td>
</tr>
</tbody>
</table>
Considering the demand pattern, most of the purchases fall into straight rebuy or modified rebuy classifications. Since the relationships with the selected customers have a long history and since these buyers are not new customers for the case company, new task purchase is not under consideration.

The aforementioned products can be seen in Appendix A. The tubular heating elements and hotplates are produced by E.G.O. Turkey, the other products are produced by other E.G.O.s worldwide and are the commercial goods of E.G.O. Turkey. The products of E.G.O. can be regarded as crucial heating components of the final products. These products determine the competency of the final product, so have strategic importance.

Since the functionality of the final products depend highly on these components, the delivery issues are essential for the buyers. Depending on the lifecycle stage of the product, the number of the suppliers for the product vary. To mention, switches are the products, which are in the late stages of their lifecycle, so there is not so much to develop on this product. The quality of the sellers’ products are almost at the same level. So price is the most important aspect in deciding on the supplier. On the other hand electronic products are in the beginning of their lifecycles, so quality and delivery terms are the most important criteria in selecting the supplier.

The number of purchase transactions are relative high, since the products are too costly to keep in the stock warehouse. So depending on the production planning of the manufacturer, the suppliers provide the necessary materials in average 7-8 times a month.

Depending on the final product, the degree of product customization varies. In general even if the components are to be implemented in a standard appliance, the technical aspects of the components vary. There are too less standard products regarding the sales of E.G.O. Turkey. The components have in general a moderate level of complexity and regarding the high-end products the components are highly complex and customized. Considering the buygrid model, E.G.O. Turkey’s sales can be regarded as modified rebuy or new task buying. In case of new task buying, the sales staff involve in bargaining and negotiation processes. These processes require more technical know-how than straight rebuy. Since the buyers have the tendency to
procure their materials as a whole package, it is much easier for the actual suppliers to sell their complementary products. On the other hand, if the seller is not an actual supplier, it is much tougher for him to be able to sell the substitute products of the competitors to the buyer. In E.G.O. Turkey case, if the customer is buying tubular heating elements from E.G.O. Turkey, he will have the tendency to buy the complementary products such as thermostats and switches from E.G.O. Turkey as well.

5.2.3. Characteristics of White Goods Market from a Supplier View

Both in white household manufacturer market and in white household supplier market the number of players is not high but competitive. The buyers are well trained and highly qualified. This requires the necessity that the sales and marketing staff of the suppliers should be highly qualified as well. Basically the manufacturers get in touch with the suppliers to refer for the required components. The negotiation and the bargaining process take much longer time than in any consumer market. The manufacturers, in general, prefer not to be dependent on a sole supplier, thus procure from at least 2 suppliers. But they try to avoid having too many suppliers, as it would be too difficult to maintain the relationships with high number of suppliers. In most cases, the manufacturers in this sector favour implementing multiple sourcing strategies, which is an indicator that the buyer's bargaining position is advantageous in the short run. Compared to price, the logistics and quality issues are much more important. In general the buyers place value on four criteria to evaluate the suppliers performance; price, quality, logistics competence, technology (Figure 5.4.)

![Figure 5.3. Supplier Evaluation Criteria in White Goods Sector](image)

Since the final product is a durable, the buyers pay more attention on the reliability of the components, which are procured by the suppliers. The buyers and sellers in
this sector are involved in long-term relationships, since the switching costs are extremely high. Regarding some components there are fewer suppliers so they have the opportunity to define the rules of the business with the buyers. In general, the price information of the competitors is not easy to obtain and the price moves of the competitors are not visible. So the suppliers in general react slowly to the price moves of the competitors.

Since the competition is becoming tougher among the white household manufacturers, they have the tendency to outsource some of their activities and focus on their core business. This leads to decreased level of vertical integration. As a matter of fact, the importance of buyer-seller relationship becomes more significant, since this situation pushes both the supplier and the manufacturer to cooperate.

The buyers’ requirement from the seller in white goods sector is to supply customized products instead of commodities. The supplier is involved in product development process at an early stage extensively. This intensive cooperation with the supplier increases the final product’s quality and as a consequence increases the probability of technical product success.

The purchase situation is one of the factors that has importance on the relationships of the buyer with the seller in this sector. Once the relationship between the supplier and the manufacturer is stabilised in other words; structured, then the tendency is to computerize the transactional activities, such as recurring orders. Since the transactional activities do not improve the relationship and consume a great deal of time, the manufacturer requires the computerization of such activities from the supplier.

5.2.4. Characteristics of the Relationships with the Manufacturers

E.G.O. Turkey has a good reputation in the market in which it is operating. The company has initiated its relationships with the most important white household manufacturers of Turkey beginning from their foundation. Since the relationships of this company with the manufacturers has a long history, trust and confidence have developed in both parties. The main aspects, which boost the image of E.G.O. are the high quality of the products and on time delivery and after sales technical service and
involvement in new projects with the manufacturers. While involving in various projects with different manufacturers, the company places value on trust issues, as the details of these projects constitute high confidentiality.

In some cases, when a new product is developed with one of the buyers, although the product takes place in the product portfolio of E.G.O., this product is not offered and supplied to the other buyers. It is crucial to maintain balanced relationships with the customers, since they are competitors.

E.G.O. Turkey is involved in affective commitment, as it holds a positive attitude towards the future existence and improvement of the existing relationships with the customers. Although the commitment level can be regarded, as high, most of the buyers are not eager to involve in totally dependant relationships, so they always seek for alternative suppliers. The overall length of the relationship with the selected buyers can be regarded as a long period of time, and trust issues have developed over time. The activities carried out by the selected buyers and the case company are tightly coordinated and the interactions between the parties are intense.

In case of lacking satisfaction among the seller and the buyer, the relationship would be hindered in many aspects. With this concern, the case company, as a seller endeavours to fulfil the performance expectations of the buyers and in return the buyers try to satisfy the necessities to endure the relationship, such as fulfilling the payment terms or performing what they have undertaken.

During the preparation phase of the contract, purchasing managers of the buyers and the general manager of the case company are involved in the process. Once the contract is signed, the sales staff of the seller and the planning and the purchasing staff of the buyer company are deeply involved in the relationship. Within the whole relationship, also the key account managers and the product managers from Germany and Switzerland are also involved. The key account managers act in coordination with the local sales teams, regarding their assigned customers. The product managers from Germany from supplier’s side and the R&D specialists from the buyers’ side are involved in the relationships, when there are new projects or new product designs are under consideration. But still the main actors, who involve deeply in the
relationship, are the buyers and the users from the buyers’ side and the sales staff and the production managers from the seller’s side.

