



**TAMPERE UNIVERSITY OF TECHNOLOGY**  
*Degree Programme in Industrial  
Engineering and Management*

**JERE KIMARI**

**FRAMEWORK FOR PRODUCT AND SERVICE PRICING IN A  
MANUFACTURING FIRM**

Master of Science Thesis

Prof. Miia Martinsuo has been appointed as the  
examiner at council Meeting of the Faculty of  
Business and Technology Management on Feb-  
ruary 8<sup>th</sup>, 2012.

# ABSTRACT

TAMPERE UNIVERSITY OF TECHNOLOGY

Master's Degree Programme in Industrial Engineering and Management

KIMARI, JERE: Framework for product and service pricing in a manufacturing firm

Master of Science Thesis, 82 pages, 2 appendices (3 pages)

May 2012

Major: Industrial Management

Examiner: Professor Miia Martinsuo

Keywords: service pricing, pricing elements, pricing guidelines, value-based pricing

This thesis examines the pricing of offerings in an industrial context. The purpose of this thesis is to give suggestions on how to develop the pricing of products and services in the case company. The main research question is: What changes and upgrades are needed towards successful product and service pricing in the case company? The objective is to identify the elements relevant to the pricing of offerings, to estimate how successfully the elements are implemented in the case company, and to give suggestions for the case company on how to develop their product and service pricing as part of sales.

In this research, a constructive research approach was used where the empirical data were collected through semi-structured interviews and observations. The theoretical part of the study examines the relevant elements in the pricing literature. Based on the literature review an initial framework for service pricing was built to direct the analysis of the empirical data. The empirical part of the research studied the pricing elements derived from both the case company's pricing practices and from previous literature.

The main findings of the research were that the case company is considering all of the pricing elements identified in the literature. There were also three new pricing elements found in the empirical research which emerged from interviews and observation rounds. The most important pricing elements proposed for development due to their current weak implementation were: the IT systems, pricing guidelines, and cost estimation. Also other improvement needs were identified concerning the other pricing elements and, therefore, a three step process is suggested, to cover the promotion of all the pricing elements needing development in the future. Possible future research topics could study the use of the newly identified elements in the pricing of offerings.

# TIIVISTELMÄ

TAMPEREEN TEKNILLINEN YLIOPISTO

Tuotantotalouden koulutusohjelma

KIMARI, JERE: Viitekehys tuotteiden ja palveluiden hinnoittelulle tuotantoyrityksessä

Diplomityö, 82 sivua, 2 liitettä (3 sivua)

Toukokuu 2012

Pääaine: Teollisuustalous

Tarkastaja: Professori Miia Martinsuo

Avainsanat: palveluhinnoittelu, hinnoitteluntekijät, hinnoitteluohjeet, arvopohjainen hinnoittelu

Tämä diplomityö tutkii hinnoitteluun liittyviä eri osatekijöitä teollisten tuotteiden ja palveluiden hinnoittelun näkökulmasta. Tämä työ keskittyy luomaan ehdotelman siihen, kuinka tuotteiden ja palveluiden hinnoittelua voidaan kehittää kohdeyrityksen myyntityössä. Päättökysymys tässä diplomityössä on: mitä muutoksia ja päivityksiä tarvitaan tuotteiden ja palveluiden hinnoittelun kehittämiseksi kohdeyrityksessä? Tavoite tässä työssä on tunnistaa ne tekijät, jotka tulee ottaa huomioon hinnoittelussa, tutkia, kuinka nämä tekijät on toteutettu kohdeyrityksen hinnoittelussa, ja näin antaa ehdotelmia siitä, kuinka kohdeyrityksen hinnoittelua voidaan parantaa.

Tämä diplomityö tehtiin kohdeyrityksen toimeksi antamana ja toteutettiin konstruktiiivisena tutkimuksena. Empiirinen aineisto kerättiin puolistrukturoitujen haastattelujen ja havainnoinnin avulla. Työn teoreettinen osuus tutkii hinnoittelun oleellisia osatekijöitä kirjallisuudessa. Kirjallisuudesta löytyneiden osatekijöiden avulla hinnoittelulle luotiin alustava viitekehys, jonka avulla empiirinen aineisto analysoitiin. Empiirinen osa tutkimuksesta käsitteli hinnoittelun osatekijöitä, jotka oli johdettu kohdeyrityksen omista toimintatavoista ja kirjallisuudesta.

Tämän tutkimuksen tärkeimmät havainnot olivat, että yritys käsittelee kaikkia kirjallisuudessaakin tunnistettuja hinnoittelun osatekijöitä. Empiirisessä tutkimuksessa löydettiin myös kolme uutta hinnoittelun osatekijää, jotka nousivat esiin haastatteluissa ja havainnoinneissa. Tämän hetkisen puutteellisen toteutuksen vuoksi kaikista keskeisimmiksi kehittämiseksi tunnistettiin seuraavat hinnoittelun osatekijät: IT-järjestelmät, hinnoittelun suuntaviivat ja kustannusten arviointi. Myös muiden hinnoittelun osatekijöiden kohdalla tunnistettiin kehitystarpeita, joiden vuoksi ehdotetaan kolmivaiheinen kehitysprosessi ohjaamaan kaikkien oleellisten hinnoittelutekijöiden tulevaisuuden kehitystä. Jatkotutkimuksen mahdollisuuksia ehdotetaan empiirisessä tutkimuksessa tunnistettujen uusien hinnoittelutekijöiden käytön tarkasteluun.

## PREFACE

In the beginning of writing this thesis, the subject was mostly new for me. However after a slow and laborious start I did managed to find the structure for this thesis. I would like to express my deepest gratitude to my supervisor Laura Äimälä-Heiskanen who not only initiated this research but also did have time for my numerous and difficult questions during the busy process. I would like to also thank my examiner Miia Martinsuo who guided me thoroughly to the whole research and writing process. I would also like to give special thanks to all the employees of the case company who participated in my research and did have time for my long and complicated questions. Last but not least I would like to thank all my friends and family who have always stood by me when I have needed you.

Lahti, 28th of March 2012

Jere Kimari

# TABLE OF CONTENTS

<b>ABSTRACT</b> .....	<b>i</b>
<b>TIIVISTELMÄ</b> .....	<b>ii</b>
<b>PREFACE</b> .....	<b>iii</b>
<b>TABLE OF CONTENTS</b> .....	<b>iv</b>
<b>TERMS AND DEFENITIONS</b> .....	<b>vi</b>
<b>1. INTRODUCTION</b> .....	<b>1</b>
1.1 Towards better pricing logic .....	1
1.2 Objectives of the research .....	1
1.3 Research methodology .....	3
1.4 Overview of the case company .....	4
1.5 Process of the research .....	5
1.6 Data collection and analysis methods .....	7
1.7 Thesis structure .....	9
<b>2. LITERATURE REVIEW</b> .....	<b>11</b>
2.1 Price movement influence on profits .....	11
2.2 Definition of services from industrial perspective .....	12
2.3 Elements in pricing .....	14
2.3.1 Pricing elements in the literature .....	14
2.3.2 Pricing strategy .....	15
2.3.3 Pricing guidelines .....	18
2.3.4 Different pricing methods .....	24
2.3.5 Different pricing methods: strengths and weaknesses .....	30
2.3.6 Customer perception of value and price .....	35
2.3.7 Measuring and pricing the value.....	37
2.3.8 Evaluating price levels.....	39
2.3.9 Pricing information .....	40
2.3.10 Pricing process.....	41
2.4 The initial conceptual framework .....	45
<b>3. RESULTS</b> .....	<b>47</b>
3.1 Pricing strategy.....	47
3.2 Pricing guidelines .....	48
3.3 Pricing method: cost-based pricing.....	52
3.4 Pricing methods: competitor- and value-based pricing.....	55
3.5 Price level evaluation .....	58
3.6 Special service consideration .....	59
3.7 IT systems related to pricing .....	60
<b>4. DISCUSSION</b> .....	<b>62</b>