Regarding quality aspects, time constraints and relationship issues, buyers are fully satisfied about E.G.O. Turkey. Cost aspect can be evaluated as an issue to improve. The exchanges among E.G.O. Turkey and its customers are mainly relationship based which include two-way communication between parties, share of information and to some extent mutual dependence.

Since the case company has involved in relationships with the selected four buyers beginning with their foundation, the relationships in this case have a long history. Initial trust has been built beginning with the awareness process and turned out to be deeper through various number of transactions and through years of direct business. The oldest relationship of the case company among the selected four companies tend to be lasting almost 40 years, beginning with the augmentation of the production facility the selected buyer.

Since the selected buyers of the case company are meanwhile competitors to each other, it is extremely crucial for the case company to keep the balance of trust and commitment issues among the buyers. The standard products of the case company are offered to all of the selected buyers. These are the products with standard E.G.O. material number. The price is determined on quantity basis. The more is the quantity of the batch the less is the price per piece. This is due to the fact that setup costs per piece are much higher when there are lower number of quantities under consideration. In any case, the balance regarding the prices of the standard products offered to the selected buyers is preserved. When customized products of the case company are under consideration, the prices depend on the share of the development cost. If both the case company and the relevant selected buyer, beginning with the development of the aforementioned product, share the cost of customization, then this product is offered only to the aforementioned buyers on mutual agreement. All the transactions and relationships with the buyers have a confidential nature and the features of these transactions and relationship issues are treated as confidential by the staff of the case company.
The new product development request may either come from the buyer or the seller side. When one of the selected buyers intend to develop a new product, they refer to the sales responsibilities of the case company to develop the corresponding components for their new product. In this case the relevant product management, which is located in Germany, is referred about the feasibility of the aforementioned component. With the coordination of the product management, the R&D specialists of the case company and the production responsibilities and the R&D specialists of the buyer coordinate to develop the component. In some cases only the technical features are given by the buyer as input to develop the component and the development process is mainly conducted by the case company. If the cost of development is borne by both parties or only by the buyer, the developed component is not offered to other buyers. This issue is also determined by both of the parties. In some cases the product development idea can emerge from the seller side, the idea is presented to a definite buyer. If the buyer has the tendency to have such a customized product, adjustments on the final product are realized for the adaptation of the developed component. In both cases; either from the buyer or the seller side, the application of the new projects are treated as confidential.

5.2.5. The Selected Buyers’ Perceptions of the Case Company

The selected buyers’ who are mentioned as buyer A, buyer B, buyer C and buyer D, in total constitute 96% of the white goods sector regarding their market share in Turkey. The distribution of their market shares is presented in Figure 5.4.

![Market Share of the Manufacturers in White Goods Sector](image)

**Figure 5.4. Market Share of the White Goods Manufacturers**

105
The selected four buyers of E.G.O. Turkey are the biggest players in the Turkish white goods sector. Each buyer's characteristics and its perceptions of the relationships with E.G.O. Turkey are mentioned below.

5.2.5.1. Characteristics of Buyer A and Its Perceptions of the Relationships with E.G.O. Turkey

Buyer A is the biggest manufacturer in Turkish white goods sector with a long history. The company produces ovens, washing machines, dish washers, refrigerators, hoods and small household appliances. The emergence of the relationships of E.G.O. with buyer A has a long history, beginning with 1960s, when the first facility of buyer A was established. Since then, both parties are strategic partners. The purchasing interfaces of both the buyer and the seller are presented in figure 5.5.

![Diagram of purchasing interfaces of Buyer A and E.G.O.](image)

Figure 5.5. Purchasing Interfaces of Buyer A and E.G.O.
Until late 1990s buyer A had a sole supplier strategy. Afterwards the corresponding group of buyer A decided to work on a multi-supplier basis. The main idea was to have at least 2 suppliers for each component types, to eliminate the potential risks to be dependant on a sole supplier. Nowadays, the buyer is procuring most of its components from E.G.O., while maintaining the relationships with the second suppliers.

The buying process

Regarding the business with buyer A, there are mainly 2 buy-classes under consideration: straight rebuy and modified rebuy. Straight rebuy is the subject of the daily transactions between the buyer and the seller. The conditions of this purchase is already defined. Since the function of the components provided by the case company are crucial in the final product, there are 2 suppliers under consideration. There is a certain quota percentage distribution among these suppliers. To avoid the possible quality deviations and to facilitate the follow up of the quality assurance, the usage of the components from these suppliers are determined on appliance basis. When the component subject to straight rebuy has to be upgraded, then modified rebuy is under consideration. In this case the price and delivery conditions are determined by the buyer and the seller. In new task buying case, the companies involve in the development phase of the new component. After the component is developed by the case company with the involvement of buyer A and the decision of commodity purchase is taken, then the price and delivery conditions are determined on an annual basis. So the purchase of the developed component becomes straight rebuy.

The prices and delivery conditions are determined on a yearly basis with the agreement of the purchasing director of buyer A and the sales manager of E.G.O. Turkey.

Roles in the Buying Center

The new component requirement is generally derived by the request of the marketing department. The R&D experts determine the exact need for the component. So R&D experts and marketing specialists can be regarded as the initiators of the purchase of a new component. Decider is the central purchasing department. Influencers are mainly the production engineers, who are familiar with the technical aspects of these
components. They can also be regarded as users. Buyer is the component purchasing unit. In any case the interface of buyer A with the relationships with E.G.O. are mainly central purchasing department and component purchasing unit.

The fit in the Interdependency Cube

Balanced power between the case company and buyer A is under consideration. Since E.G.O. Turkey is a member of a group, the power of the whole group is the basis for the judgement. Since both of the companies have involved in a long term relationship, they have a joint orientation. So they fit to coordinative relationship cell in the interdependency cube. Problem solving approach of the buyer, information sharing between both parties and engagement in two-way communication are the factors that support the maintenance of this coordinative relationship.

Trust and Commitment

Since the relationship of this buyer with E.G.O. has a long history, both parties have experienced several transactions. These transactions and the engagement in a deep relationship have led to the development of trust and as a matter of fact; commitment. Among quality, price and delivery issues, trust and commitment issues play a major role in the relationship of E.G.O. with buyer A. The ways of exchange of information between those parties are transparent and accessible for both parties. Social relations between the staff of both companies and institutionalized processes have strengthened trust issues. An example to the development of institutionalized processes is EDI. Both companies involved in the development EDI system to integrate their information technologies with each other. This is one of the indicators of commitment, since it represents the lasting willingness to maintain the long-term relationship.

5.2.5.2. Characteristics of Buyer B and Its Perceptions of the Relationships with E.G.O. Turkey

Buyer B opened its first production facility in 1999. The production of refrigerators started in 1999, then it was followed by the production of split air conditioners in 2000. In 2002, the company started to produce washing machines. The relationships of E.G.O. with the case company started before the production of washing machines;
the first product of buyer B, which requires the components, provided by E.G.O. Turkey. So the relationship of the case company and buyer B has a 3 year history. The structure of the buying center of buyer B is presented in Figure 5.6.

![Diagram of Purchasing Organization of Buyer B]

**Figure 5.6. Purchasing Organization of Buyer B**

The buying process

Before the augmentation of the production facility, buyer B got in touch with E.G.O. Turkey. This phase can be regarded as the “recognition of a requirement”, which is the first phase of buygrid framework developed by Robinson (1967). Afterwards, the required components were determined as a package. During the interaction process with the suppliers, buyer B made his decision on E.G.O. Turkey for the corresponding components. Then the relationship was initiated by orders placed to E.G.O. Turkey. Since the relationship is in the beginning phase, there are still new component requirements now that buyer B is extending its facilities and product mix. In this case straight rebuy, modified rebuy and new task buying is under consideration. For the components, which are already agreed upon, have definite price and delivery conditions. For these components, the purchasing department of buyer B simply places orders to E.G.O. Turkey, when required. Whenever the final product is improved, the components have to be upgraded or modified. In this case, modified rebuy is under consideration. In case of modified rebuy, there is not a great concern for the supplier selection, since the primary step would be to check the feasibility of the purchase from the existing supplier. For instance, if buyer B intends to upgrade from control switch components to electronic controls, the first supplier to refer would be E.G.O., since this company is already providing the buyer switches and is able to provide electronic controls as well. The buyer’s intention in modified
rebuy is not to switch to another supplier for a modified component, but to try to procure it from the actual suppliers. In case of new task buying, buyer B has a concern for supplier selection. When the buyer has new projects under consideration, the potential suppliers are referred for offers. As well in this case, for the corresponding components of E.G.O. Turkey, E.G.O. is the first supplier to be referred.

**Roles in the Buying Center**

In buyer B’s case, the initiator of the purchase is the production process itself. When the company decided to open a production facility, the need for the components to build up the final product arose. As shown in Figure 5.6., the company has various divisions, so each division has its own purchasing directorate. The decider in this case is the purchasing directorate of white goods division. The purchasing directorate can be also regarded as buyer. The influencers can be regarded as R&D experts, since the purchasing decision is made before the production. The users had no effect in the purchasing process. By time, the feedback of the user, such as production engineers, supported the image of E.G.O.

**The fit in the Interdependency Cube**

Since the involvement in the relationship does not have along history, cooperative strategy is under consideration within the context of interdependency cube. The power of both buyer B and E.G.O. is balanced. Both parties have joint orientation. The duration of the relationship can be regarded as short term. Although the focus of both of the companies is on long-term relationship, they are still involved in negotiations. Both parties have engaged in the initial period of the strategic partnership. After a number of transaction and after the development of trust, the position in the interdependency cube will definitely shift to the “coordinative relationship” cell.

**Trust and Commitment**

Since buyer B does not have a long history regarding its production and its relationship with E.G.O., a deep trust has not evolved yet. The development of deep and stable trust requires various number of transactions and time. Despite the short
time involvement in the relationship there is trust under consideration. This trust is due to the reputation and image of E.G.O. Turkey. Considering the definition of commitment: “a lasting intention to build and to maintain long term relationships”, both parties can be regarded as committed to each other, since both companies have the intention to build long term relationships. Trust develops by time through transactions. For the time being trust will develop as long as the buyer B is satisfied with the procured components, delivery conditions, after sales service. These factors will support the development of trust by increasing the buyer’s satisfaction.

5.2.5.3. Characteristics of Buyer C and Its Perceptions of the Relationships with E.G.O. Turkey

Buyer C is an affiliate of one of the world’s leading white goods manufacturer. The corresponding group of buyer C is operating on a global basis. This group is also the key account of E.G.O. group. The group not only produces white goods, but is also operating in three business sectors: automotive technology, industrial technology and consumer goods and building technology. White goods production is comprised in consumer goods and building technology division. As a part of consumer goods, the company produces ovens, cooktops, washing machines, dish washers, hoods and small household appliances. Figure 5.7. shows the purchasing organization of buyer C.

![Figure 5.7. Purchasing Organization of Buyer C]
The purchasing responsibility is distributed among the corporate purchasing departments on component basis; electronic components, raw materials and capital goods. The components of E.G.O. take place in electronic components and raw materials.

**The buying process**

All the subsidiaries of the buyer C’s group are bound by the corporate purchasing department for every component type. The buying decisions are taken in these corporate purchasing department. In E.G.O. group there is one key account manager assigned for this group, since it is operating on a global basis. The interface structure of both buyer C and the case company can be seen in Figure 5.8.

**Figure 5.8. Purchasing Interfaces of Buyer C and E.G.O.**
The cooperate purchasing department determines the suppliers on a global basis. In other terms, the purchase of buyer C is global procurement. The cooperation purchasing departments determine the quota of each supplier. Both cooperate purchasing departments and E.G.O.’s key account management for buyer C are located in Germany. The purchasing department in the subsidiary plant in Turkey, receives the quotas, price information and delivery conditions for each supplier from cooperate purchasing department. The principles of business with buyer C is determined among the cooperate purchasing department of buyer C and the key account management of E.G.O. The price information and delivery conditions of the purchase for buyer C is given to the sales department of E.G.O. Turkey by the key account management, who is in charge for buyer C. In these conditions, the relationship between buyer C in Turkey and E.G.O. Turkey involves straight rebuy and modified rebuy. When a task buying for buyer C in Turkey is under consideration, this subsidiary leads a supplier research and gives a feedback to the corporate purchasing department. Having received the alternative supplier information, the corporate management considers all the alternatives, including the existing buyers as well. Since the key account management of E.G.O. and buyer C are involved in long relationships on a corporate basis, the first supplier to be evaluated is always the affiliate of E.G.O. group in the country, where the demand for the component emerges. Regarding the new projects, both parties are involved in the development process. In case the development costs are burned by buyer C, the relevant component is not offered to other customers. The terms of purchase are determined once by a contract. Then the price information and delivery conditions are updated in the beginning of the year in accordance with the annual negotiation results.