4.1	Revised framework .....	62
4.2	Classification of the pricing elements .....	63
4.3	Factors to be promoted in the future .....	66
4.3.1	Pricing strategy .....	66
4.3.2	Pricing guidelines .....	66
4.3.3	Special service consideration .....	68
4.3.4	Pricing methods .....	69
4.3.5	IT systems .....	70
4.4	Promotion phases .....	71
<b>5.</b>	<b>CONCLUSION.....</b>	<b>73</b>
5.1	Summary of the research.....	73
5.2	Academic contribution and limitations .....	73
5.3	Recommendations for the future .....	75
	<b>BIBLIOGRAPHY .....</b>	<b>76</b>
	<b>APPENDICES (2 pieces)</b>	

## TERMS AND DEFENITIONS

ERP system	Information system whose functionality covers all the operations in a company (Enterprise Resource Planning system)
B-to-B	Business-to-Business
B2B	Business-to-Business
B-to-C	Business-to-Consumer
Offering	Product or service or combination of both
Operating profit	The profit earned from a firm's normal core business operations. Also known as “earnings before interest and tax” (EBIT).

# 1. INTRODUCTION

This chapter will introduce this thesis in general. First the reason for this thesis subject of study there will be given. This is continued with clarification of the objectives and research methodology. After this the process of the research and the data collection and analysis methods will be introduced. Finally the process and the structure of this research and overview of the case company are presented.

## 1.1 Towards better pricing logic

The importance of capable pricing practice cannot be underrated. According to Lancioni (2005) when companies fail to understand the implications of their pricing decisions, this often leads to missed opportunities and eventually lower profits. Lancioni (2005) also states that price setting is a multidimensional process which has effects on: customer retention, market share, margin levels, and domestic and international sales. Cram (2006) believes that smarter pricing has greater impact on market success than any other element. The author consolidates this argument referring to research of 2,463 companies where successful one percent increase in price improves operating profit in average by 11.1 percent – greatly exceeding the impact when improving one percent of fixed (+2.3% improvement in operating profit) or variable costs (+7.8% improvement in operating profit). Marn & Rosiello (1992) also states that the pricing is a two edged sword which means that decrease of 1 % in price would destroy 11.1 percent of the company's operating profit.

This research has been made as an assignment of the case company. The case company produces and sells stainless steel products globally. Due to variable nature of stainless steel products demand and volatility of the stainless steel raw material prices the case company is highly exposed to the risks of: demand changes, raw material price changes, and stainless steel products stock value changes (Butterfield & Kersley 2012, p.27). The risk of the raw material price changes and stock price changes creates a challenge for the pricing of the stainless steel products effectively. This researcher was responsible for developing the sales pricing process excluding other areas of the sales and marketing unit operations.

## 1.2 Objectives of the research

The objective of this research is to create a framework for the case company which gives knowledge for a further development process needed in the marketing units pricing.

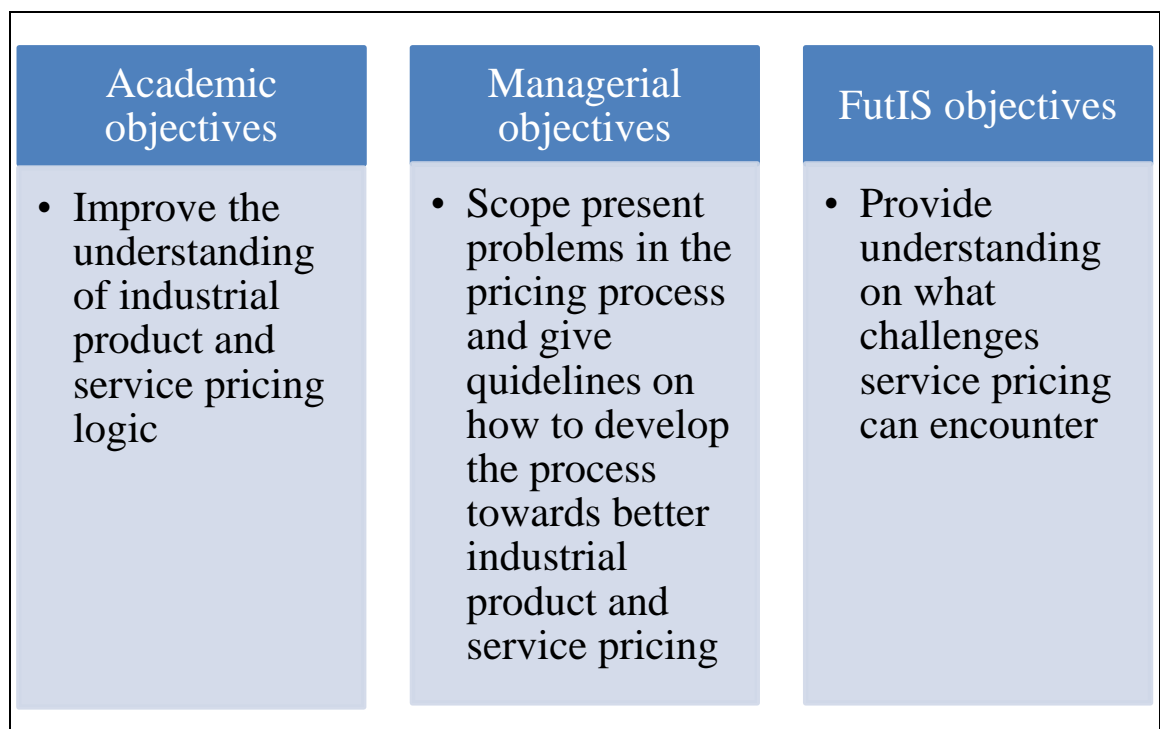


ing process. The case company is selling stainless steel products globally in several different currencies with wide variability of the products dimensions, material, and other characteristics. This creates a need for an efficient sales pricing process which can operate in relatively highly variable different markets. The variability can be understood to be: the variability of the raw material prices, case companies' end products value (stock price), and the demand of the products.

This research is also part of the Future Industrial Service program (FutIS). The program was started in 2010 and is scheduled to last until the end of 2015. The main objective of the Future Industrial Service program is promoting the Finnish industry towards service and solution business. The project has three different work packages: WP1, WP2 and WP3. The case company is one of the participants of the projects WP1 theme. The main object in WP1 theme is studying the service business mindset which has three main goals:

- 1) Increase knowledge of industrial service business
- 2) Improve understanding on the market and customer context
- 3) Enhance service business capabilities and, thereby, well-manage expansion of service business.

The main objectives of this thesis and the support for FutIS goals are shown in the figure 1.2, which clarifies the different objectives of this thesis.



**Figure 1.2: Objectives of this thesis.**

The academic objectives in this thesis are trying to improve the understanding of the industrial product and service pricing. The literature covering the area of pricing is widely researched, but the literature is lacking general studies and frameworks developed how the pricing should be implemented in industrial product and especially service point of view, in this research the objective is to bring more understanding and clarify the pricing implementation in industrial products and services context. Regarding the managerial objectives, the goal is to identify present problems in the case company marketing unit's pricing execution and propose a framework on are the most important pricing elements needing development for the industrial service pricing in future. The FutIS objective is trying to bring more understanding on what challenges service pricing can encounter in an industrial context.