**Roles in the Buying Center**

Depending on the need of components, the initiators can be marketing and R&D specialists in Germany. When there is a new or a modified final product under consideration, the marketing specialists foresee the potential demand for a certain application. The R&D specialists design the final product and determine the necessary components. If the final product is to be modified, then they determine the required upgraded components and the necessary adjustments for the modified product. In both cases, the demand for the components is transmitted to the corporate
purchasing department. From that process on the decider is the corporate purchasing department, who is in charge for the relevant component. The influencers can be mentioned as R&D specialists and production engineers. Users are the production engineers in the production facility. Buyers are the purchasing departments in the relevant subsidiaries.

The fit in the Interdependency Cube

Balance of power, joint orientation and long term relationship is under consideration for buyer C and E.G.O. Both parties have been engaging for 70 years in two-way communication, they have a deep understanding of the cultural differences, they have integrated their processes to facilitate the sales and purchase process. Considering these issues, the relationship between buyer C and E.G.O. fits in the “ coordinative relationship” cell of the interdependency cube

Trust and Commitment

A deep and stable trust has developed between buyer C and E.G.O. on a corporate basis, after having involved in a 70 years of relationship. There is one key account management assigned for buyer C. One of the aims in assigning a key account management team for this customer is to constitute one interface to the customer. The customer communicates about the principle issues of the purchase only with the key account management. The organization of the key account management has almost the same structure with buyer C. There is one key account management team, dealing with the strategic issues regarding buyer C and the sales departments in various countries. The sales teams handle the transactional sales activities with the subsidiaries of buyer C in their countries. This type of organization is a good example to reveal the commitment of E.G.O. in the buyer-seller relationship with buyer C. The demand for components are evaluated on a total basis. In other words, the demand from all the subsidiaries of buyer C is gathered and the price is determined on the basis of this quantity, This provides the buyer the price advantage. EDI is used for most of the orders of the subsidiaries. Not only the key account management but also the local sales departments endeavour to facilitate the purchasing process of the local purchasing department of buyer C. All these efforts also represent the existence of commitment. Both credibility and benovelent trust
exist in the relationship of buyer C and E.G.O. The existence of credibility trust is as a result of the reliability on the skills and resources of E.G.O. The development of benevolent trust can be explained by the expectation that E.G.O. will care about the relationship. In case of new projects, the buyer designs a final product, which is not yet existent. So the designed product is supposed to provide competitive advantage to the buyer. Beginning with the development process, E.G.O. has profound information about the new product. In this case reliability of the supplier on confidential issues play a critical role, since the supplier has also relationships with the competitors of the buyer. E.G.O. has proven buyer C, his trustworthiness also in this confidential issues.

5.2.5.4. Characteristics of Buyer D and Its Perceptions of the Relationships with E.G.O. Turkey

Buyer D is a white household appliance producer, who is operating in the white goods sector for more than 30 years. The company belongs to a group of companies. The company has a 7% share in the Turkish white goods market but indeed covers 75% of the white goods exports of Turkey. The white goods of buyer D are exported to more than 80 countries. The activities of buyer D are white goods production, mechanic contracting business. The company produces ovens, cooktops, washing machines, dish washers, hoods and small household appliances and air conditioning appliances. The relationship of E.G.O. Turkey with buyer D had started beginning with the establishment of the first facility of E.G.O. in Turkey. Since then, both parties are involved in deep relationship. The buyer has a sole supplier strategy. E.G.O. is the only supplier for the components, which take place within the product range of E.G.O. The interfaces of both the buyer and E.G.O. in purchasing process is presented in Figure 5.9.
Figure 5.9. Purchasing Interfaces of Buyer D and E.G.O.

The buying process

The purchase of buyer D mainly occurs as straight or modified rebuy. In the beginning of every year, the annual requirement for E.G.O.'s components are defined. Then taking this figure into account, the annual negotiation process begins. The price and delivery conditions of the components are updated on an annual basis. Both parties have been involving in strategic partnership for years. E.G.O. is the sole supplier for its products. Regarding the annual negotiation process, these facts are taken into account and this provides buyer D an asset in determining price and delivery conditions. During the year, in accordance with the scheduled orders, buyer D orders the goods with the predefined price and delivery conditions. Whenever buyer D has a concern for new product development, from the beginning of the project both the buyer and E.G.O. involve in the development process. For the products of E.G.O., the buyer has no concern for supplier research and selection, since E.G.O. is the sole supplier also in new task buying cases. As mentioned in Figure 5.9., the departments involved in purchasing are purchasing department of buyer D and sales department of E.G.O.

Roles in the Buying Center

The initiators of the purchase of new components are in most cases marketing and R&D specialists. The marketing specialists determine the aspects of the new
products. Then R&D specialists design the product and determine the required components and their technical features. Purchasing department is decider and buyer at the same time. Influencers and users are the production engineers.

The fit in the Interdependency Cube

Both buyer D and E.G.O. have the same level of power considering the fact that they are both belonging to group companies. So balanced power among both parties are under consideration. Since they have been involving in a long term relationship and a stable strategic partnership, there is a great concern for joint orientation. Considering these facts, they fit to “coordinative relationship” cell of interdependency cube.

Trust and Commitment

Both buyer D and E.G.O. place value on the existent relationship and pay maximum effort to maintain it. Buyer D’s decision of selecting E.G.O. as a sole supplier is an indicator of how deep its trust for E.G.O. is. Buyer D and E.G.O. involved in several projects for innovative products of the buyer. These innovative products also required a great technical support from the suppliers. As a matter of fact E.G.O., as the sole supplier, had to adopt its processes for these new projects. Through the involvement of such projects, a deep trust has developed between both parties. To facilitate the purchase process, information technology systems were integrated to each other allowing the application of EDI. These endeavours of both companies are the main indicators of the existence of high level of commitment.

5.2.6. The Interdependency Framework of the Case Company

As mentioned in the theoretical part of the thesis, there are 3 dimensions of the relationships to be analyzed; the balance of power, the transaction grid and the relationship grid. Considering the transaction grid, E.G.O. Turkey takes place in “Cooperative strategy” grid. Under normal conditions of the environment, in other words when the environmental conditions do not present a high level of variability, the case company and the selected buyers pursue long-term relationships. But when the environmental conditions vary, to mention; the economic decline in year 2001, then the companies tend to involve in short term interdependencies. Since the
balance of power remains the same, as both parties are affected by the change in the environment the same way, they try to realize the mutual benefit goals. In this case, the companies have short-term strategies. Any single movement in the market can have effect on the transactions, since the companies are extremely sensitive to any movement in the market in uncertain environment.