The main research question shaped during the thesis process and is formulated as follows:

*What changes and/or upgrades are needed towards better service pricing in the case company?*

The main research question can be broken down to two sub-questions:

- 1) *What are the essential elements in the pricing of offerings?*
- 2) *How is the case company taking into account the critical pricing elements?*

### **1.3 Research methodology**

The thesis objective is to identify the case company's main areas of improvement needed in the pricing process. This thesis has most resemblance to constructive research which according to Kasanen et al. (1993) can be defined as: "managerial problem solving through the construction of models, diagrams, plans, organizations, etc." The construction refers in general to entities which produce solutions to explicit problems. The constructive research essential purpose is to link the practical problem and its solution to theoretical knowledge. According to the authors, constructive research has the following six phases:

1. Find a practically relevant problem which has research potential.
2. Obtain a general and comprehensive understanding of the topic
3. Innovate; i.e. construct a solution idea
4. Demonstrate that the solution works
5. Show the theoretical connections and the research contribution of the solution concept
6. Examine the scope of applicability of the solution

This research goes thoroughly through the first three steps of from the constructive research process ending in the presentation of the suggested construction excluding mostly the step four where the solution functionality is demonstrated. The phase four is excluded because this research will be done in a seven month time scale which precludes the possibility to demonstrate that the solution works. The steps five and six are yet included in this research, where the connection of the theory to the research will be presented and the applicability of the solution for the case company and general use will be discussed. For this reason the “construction” is frameworks which give proposals for the case company from the areas which require further development.

The research time horizon is considered to focus on one time period which means this research is done by static cross-sectional study. The static cross-sectional study means that the research is done by static moment of time where the researcher is processing the research in one time period in a particular time. (Saunders 2009, p.155)

The research strategy on this research is using multi-method approach, which according to Tashakkori & Teddie (2003) is a research where more than one data collection technique is used with associated analysis techniques but is restricted to either qualitative or quantitative world view. On this research the data is qualitative and is collected using semi-structured interviews and observation techniques. The observation is implemented from a participant role which according to (Saunders 2009, p.294) is a role where the attendee will observe without taking a part in the activities in the same way as the “real” candidate.

## **1.4 Overview of the case company**

The case company is an internationally operating structural stainless steel tube manufacturer which provides tubes worldwide to over 45 countries where the major markets are located in Europe and USA. The case company is a family owned company run in 2<sup>nd</sup> generation. The case company was employing in year 2011 approximately 110 employees' globally with the net sales of 73 million euros (Yritystele, 2011). Approximately 10 percent of the net sales came from services in the year 2011. The head office is located in Finland and secondary office is located in Netherlands.

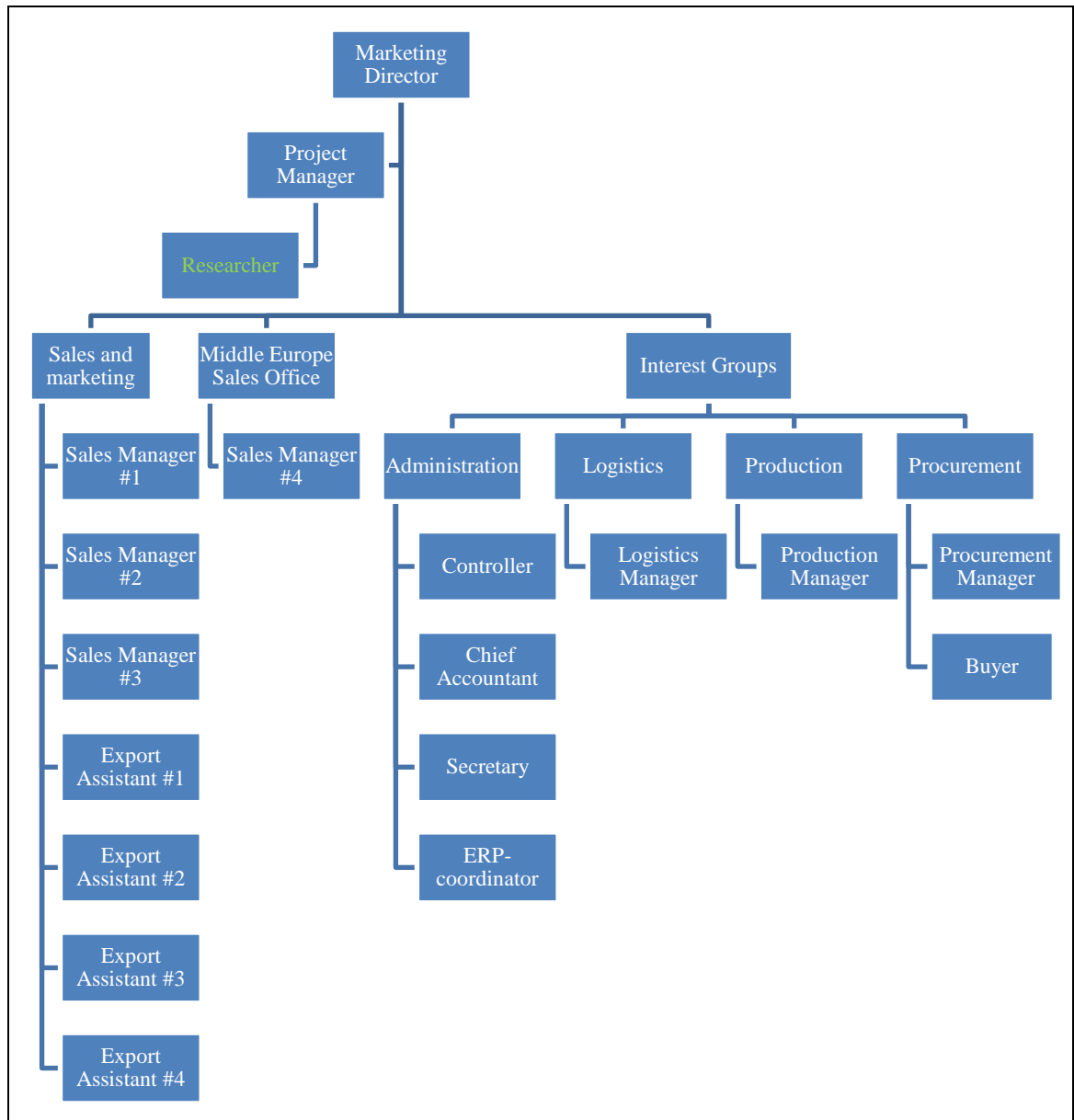
The case company's main products are square and rectangle stainless steel tubes which presents a large part from the company's revenues. The structural stainless steel tubes are highly standardized products in the industry where the case company's customers are mainly wholesalers and project customers.

The case company has been actively developing new services alongside for the structural stainless steel tubes for providing further processing for the products and also customization more to customers' needs, such as special technical tubes, and component

manufacturing. For more customer-related business the case company has started a new affiliated company in the year 2006, which is focusing on developing and providing more technical solutions for the customers.