Considering the relationship grid, the interdependency framework in industrial markets, E.G.O. Turkey is involved in coordinative relationships with its selected customers who are the strongest players in their own market. There is balanced power and joint orientation under consideration. Under certain conditions of the environment, the case company and the selected buyers tend to pursue “Coordinative relationships”. The parties are directed toward achieving joint goals. They are involved in innovative projects, to improve the products of both parties. In general terms, the supplier’s innovations add value on the final product of the selected buyers.

Bonds with the customers

Technical bonds: Since E.G.O. Turkey is providing its customers highly technical products, they involve in product customisation. They cooperate with each other to improve the product. These bonds with the selected buyers had started to develop beginning with the relationships. The case company endeavours to avoid the obsolescence of its products and invests in product development not to be the pursuivant but to be the leader of the components sector.

Time bonds: E.G.O. Turkey is using EDI systems with specific customers, this shortens the cycle times and this situation affects the economic bonds positively. Another aspect, which strengthens the time bonds between the parties, is logistics issues. In most cases the case company provides “Kanban –JIT” opportunity to the selected customers. The short lead times of the case company is another aspect, which plays a major role in strengthening the time bonds with the selected customers.

Knowledge bonds: The formation of knowledge bonds had started with the beginning of the relationships with the selected buyers. Since in most cases, the case company took part in the development of the product at early stages, the buyers got to know
the capabilities of the supplier. Over the years, both the case company and the selected buyers got to know each other, which can be regarded to have a positive effect on knowledge bonds.

**Social bonds:** Through the customer visits, interviews and frequent phone calls, the interaction between the sales staff of E.G.O. Turkey and the purchasing, planning, Research & Development staff have high level of communication with each other. This leads to the constitution of social bonds.

**Legal bonds:** Every year, the case company and the selected buyers renew their supply agreements or purchase contracts. But these are signed just as a precaution. The existence of these bonds, for sure, can not provide the endurance of a relationship.

**Economic bonds:** After years of involvement with the case company, the selected buyers benefit from advantageous prices and exclusive payment terms. This case strengthens the economic bonds between the parties.

**Geographical bonds:** One of the reasons for the situation of E.G.O. Turkey, is to be close to the customer geographically. This provides the company logistics advantage.

### 5.2.7. CRM aspects of the relationships of E.G.O. Turkey with the buyers

The customers of E.G.O. Turkey are grouped into two: International and National customers. International customers are the customers who are operating on a global basis and for each international customer a key account manager is assigned. All the key account managers are located in Switzerland, in Zug, where the financial headquarter of E.G.O. group is. So key account management already exists in the group. National customers are the local customers of each sales team all over the world.
Both two forms of the relationships with the selected buyers, regarding the customer lifecycle within the customer lifetime value are under consideration: Upgrading and X-Selling. The aforementioned customers, who priorly had the tendency to purchase components like tubular heating elements or switches, which are relatively low in price, nowadays show great interest to radiant heating elements, electronics and energy regulators, which are high in value. These buyers place high amounts of orders for these high value components. Considering this case, an Upgrading relationship between the case company and the selected buyers, can be mentioned. X-Selling is also under consideration between these parties, since the selected buyers retained their demand for the previously components, as tubular heating elements and switches, but in addition to these components added several other components to their orders, such as electronics, energy regulators and radiant heating elements. To manage this case, there are various functions serving the customer as stated before. The local sales team is the interface of the company to the selected buyers, when necessary the product management involves in the relationships. There are also key
account managers who are handling the customer relationships on a global basis with the key account customers, who are operating on a worldwide basis.

The most important customers are defined on turnover, the customers' growth rate and relationship basis. These important customers are provided the privilege to go through shorter processes. EDI and Web-Based Marketing can be mentioned as examples to these shortened processes.

5.2.7.1. Electronic Vehicles regarding the Buyer-Seller Relationships

E.G.O. Turkey benefits from fax, e-mail and EDI tools regarding the maintenance of buyer-seller relationships. In addition to this E.G.O. Italy offers Web Based Marketing opportunity to its customers. Although there exists no Web Based Marketing in E.G.O. Turkey, this tool will be mentioned.

In Turkish industrial markets, fax and e-mail are the most preferred means of communication, especially for ordering, among the buyers and the sellers.

5.2.7.1.1. EDI Application

The 3 biggest customers of E.G.O. Turkey have the possibility to order their goods via EDI. EDI is a customized form of order, which is integrated to the MRP software (SAP R3) of E.G.O. Turkey. The order of these customers are received as per e-mail attachment. These attachments are in text format. After receiving the order via e-mail attachment, a transaction in SAP is executed to import the text file and convert it to a specific format. Then the order is automatically input in the system by executing this transaction.

This application saves time to both parties. The buyer is no more obliged to prepare an order format other than the output of his own system and the seller doesn’t have to insert the orders manually. It provides more accuracy, eliminates the manual work and provides the consistency of the transactions. By using EDI, the softwares of the buyers and the seller can communicate with each other.
5.2.7.1.2. Web Based Marketing

Among E.G.O. group, Web Based Marketing is specific to E.G.O. Italy. Via Web Based Marketing tool, the customers can simply send their orders by using the website of the seller company; E.G.O. Italy. Web Based marketing is a form of extranet application.

As seen in Figure 5.12, when the customers visit the Web Site of E.G.O. Italy and click on ERP-EGOnet, they are asked to provide their user name and password to login.

![Figure 5.12. Login page to ERP-EGOnet](image-url)
Figure 5.13. Link to order entry

Figure 5.14. Order Entering

After writing their user name and password, they can access to the order page. (See Figure 5.13.)
After clicking on “Ordine”, which means Order in Italian, they can order their goods through a page for order entry. (See Figure 5.14.)

After the customer confirms the order, the order information is retrieved by the local system of E.G.O. Italy. Every evening, the system transfers the orders, sent via Web Based Marketing tool, to the local MRP system; BPCS. The following morning the order can be seen as a new customer order in the system. Web Based Marketing can also be regarded as one of the tools to manage CRM, and is appropriate for E.G.O. Turkey as well.

5.3. Managerial Implications for the Application of the Integrated Model to E.G.O. Turkey

The integrated model is applied to the case company; E.G.O. Turkey, to reveal the factors, which affect the success of the buyer-seller relationships, in practice. The case company is analyzed and evaluated for each factor that affects the success of buyer-seller relationships with the selected buyers of E.G.O. Turkey.