## **1.5 Process of the research**

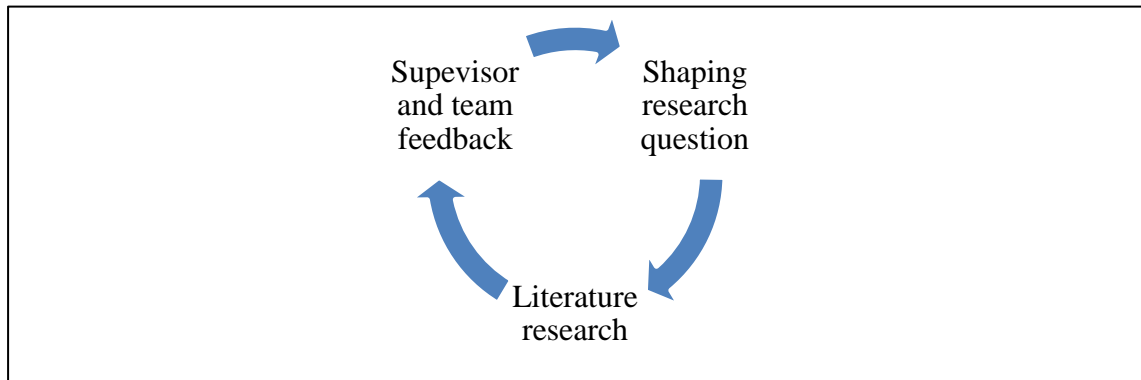
This research is executed as an assignment for the case company where the researcher worked as case company's marketing unit participant for seven months. The first month the researcher contributed most of his time to getting to know the organization policies and processes. The orientation period lasted first three weeks in the beginning of the research in which time the researcher did get familiarization training from different units of the case company. The researcher supervisor was the project manager of the case company who was also working closely with Marketing & Sales unit. All this thesis internal interest groups units and participants can be shown in the figure 1.5.1, which also shows the hierarchy of this research.



**Figure 1.5.1: Hierarchy of the project participants.**

The researcher did get constant feedback from the Project Manager for this research. There were also arranged meetings with the Marketing Director when there were greater limitations and research approach decisions needed to be done for the research. The Marketing Director was responsible from the whole operation of marketing unit and was also the subscriber of this thesis. To get better understanding to the relatively wide matter covering the research questions the researcher spend substantial amount of time in the first three months for literature research, interviewing the Marketing & Sales unit employees and other case company's internal interest groups which did have conjoint action with the Marketing & Sales unit. The researcher also participated on the case company's daily action from observer's role to understand better the current pricing process.

The theories and frameworks which were used to form the construction of this thesis were chosen by the researcher with the help of: Project Manager, Marketing Director, and Sales Personnel. Because there is wide and variable literature covering the area of pricing products and services in business markets, the researcher needed to choose the most relevant ones for this research construction. The literature research and selection was done iteratively illustrated in figure 1.5.2.



**Figure 1.5.2: Iterative process of the research.**

The iterative research is done by three steps where the first step is getting to know the research problem and the organization practices and protocols. The second step is researching the literature from the basis which was learned from step one. Step three the researcher presents the discovered literature to the supervisors and team and receives feedback concerning the literature. Using this iterative method it is easier to process wide range of literature and choose the frameworks or studies which are considered to be the most important ones.

## 1.6 Data collection and analysis methods

The qualitative data were gathered using semi-structured interviews and observation. The semi-structured interviews were executed in two separate interview rounds in the case company. The objective of the first interview round was to identify current problems in the pricing process, where the researcher interviewed the majority of the administration, logistics, sales and marketing, production management, and procurement employees of the case company to get a wider picture on how the sales units operations are affecting to the other functions of the organization. The second interview round was also arranged by using semi-structured interviews. In these interviews the researcher used more specific questions which were focusing more on the matters derived from the literature review. From the interviews the researcher made interview notes. The interview and observation results are presented in chapter three.

The first interview round was held in October and November 2011 in which 17 case company's employees were interviewed. The interviews lasted approximately from 45 minutes to one and a half hours. List of interviewees can be seen from table 1.6.1.

**Table 1.6.1: List of the interviewees.**

<b>First interview round</b>	<b>Second interview round</b>
<b>Sales and Marketing interviewees</b> <ul style="list-style-type: none"> <li>• 9 persons, 4 interviews</li> </ul> <b>Interest Groups</b> <ul style="list-style-type: none"> <li>•Administration interviewees <ul style="list-style-type: none"> <li>• 4 persons, 3 interviews</li> </ul> </li> <li>•Logistics interviewee <ul style="list-style-type: none"> <li>• 1 person</li> </ul> </li> <li>•Production interviewee <ul style="list-style-type: none"> <li>• 1 person</li> </ul> </li> <li>•Procurement interviewees <ul style="list-style-type: none"> <li>• 2 persons, 1 interview</li> </ul> </li> </ul>	<b>Sales and Marketing interviewees</b> <ul style="list-style-type: none"> <li>• 9 persons, 4 interviews</li> </ul>
<b>Total: 17 persons, 8 interviews</b>	<b>Total: 9 persons, 4 interviews</b>

The interview round structure can be seen from the table 1.6.2. The interviews started with some casual talking about the purpose of this thesis and questions about interviewee's background and job description, after the warm-up questions the researcher started to ask about present pricing and sales practices. The second questions were related to current pricing practices to get a better view about how the pricing process works from the interviewee's opinion. Third questions were focusing on mapping the current pricing process capabilities for service and product pricing. The fourth questions were processing the challenges what could possibly arise and what have arisen in different demand downturns and upturns. Lastly there was also arranged time for other ideas for pricing development to get understanding if there is something else related to pricing which should be considered.

The second interview round were focusing more in the elements which were found in the literature. These interviews were arranged in February and March 2012 where only the sales personnel were interviewed. The interviews lasted from 45 minutes to one hour. The second round interview questionnaire can be seen in Appendix 1.

**Table 1.6.2: Structure of the first interviews.**

<p><b>Sales and Marketing interviewees</b></p> <ol style="list-style-type: none"> <li>1) Background of the research and job description of the interviewee</li> <li>2) Current pricing practices</li> <li>3) Capability for product and service pricing</li> <li>4) Current pricing issues</li> <li>5) Other ideas for development and comments</li> </ol>
<p><b>Interest Groups</b></p> <ol style="list-style-type: none"> <li>1) Background of the research and job description of the interviewee</li> <li>2) Interrelationship with sales unit pricing</li> <li>3) Own operations effects on sales unit pricing decisions</li> <li>4) Ideas for the sales pricing development</li> </ol>

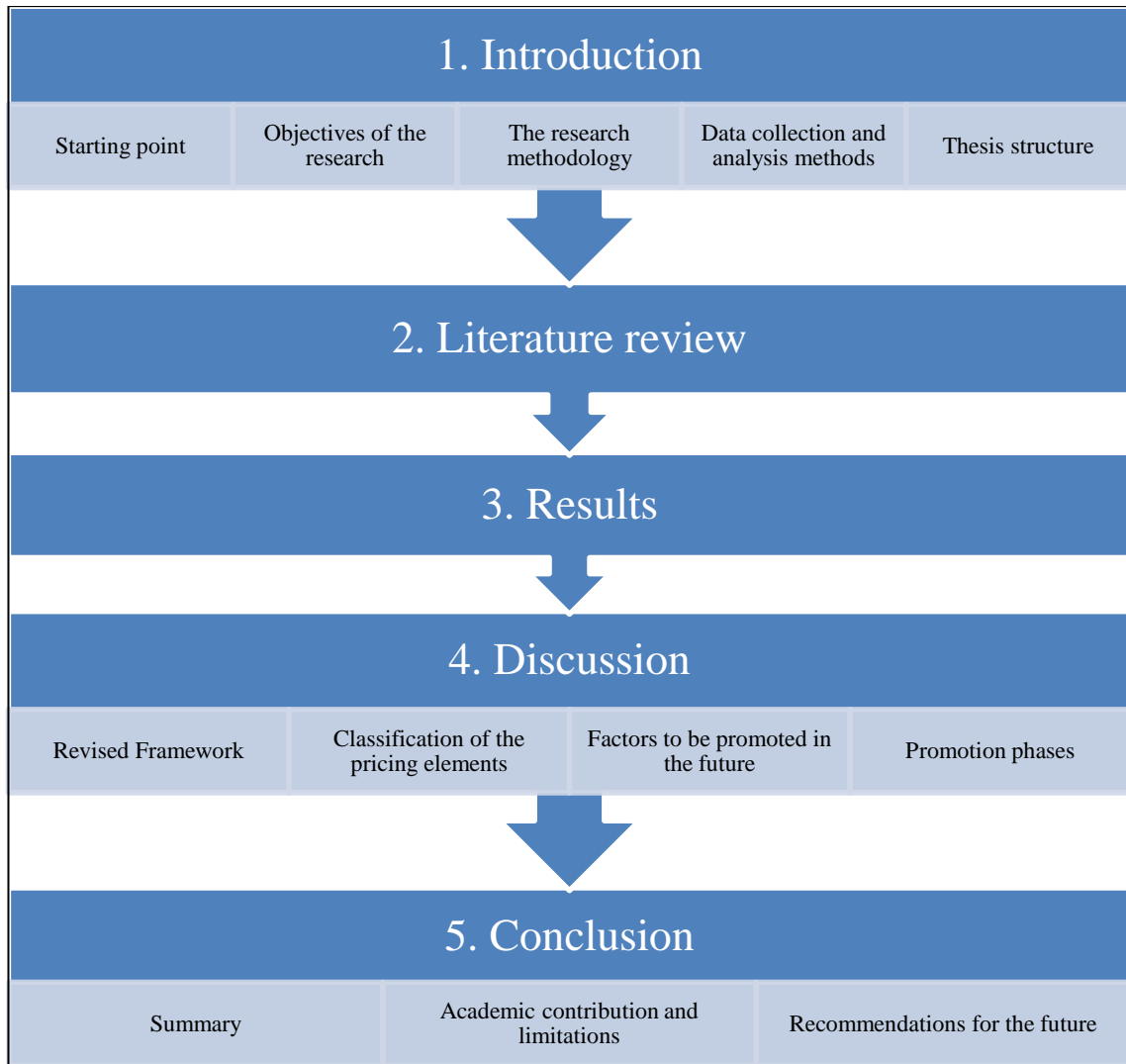
The observation period was arranged mostly in September and October 2011 where the researcher participated in the Sales units operation from a spectator role. The researcher did arrange familiarization training with the sales personnel where the personnel did show in their workstations how the sales process was conducted and presented how the Enterprise Resource Planning (ERP) software was used to determine the prices for the products and services. The researcher also took part in the Sales unit's joint meetings which were arranged usually once a week where the Marketing Director presented round ups from the past weeks sales. The researchers made notes from the observations which are presented in the chapter three.

The data analysis was implemented by using an initial framework which was created based on the literature and the first interview round and observation results. When all of the interviews from the first interview round and observations were conducted, the interview and observation notes were processed and read through. Since the collection of qualitative data will result in non-standardized data which requires classification to categories (Saunders et al. 2009, p.482) the first interview round and observation notes were shorted, summarized, and collected under different titles based on the initial framework. The comments and quotations were categorized and presented in the empirical results on chapter three. The quoted comments were selected when the matter occurred repeatedly or when the matter was supported by the other interviewees, or when the matter did have new point of view.

## **1.7 Thesis structure**

This thesis structure follows typical structure for master's thesis seen in figure 1.7. The first chapter has introduced this thesis starting point, objectives, methodology, the research process, and finally the structure.





**Figure 1.7: Structure of this thesis.**

Chapter two covers the theoretical part of study. It begins with a presentation on how the price changes influence on profits making basis for the price change understanding. After this the services are defined in industrial context. Lastly there will be a discussion on the important elements in pricing from product and service pricing perspective where in the end there will be an initial conceptual framework presented.

Chapter three will introduce the results and key findings of the empirical research from the first and the second interview round and from the observation results which are presented systematically in an outlined order of the initial framework. Chapter four will conclude this research in a discussion chapter which is the most important chapter in this thesis which will answer to the research question, where the suggested framework for the improvement of the case company's pricing process is presented. Chapter five will cover summary of the research, academic contribution, limitations, and suggestions for further potential research.

## 2. LITERATURE REVIEW

In this chapter the relevant literature regarding different pricing elements is discussed. The purpose of this chapter is to explore the matters from an academic point of view and create strong theoretical knowledge for the empirical research. This chapter begins with a demonstration of how the price movement influences on profits, which continues with an introduction of industrial services. After this the different pricing elements found in the literature are covered. Finally an initial framework from the industrial product and service pricing is presented.

### 2.1 Price movement influence on profits

Price is an important factor which has great effect to the sales revenue and more importantly to the profits. Blythe & Zimmerman (2005, pp.174–175) gives an example how the small movement in price can have large effect on the firm's profits seen in table 2.1.

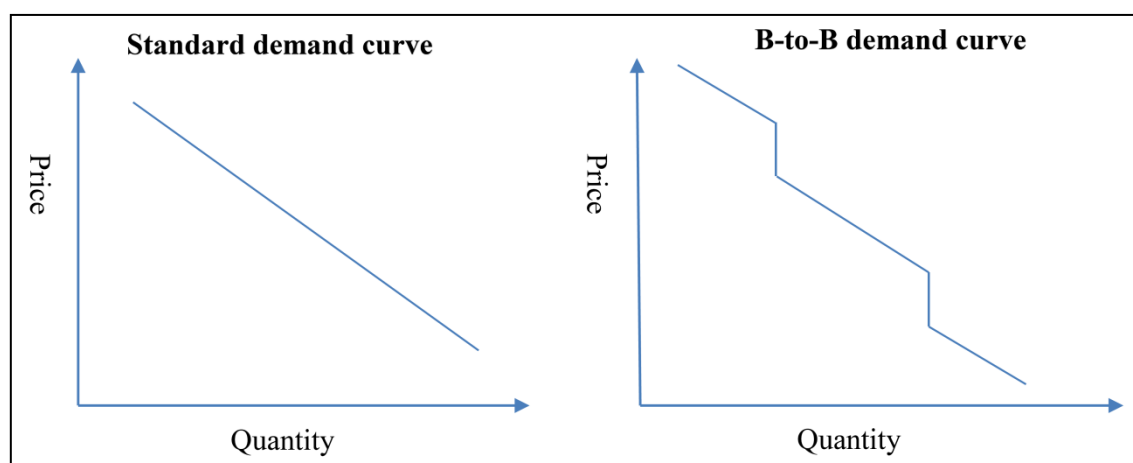
**Table 2.1: Price influence on profits. (Blythe & Zimmerman 2005, pp.174–175)**

	<u>Original Price</u>	<u>New Price</u> <i>(5% increase in price)</i>
<b>Sales Revenue</b> <i>(1 million units sold)</i>	\$10 000 000	\$10 500 000
<b>Direct Costs</b>	\$6 000 000	\$6 000 000
<b>Administrative Costs</b>	\$3 000 000	\$3 000 000
<b>Profit</b>	\$1 000 000	\$1 500 000