5.3.1. Demand for Knowledge and Cost Sharing

Product and process nature implications

The final products of the selected customers can be regarded as component-driven products. The performance and the functions of the final product are totally dependent on the components, which are procured from suppliers. The selected buyers assemble the components to create the final product. The products vary within the portfolio of these selected customers, since the target markets differ from each other. Basically the products have a moderate level of complexity. The products that are targeted at high segments of the market require highly complex components.

The product and process nature of E.G.O. Turkey varies depending on the product group. Considering 6 product groups, electronics, tubular heating elements, radiant heating elements, switch and regulators can be regarded as complex, highly customized products. The complexity ranking can be seen in Figure 5.15. Among these electronics is the most sophisticated and complex product.
Beginning from the production planning, cooperation with the customer is necessary. Depending on the level of complexity of the product type and the process, the cost and information sharing activities should be balanced. For example while it is not so crucial to share cost and information for a product like switch, which is just about to complete its lifecycle, it is extremely important to involve in intensive activities to share cost and information regarding the electronics. So depending on the product type, demand for knowledge and cost sharing is necessary; especially in high-end products. The level of demand for cost and knowledge sharing depending on the complexity of the final product is presented in Figure 5.16.

**Figure 5.15. Product Complexity Ranking**

**Figure 5.16. The Relationship Between Cost and Knowledge Sharing and Product Complexity of the Buyer**
Implications on Buyer Product Specific Competence

The white household appliance manufacturers have the tendency to outsource as much as possible, to focus on their core competencies. So this situation doesn't allow the buyers to have product specific competence on the products of E.G.O. Turkey. Since the product competence of the buyer is relative low, the buyer needs support from the supplier. If the competence of the buyers would be adequate for E.G.O.'s components (e.g. existence of a tubular heating specialist working for the buyer), then the demand for cost and knowledge sharing for the supplied component would be lower. This situation leads to higher demand for cost and information sharing. In this case the demand for cost and knowledge sharing can be interpreted as the tendency to involve in strategic partnerships with the supplier. The relationship between the demand of the selected buyers’ demand for cost and knowledge sharing and the buyers’ competence on the products of E.G.O. is presented in Figure 5.17.

Figure 5.17. The Relationship Between Cost and Knowledge Sharing and the Buyers’ Competence on the Products of E.G.O.

Implications on the Turbulence in the Buyers’ Environment

As mentioned in the interdependency framework, when the conditions of the environment are not stable, the selected buyers involve in transaction based relationships with the suppliers, since they are sensitive to any single movement in the market under these conditions. So this doesn't require any involvement in partnerships with the supplier and hinders the manufacturers’ demand for cost and knowledge sharing, which are the main aspects of partnerships. The economic crisis
in 2001 is a good example in explaining the affect of turbulence of buyers' environmental factors on the level of demand for cost and knowledge sharing. With the economic recession in 2001, the consumers had the tendency not to spend money on durables, such as automotive and white goods. As a matter of fact, the demand for white goods decreased instantly. The white goods manufacturers lowered their production, stopped their new projects. So the demand for E.G.O.'s products decreased and finally the demand for cost and knowledge sharing took lower priorities since the environmental conditions were unpredictable. In this time period the manufacturers' intermediate level of dynamism affects the demand for cost and knowledge sharing, since intermediate level of dynamism requires development of the products and involvement in deep relationships with the suppliers. The market, in which the customers of E.G.O. Turkey are operating, has a moderate dynamism and complexity. But competition is quite tough in white household appliance market. There are various manufacturers. And all of them are seeking for outstanding functionality and design for their products. Since the functionality is mostly determined by the electrical components, they need to be involved in cooperative relationships with the suppliers. This situation also requires cost and information sharing. The relationship between the level of demand for cost and knowledge sharing and turbulence in buyers' environment is presented in Figure 5.18.

![Diagram](image_url)

**Figure 5.18. The Relationship Between Cost and Knowledge Sharing and the Turbulence in Buyers’ Environment**
5.3.2. Capacity of Knowledge and Cost Sharing

Implications on E.G.O. Turkey's competence of buyer relationship management

Since E.G.O. Turkey provides the customers, customized products, it is able to meet the varying requirements of the customers. It has gained a know-how over time with the customers, how to deal with the requests of the customers. Repeated transactions with the customers have led to accumulated technological capability. There are various contact points as sales teams, key account managers and product managers who are taking care of the customers. During the routine relationship with the customer, only the sales department deals with customer issues. When new topics or requests are under consideration also the product managers and key account managers are involved. Since the competence of the buyer management is adequate and well structured, there exists the capacity for share of cost and information.

Implications on E.G.O. Turkey’s competence on the Components/Processes

In contrary to the product / process specific competence issue of buyers', the competence of the supplier regarding the products and the processes affects the capacity to meet the demand for cost and knowledge sharing, since the supplier holds the necessary capabilities to meet this demand. Product/Process competence of E.G.O. has an outstanding performance, since the company invests on product development and innovations. So it can clearly be stated that the company is competent in the products/processes, hence has adequate capacity of cost and information sharing.

Implications on Inter-organizational systems (IOS) Usage

As an IOS, EDI can be mentioned as one of the tools to support the relationships with the buyer by decreasing the level of operational work. But EDI is not in application with all of the selected customers. The usage rate of EDI can be improved. In addition to this Web Based Marketing, as in E.G.O. Italy can be applied. The more usage of IOS would definitely boost the capacity to share cost and information. The usage of interorganizational systems eliminates the operational work and this facilitates the intercompany operations and boosts the reliability. Ease and reliability of intercompany operations have supported E.G.O. by means of
increasing the capacity for cost and knowledge sharing. This relationship is presented in Figure 5.19.

![Diagram showing the relationship between Cost and Knowledge Sharing and IoT Usage](image)

**Figure 5.19. The Relationship Between Cost and Knowledge Sharing and the IOS Usage**

**Implications on Trust issues**

Since E.G.O. Turkey is the supplier of various white household manufacturers, which are in competition with each other, trust issues are handled delicately. E.G.O. has a reputation of being trust worthy among the customers. The company has taken the necessary measures to maintain the confidentiality of the customer information. Another issue, which can be regarded as a trust issue is manufacturers’ trust in the quality and the reliability of the components of the case company. After having involved in deep relationships and experienced various types of purchase transactions, the manufacturers’ trust on this company has developed over time. When there is a demand for cost and knowledge sharing from the buyers’ side, the will be no doubt regarding the case company’s capability to meet this demand. This supports the capacity to share cost and information.