When the company is manages to sell one million units with the price of US\$10 the company is totaling US\$10 000 000 in sales revenue. The direct cost for manufacturing the products including all of the variable costs is US\$6 per unit totaling US\$6 000 000. The administrative costs are US\$3 million, this results total of US\$1 million in profits. If the company manages to raise products prices with five percent and manages maintains the current sales quantities of one million products sold. This would mean that the products prices would be now 10.50 US\$ which would results in US\$10.5 million of sales revenue. The direct cost and the administrative cost remains the same (US\$6 million and US\$3 million). This shows that five percent increase in price results in a 50

percent increase in profits from US\$1 million to US\$1.5 million. (Blythe & Zimmerman 2005, p.174)

Yet the previous example has some obvious limitations. Firstly it assumes that the sold quantity remains the same when the company raises the price of the products. These can be argued with the basics of demand curve which slopes downward to the right as seen in figure 2.1. However in B2B-markets the demand curve can be stepped-shaped. This means that there are price ranges where the demand stays the same seen in figure 2.1. This means that there are price areas where the demand quantity remains the same even when the price is changing. From this reason if it is possible to determine the price ranges where the customers are not price sensitive. It is possible to establish higher sales revenues and profits as in the previous example changing the price from US\$10.0 to US\$10.5. (Blythe & Zimmerman 2005, p.175)



**Figure 2.1: Comparison of standard and B2B demand curve. (Blythe & Zimmerman 2005, p.175)**

There is also more criticism about the previous example because the increased price can increase the administrative expenses, such as: hiring more sales force, increased advertising, or trade show promotion. Here again the previous example would fail. Therefore the previous example in the table 2.1 was just a simplification of real life pricing situation. (Blythe & Zimmerman 2005, p.175)

## 2.2 Definition of services from industrial perspective

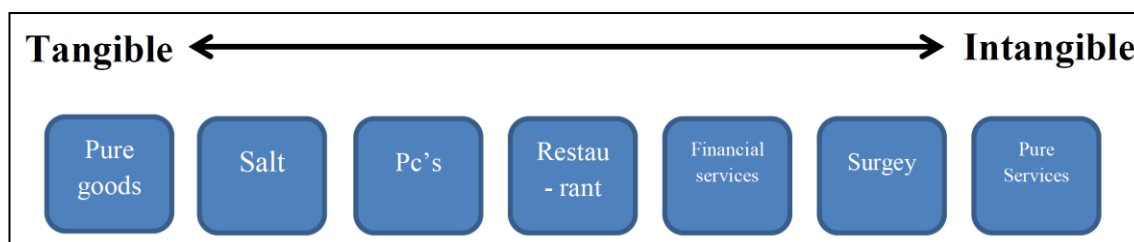
The subject of industrial services has been researched increasingly during recent years' due to its topicality in the industrial sector. One benefit that industrial sectors are pursuing with the service related research is to achieve new earnings logic and generate new ways of finding growth and revenue generation opportunities (Grönroos et al. 2010, p.565). Also the concept of services is defined and understood in the literature in many ways. For example Shostack (1977) have recognized so-called IHIP characteristic for services. In this model there are four different characteristic in services: 1) intangibility,

2) heterogeneity, 3) inseparability, and 4) perishability. This model is widely adopted in the context of service definitions, but however Lovelock & Gummerson (2004) have stated that the latest literature argues that the early mentioned model fails to make clear distinction between goods and services. There are also many frameworks constructed from the available service literature. Grönroos (2008) has introduced a widely cited model for services, where the author has identified three different aspects for services from the available literature:

1. Service as an activity
2. Service as customer's value creation
3. Service as a perspective on the provider's activities and business logic

In this mindset the first aspect of service is that it is based on the activity in the form of doing something to assist someone else. The second view is that the service is considered to be activities which create value for the customer or supplier. The third aspect is seeing services as a part of customers operation where the value is created in form of ease-of-doing business with contribution to customers business. Laine (2009, pp.40–41) has also introduced a model for service definitions by synthesizing the service literature comprehensively. In Laine's (2009, pp.40-41) model service are divided to three different levels. In one level the services can be separated with certain features using IHIP characteristics. In other level the service can be seen as an activity that provides solutions for customer's problems. Third way of defining services is the view that services is application of specialized skills. From the Laine's (2009, pp.40–41) wide literature synthesis, it is stated that the service is quite abstract concept and there is not: clear or applicable nominal definition for services existing. From this reason it is recommended that the definition of services needs to capture the phenomena at hand.

For the numerical measurement of services Rathmell (1966) and Shostack (1977) have developed a framework which measures the portion of services from the whole offerings. In this framework named a goods-services continuum it is possible to measure the portion of service business in a company by revenue seen in figure 2.2. In the left end there is pure goods' where 100 percent revenue comes from goods'. In the right end these is pure service company where 100 percent of the revenue comes from services.



**Figure 2.2: The good-services continuum. (Adapted from Rathmell 1966; Shostack 1977)**

Because this thesis is focusing on the business-to-business side services it is reasonable to clarify what can be understood to be industrial services in this research. Based on the literature research above and adopting the literature to the case company's understanding of services this thesis definition of services can be seen as:

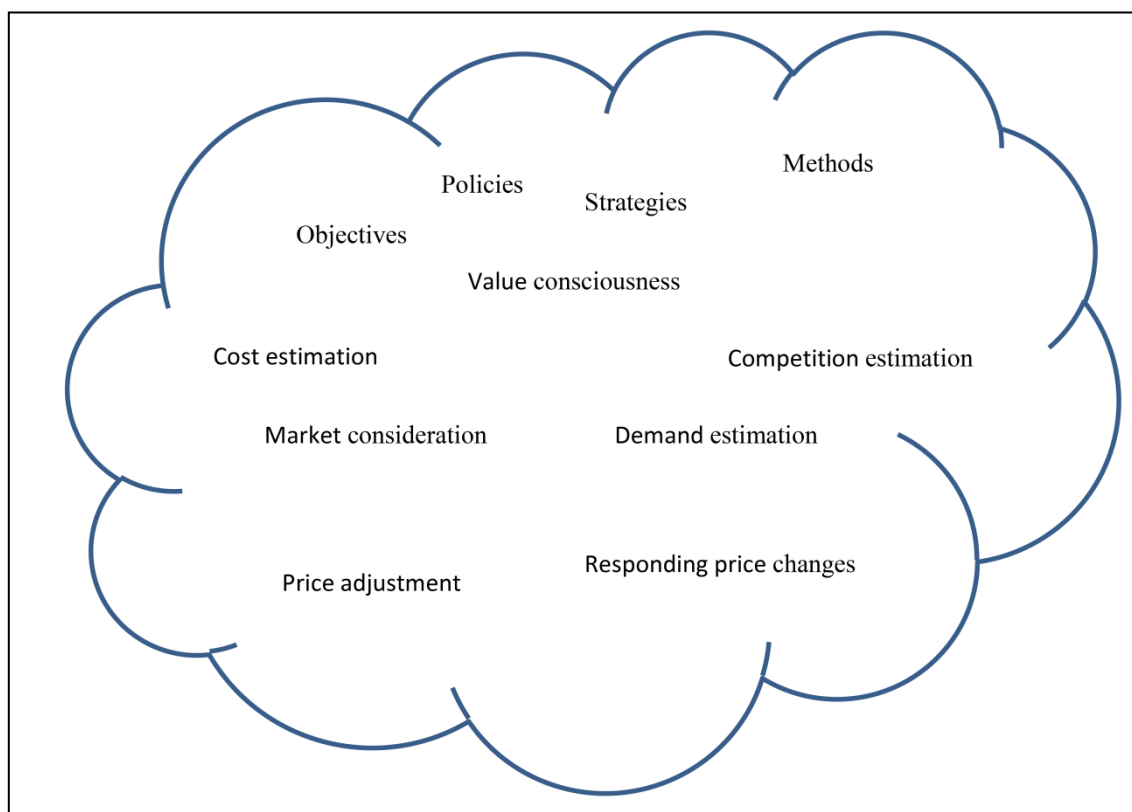
*“Physical products’ add-ons which can relate to: upgrading physical goods, or providing activities to customers for solving customer problems”*

It is worth noticing that this definition for services is not widely adaptable and the definition is given to clarify for the reader what service means in this research from the case company's point of view.

## **2.3 Elements in pricing**

### **2.3.1 Pricing elements in the literature**

To understand the wide concept of pricing and its most relevant elements, a literature review of the pricing elements is needed. The current literature of pricing is full of different matters and subjects which are discussed from different points of view, this makes it difficult to find widely recognized and agreed elements for the pricing. The figure 2.3 summarizes the findings of the pricing elements found in the literature. The problematic part of summarizing the literature is that different authors use different concepts and definitions from the same matters. Hence some generalizations are made which makes it possible that the precise terms used by different author(s) for the different elements are not presented in the figure below.



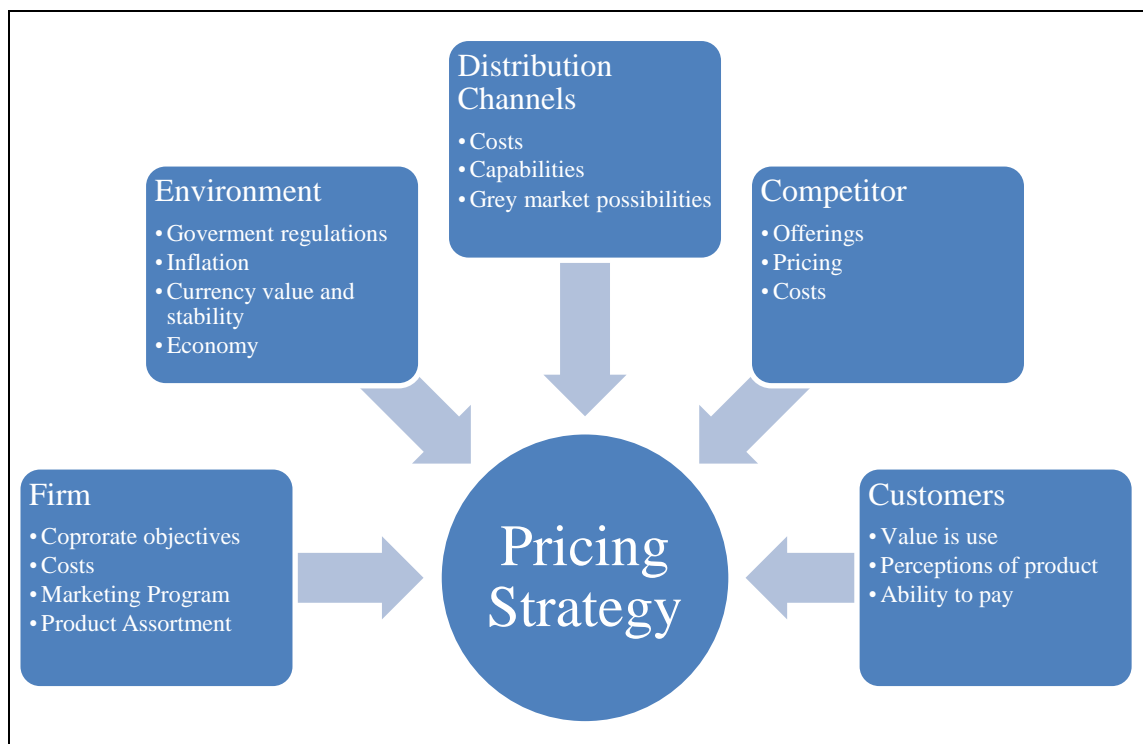
**Figure 2.3.1: Pricing elements in the literature.**

The elements discussed in the pricing literature are widely spread. For example Avlonitis & Indounas (2007 pp.740–746) have found 39 different elements (authors term “characteristics”) which can have an effect on the pricing decisions. For this reason the elements found in the literature are generalized in 11 different matters which were repeating in the context of industrial product and service pricing literature.

### **2.3.2 Pricing strategy**

The pricing strategy is one of the elements widely occurring in the context of pricing by many authors (see e.g. Blythe & Zimmerman 2005, pp.175–177; Hutt & Speh 2010 pp.362–363; Trepstra & Sarathy 2000, pp.561). However there is no clear definition which is regarded to be a part of pricing strategy or what matters the pricing strategy should include. Also there is a lack of literature made from the service pricing point of view.

Blythe & Zimmerman (2005, p.177) have made a comprehensive model from the pricing strategy. In the figure 2.3.2 the authors present in their framework how the pricing strategy’s different factors can be divided.



**Figure 2.3.2: Pricing strategy elements. (Blythe & Zimmerman 2005, p.177)**

In the pricing strategy Blythe & Zimmerman (2005, pp.176–178) suggest that there are five main segments which need consideration: Firm, Environment, Distribution Channels, Competition, and Customers. One of the segments is the Firm which contains: corporate objectives, costs, and marketing programs and product assortment. In this segment the authors suggest, that the cost should be evaluated widely in such a way, that it would include costs such as the product production costs and also the marketing costs such as market penetration costs in different areas. The marketing program includes taking into consideration the marketing unit targets about how the products are positioned in the markets. For example are the products unique or standard ones. In the product assortment the products price relationship to other products prices from the same product line are considered.

The second element is the Environment which according to the authors should have an effect on pricing strategy. There can be government regulations such as price control, duty requirements, import taxes or quotes which can have an influence in the pricing possibilities. If the country has hyperinflation and there are price increase limitations, the company should ask for higher possible price from new products. There is also a possibility of currency risks where firms need to analyze the stability of the currency and decide if it is important to revise prices continually or seldom. Also the relative growth or descent of different economies can have an effect on pricing decisions. (Blythe & Zimmerman 2005, pp.176–178)

The third element in pricing strategy consideration is Distribution Channels. One reason for the distribution channel consideration is the distribution costs which can have a noteworthy influence on the offerings eventual price. The gray market re-export risk can also have an effect on pricing. This appears when there are price differences in different areas which enable the possibility for a distributor to overbuy and sell the surplus in different areas profitably. (Blythe & Zimmerman 2005, pp.176–178)

The Competitors are a fourth element which is one critical viewpoint to be taken into consideration when exploiting the pricing strategy. One essential matter is to compare the companies' offerings benefits and deficiencies closely between competitors. This is not always possible if the bidding is done rarely, which makes it difficult to sustain consciousness about competitors pricing. The second question related to the costs of competitors. This, as well as pricing can be as well as the pricing to prove to be a difficult task. (Blythe & Zimmerman 2005, pp.176–178)