**Implications on E.G.O. Turkey’s Industry Environmental Factors**

Since the case company’s environment, in this case is a derived market, the environmental factors of the manufacturers would be under consideration for the suppliers’ environment as well. So the statement for the manufacturers’ environmental factors are valid for the supplier’s environment. So intermediate level
of environmental dynamism positively affects the capability to meet the demand for cost and knowledge sharing.

5.3.3. Success of the Buyer-Seller Relationship

In the application of the integrated model to case company, it was found out that the case company's level of capacity for cost and knowledge sharing and the selected buyers' demand for cost and knowledge sharing had the same rate. Considering this case, the relationship of the case company with the selected buyers was evaluated as successful. This evaluation is visualized in Figure 5.20.

![Graph showing the relationship between the level of buyers' demand for cost and knowledge sharing and the level of seller's capacity for knowledge and cost sharing.]

**Figure 5.20. Success of Buyer-Seller Relationship Between E.G.O. and the Selected Buyers**

According to the integrated model, the determinants of the success of the buyer-seller relationships are; the buyer's demand for cost and knowledge sharing and the seller's capacity for cost and knowledge sharing. The buyers' demand for knowledge and cost sharing was evaluated considering the buyers' product and process nature, buyers' product specific competence, and turbulence in buyers' environment. Then, the case company's (E.G.O. Turkey's) capacity of cost and knowledge sharing was evaluated taking into account E.G.O. Turkey's competence of buyer relationship management and of the components and the processes, the interorganizational systems usage, trust issues. Afterwards, it was found out that the level of the capacity
of knowledge and cost sharing was compatible with the level of demand for knowledge and cost sharing.
6. CONCLUSIONS AND IMPLICATIONS

6.1. Conclusions

The main subject of this thesis is to define various factors, which have impact on the success of the buyer-seller relationships in industrial markets. Most of the factors within the context of industrial marketing coincide with that of CRM issues. The main difference of CRM from industrial marketing issues is the integration of IT skills in the whole process of customer relationship, including all the involved functions of the sellers.

Industrial buyers and sellers engage in stable and deep relationships. These relationships are much closer compared to consumer markets and the buyers are professional, there exists a hierarchy of buying roles for each buyer. The buyers seek for customized supplies instead of purchasing commodities. Depending on the product portfolio, customer portfolio, the seller must be involved in more than one type of relationship.

The case company, E.G.O. Turkey was introduced, the characteristics of its products were mentioned, characteristics of white goods market were defined, characteristics of the relationships with the selected buyers were analysed and each buyer’s characteristics and perceptions of the relationship with the case company were explained.

Considering industrial aspects and CRM issues, an integrated model was mentioned to define the factors that influence the success of the relationship. The model was evaluated by applying it to the case company. It was observed that, the model fit to a supplier company, which is operating in an industrial market. It was figured out that the suppliers’ capability to meet the demand for knowledge and cost sharing overlaps with the buyers’ demand for cost and knowledge sharing. In other terms, if the level of demand for cost and knowledge sharing and the level of capacity for cost and
knowledge sharing are the same, then the relationship between the buyer and the seller can be regarded as successful.

It was found out that, even if the seller itself has the necessary capacity to share cost and knowledge, which can also be interpreted as cooperation competency, as long as the environmental factors do not favour, outcome of the buyer-seller relationship will be effected by the environmental factors and will tour out to be transaction based instead of long-term relationships.

The developed model can be applied to any seller, who is operating in white goods sector, since the application verified the validity of the model, which comprised varying components. The application is meant for evaluating the case company by monitoring the factors, which are influencing the capacity to cooperate with the buyers and a result of this and it reveals the probability to involve in successful relationships with the customers.

During the research, the theoretical part of the study was verified by the case analysis. The theoretical aspects, mentioned in this study, constituted a basis for the case analysis.

Nowadays, there is a great shift from vertical integration to core business, considering the manufacturers operating in the white goods sector. The manufacturers have the tendency to outsource more of their components. This tendency leads to the necessity that the suppliers have to be more competent regarding these components and services to enable the manufacturer gain competitive advantage. This requires the commitment of both parties in the relationship.

The most important relationship characteristics for the companies covered by this study, can be stated as trust and commitment, as mentioned in the theory. Trust develops by time and it is directly related to the seller's image. Both parties get to know each other's attitudes and count on the reliability of the other party. After the constitution of trust, the parties tend to maintain the long-term relationship, which can be defined as commitment.
The previously created model; The interdependency framework gives the business marketers the view to determine where their relationship types are fitting, regarding the temporal and the relationship aspects, and to define their strategies.

The aspects of CRM were mentioned in this study, to reveal the relevance of CRM and the buyer-seller relationships in general. Then, it was found out that CRM and the general approach to buyer-seller relationship had much in common, except for the IT integration of the processes in CRM.

In the final part of the theory, an integrated model for the white goods sector was introduced to mention the determinants of the buyer-seller relationships in white goods sector and the relationship between these determinants and the way how they effect the success of the relationships was visualised.

6.2. Managerial Implications

An integrated model for the relationships for white goods sector was included in this study, to gain a better understanding of the relationships between the manufacturers (buyers) and the suppliers (sellers). The model focused on the relational aspects of both parties, which have effect on the success of the relationship.

To manage the buyer-seller relationships, the managers have to pursue strategic thinking as a prior step. They should link buyer-seller relationship management with the business strategy, information systems strategy and the manufacturing strategy. Considering the increasing importance of the business transactions and the integration between the partners, the buyer-seller relationship management has a strategic impact on the company’s performance. That is due to the fact that buyer-seller relationship management has great impact on the business operations, which in turn determines the company’s performance. The managers should endeavour to orient their buyer-seller relationship management to technology usage. Manufacturing needs information systems support for successful operations and for competing in today’s market. In today’s conditions, both intra information systems and the inter-organizational information systems are integrated parts of the whole manufacturing system.
As a second step, the managers should identify the company's demand for cost and knowledge sharing through the buyer-seller relationship management. The final product and product complexity, and the manufacturers competence on the final product should be evaluated. This evaluation can provide managers with a good understanding of the nature of their business. Then they will have the chance to identify what type of competencies they need to access through cooperative relationships with the suppliers. The market competition is also another issue to be checked by the manufacturers. This checking process can be realized by taking into account the growth rate of the market, volatility of the sales, the complexity and the competitors. Evaluation of these criteria will help managers understand the competition that they are facing and the opportunities they can take to enhance their position. Then the manufacturers should determine the degree of the demand for cost and knowledge sharing based on the company's strategic thinking, such as determining the degree of out-sourcing components.

On the other hand, the suppliers should also identify their existing capacity for cost and knowledge sharing through the buyer-seller relationship. In this case, the supplier evaluates the situation by determining what the differences between his party and the buyer are considering the objectives.

As a last step the companies should determine the gap between the demand for cost and knowledge sharing and the capacity to meet this demand and take decisions on the buyer-seller relationship management. The size of the gap determines the success of the buyer-seller relationships considerably. If the origin of the gap is originating from the supplier, in other words if the supplier is not compatible enough to meet the demand for knowledge and cost share, then the switch of the buyer to another seller would be inevitable. If the gap is originating from the buyer's side, in other words if the buyer's demand for cost and knowledge is not comparable to that of the seller, then unbalanced power can be under consideration. To benefit from the successful relationships, both the buyer and the seller should stand at the same level, regarding the demand and capacity for cost and knowledge sharing model.
6.3. Further Research Directions

During the research process a few interesting further research areas were determined:

- To verify the validity of the integrated model, an empirical analysis on other companies who are operating in other industrial markets would be another research area.

- Since this thesis included four buyers in Turkish white goods sector, it would be interesting to expand a future study to include more buyers and interviews within this sector to get a more complete picture and confirm the findings of this thesis.

- Another interesting area would be to analyse buyer-relationships in white goods sector in various countries and compare the factors affecting buyer-seller relationships in different countries.
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APPENDICES

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Description</th>
<th>Page No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix A</td>
<td>Buyer Questionnaire Form</td>
<td>153</td>
</tr>
<tr>
<td>Appendix B</td>
<td>Seller Questionnaire Form</td>
<td>154</td>
</tr>
<tr>
<td>Appendix C</td>
<td>Product samples of E.G.O.</td>
<td>155</td>
</tr>
</tbody>
</table>
Appendix A. Buyer Questionnaire Form

**Buyer Questionnaire**

1-) How would you define your purchase situation with E.G.O. Turkey? (straight rebuy, modified rebuy, etc.)

2-) How long have you been purchasing from E.G.O. Turkey?

3-) Considering the portfolio of E.G.O. Turkey, do you buy these products only from E.G.O. Turkey or from various suppliers?

4-) How dependant are your products on E.G.O. components?

5-) Would you consider partnership with E.G.O. in the long run?(Joint ventures or etc.)

6-) If you ranked your suppliers on the basis of their importance to you, where would E.G.O. take place?

7-) How do you evaluate your suppliers? Which criteria do you take as basis?

8-) With how many of your suppliers are you involved in a strategic partnership?

9-) If E.G.O. offered you a new product type, which you are currently procuring from another supplier, would you consider purchase from E.G.O.?

10-) Regarding the IT issues, what are your expectations from E.G.O. Turkey? (e.i. usage of a new software package, developments on EDI, etc.)

11-) How much time did EDI save you? Are you satisfied with EDI?

12-) How would you consider the trust issues with E.G.O.?

13-) How would you evaluate E.G.O. regarding the process competency?
14-) How would you evaluate E.G.O. regarding the product competency?

15-) How do you think is E.G.O. handling the customer relationship management?

**Interviewed with:**

Alkın Tanrıverdi – Purchasing Specialist – 10.03.2004

Erdal Haspolat – Purchasing Manager – 10.03.2004

Murat Bingöl – Purchasing Specialist – 14.04.2004

Nilgün Anagök – Purchasing Engineer – 25.03.2004

Ogün Erdal – Purchasing Specialist - 08.04.2004

Orhan Çavuşoğlu – Purchasing Manager – 25.03.2004

Sencer Başarır – R&D Specialist – 10.03.2004

Tolga Beldağ –Planning Engineer – 14.04.2004

Uğur Çamlı – Purchasing Manager- 08.04.2004
Appendix B. Seller Questionnaire Form

Seller Questionnaire

1-) How is the nature of our products? (complicated, high-tech etc.)

2-) How is the nature of our processes? (simple, costly to modify etc.)?

3-) Sales volume of E.G.O.? (Percentage of total sales of E.G.O. to the whole market of the same product portfolio.)

4-) What is the pace of change in our sector? (Revision of products, product life cycle, how long are we able to sell a certain product.)

5-) What is the degree of our dependency on the selected buyers? (What are the percentage revenues gained from these companies?)

6-) Do we have powerful competitors in the market? Do our biggest customers have alternatives to us? How would be the switching costs for our customers?

7-) What are the basic problems that we face during the sales process?

8-) What do we do to build long-term relationships with our customers?

9-) What are our competitive advantages over our competitors?

10-) To what degree is our ERP integrated to that of our customers?

11-) Our biggest customers are shifting towards electronics. Where do we fit in these changes? Are we adaptable to these changes or are we involved in the change process?

12-) Can we assume that our customers are loyal to us?

13-) Do we sign long term contracts with our customers?

14-) Do our prices stay stable over the contract period?

15-) Is our R&D department involve in projects with the R&D staff of our customers?

155
16-) All of our customers are competing with each other. How do we handle Trust issues? Are we bound by a certain contract? (know-how etc.)

17-) How frequent do we have contact with our customers? (interviews)

**Interviewed with:**

Harald Zeidler – General Manager – 11.02.2004 / 09.03.2004

Wolfgang Kurscheidt – Technical Director – 14.01.2004 / 04.02.2004

Temel Kalfa – Sales Engineer – 19.01.2004 / 20.01.2004

Appendix C. Product Portfolio of E.G.O. Turkey

**WASHING**
- TUBULAR HEATING ELEMENTS, EGOTHERM FLOWHEATERS
- THERMOSTATS, DRIVES, FREQUENCY INVERTER
- HYBRID CONTROLS, DISPLAYS

**DRYING**
- TUBULAR HEATING ELEMENTS, ELECTRONIC CONTROLS

**DISHWASHING**
- TUBULAR HEATING ELEMENTS, EGOTHERM FLOW
- HEATERS
- FULLY-ELECTRONIC CONTROL SYSTEMS

**COOKING AND BAKING**
- HOTPLATES, RADIANTS HEATING ELEMENTS,
- THERMOSTATS, INDUCTION, SWITCHES,
- ENERGY REGULATORS, ELECTRONIC REGULATORS, TOUCH CONTROL
CURRICULUM VITAE

Nihan KOÇ was born in 1978. After graduation from Yıldız Technical University Industrial Engineering Department, in 2000, she was admitted by I.T.U. Institute of Science and Technology, Management Engineering Program. Nihan knows English and German and still works for a German company.

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