The fifth element in the pricing is the Customer. In this segment the marketing unit should create understanding on how the customers are practicing their business. This is used when the price is constructed with the true value drivers which the customer is valuing to determine the true value-in-use prices. The determination of the value-drivers is not always just the customer's perception from the product but also from the manufacturer itself. Other side of the customer's consideration is the paying ability. If the customer does not have the amount of funds needed to acquire the products or services, alternative payment methods could be used such as: countertrades, or long-term payment programs. (Blythe & Zimmerman 2005, pp.176–178)

A slightly older framework created by Trepstra & Sarathy (2000, p.561) is mainly supporting the early presented frameworks point of view and adds also more elements in the pricing strategy consideration. In the authors framework the pricing strategy is divided into: Firm-level factors, Product-specific factors, Market-specific factors, and Environmental factors. From the Firm-level factors the authors suggests that consideration in wide area of different cost is needed such as: product development costs, but also there is consideration needed in the experience-curve effects and scale-of-economies which can have an effect on costs. The authors have also wide perspective from the product as a part of the pricing strategy where the authors have suggested that factors such as: product-life-cycle stage and substitutes' evaluation. The authors also include services and deliveries in the product-specific factors. In the Market-specific factors the authors are supporting the earlier presented model where the customer's ability buy, government regulations and distribution channels choice and barriers to trade are considered. In addition the authors also add the consideration of product adoption costs from different markets. In the Environmental factors the authors have included competitor's goals and their possible price signaling.



By synthesizing these two different frameworks from pricing strategy, there are similar matters presented to be comprehended in the pricing strategy's consideration even though Trepstra's & Sarathy's (2000, p.561) framework is introduced from international marketing point of view, whereas Blythe's & Zimmerman's (2005, pp.176–178) framework is introduced from business-to-business marketing point of view. As a conclusion by linking the different pricing strategy point of views presented earlier, the pricing strategy is a widely general area which contains many factors to consider. The factors include matters such as: the market environment which can contain political factors and competition, the firm with its products is needed to compare with to its competitors; also the distribution channel can also be important matter to consider. From the literature covering the area of pricing strategies, there is a lack of literature covering the area of pricing strategies in the context of service pricing. This may be due to generalizability of the two strategic pricing frameworks, where the outlining of services or products is not considered to be relevant.

### 2.3.3 Pricing guidelines

The subjects of pricing objectives and policies are widely used in the pricing literature to form the guidelines for the pricing. These two matters are taken into consideration by many authors who have made their own pricing models, (see e.g. Blythe & Zimmerman 2005, pp.175–176; Kotler & Keller 2006, pp.437–448; Jobber 2010, pp.422–424; Hutt & Spoh 2010, pp.362–363) for this reason it is rational to study these two matters' meanings and usage in pricing.

Because in the literature pricing objectives and pricing methods are strongly related to each-other a clarification of pricing objectives is in order. Oxenfeldt (1983) have defined the pricing objectives as: "*they provide direction for action*". Tzokas et al., (2000, p.193) says from pricing objectives: "*To have them is to know what is expected and how the efficiency of the operations is to be measured*". The importance of pricing objectives is also presented in the literature. Diamantopoulos (1991, p.138) have suggested for pricing objectives that: "*they should be the starting point of every pricing effort.*" Gabor & Granger (1973, p.743) also agree with the idea that the first task in pricing is to clarify the objectives. The previously mentioned authors also add that it is not wise to give objectives which can be in conflict for example targeting to achieve maximum profit and maximum market share at the same time, which is not always possible. In sum the literature is generally supporting the statement that the pricing objectives should be clear before the pricing is initiated.

In the literature there is a wide area of different views how on the pricing objectives are set. Normally the pricing objectives can have some specific goals which can be related to: sales profits, return on investment, sales revenues, market size objectives, channel relationship, or product line consideration. (McCarthy & Perrault 2002; Hutt & Spoh 2010, p.362; Gabor & Granger 1973, p.743)

Cannon & Morgan (1990) have presented that the pricing objectives' eventual outcome is maximum attainable profits which however can be difficult to operationalize. For this reason the pricing objectives used should be intermediaries which would lead to maximum profit levels. The used intermediate objectives should be also established from several different classes such as: profit, consumer satisfaction, competitive vulnerability, strategic consistency, and simplicity of the pricing rules. This gives better tools to operationalize the objectives for pricing. (Cannon & Morgan 1990)

It is also important to recognize that although in the literature the profit orientated objectives are widely understood to be the general goal in pricing Blythe & Zimmerman (2005, p.176) argue that some companies do not have the possibility to target objectives such as maximizing the sales profits but only to survive in an industry with a very strong competition and overcapacity.

Diamantopoulos (1991, p.139) suggests that pricing objectives can be divided into six different categories relating to their content (i.e. nature) these categories are:

- Quantitative objectives
- Qualitative objectives
- Objectives with maximum level of attainment
- Objectives with satisfactory level of attainment
- Short-term objectives
- Long-term objectives

In the authors model both qualitative and quantitative pricing objectives can be used. Quantitative objectives can be measured easily and can be related to: profits, sales, market shares and costs coverage. Qualitative objectives can be related to relationship: with customers, competitors, distributors, the long-term survival of the firm, or achievement of social goals. The desired level of attainment can be divided mainly in two categories: those which need maximum results (i.e. terms in profit or sales), and those where satisfactory results are accepted. The time horizon of the pricing objectives can be divided to long- and short-term ones. The short-term objectives strive to fulfill specific goals for a short term i.e. six months' time period. The long-term objectives can be achieved after a longer time-period. (Diamantopoulos 1991, p.139)

The objectives classification presented above is one way to identify and categorize the pricing objectives to six different categories. However, many authors are suggesting that because of the complexity of pricing decisions, there is a need to use more than one pricing objective at a time (Oxenfeldt 1983; Diamantopoulos 1991, p.139).

The pricing objectives are also researched in the service pricing context. Avlonitis & Indounas (2005) have made comprehensive research from pricing objectives known in the literature in both business-to-business and business-to-consumer side service firms. The table 2.3.3 lists the authors' findings.

**Table 2.3.3: Different pricing objectives of service firms. (Avlonitis et al. 2005; Channon, 1986, p.142–159; Cannon and Morgan, 1990; Bonnici, 1991; Payne, 1993; Palmer, 1994; Bateson, 1995; Drake and Llewellyn, 1995; Woodruff, 1995; Ansari et al., 1996; Lovelock, 1996; Meidan, 1996; Zeithaml and Bitner, 1996; Hoffman and Bateson, 1997; Langeard, 2000)**

Profit maximization	Achievement of satisfactory profits
Market share maximization	Achievement of a satisfactory market share
Distributors' needs satisfaction	Creation of prestige image for the company
Discouragement of new competitors entering into the market	Price similarity with competitors
Maintenance of the existing customers	Customers' needs satisfaction
Determination of "fair" prices for customers	Attraction of new customers
Long-term survival	Achievement of social goals
Sales maximization	Achievement of satisfactory sales
Market share increase	Cost coverage
Return on investment (ROI)	Return on assets (ROA)
Price differentiation	Service quality leadership
Coverage of the existing capacity	Liquidity maintenance and achievement
Price stability in the market	Price wars avoidance
Sales stability in the market	Market development

From the table 2.3.3 and literature presented above, it is possible to synthesize product and services pricing objectives. These objectives include consideration of: profits and profitability, sales revenues, price levels, capacity usage, customers, market-share, service quality, distributors, and competition. These different objectives are not always aiming to maximize profits. There can other objectives with a high level or lower level of attainment. The objectives can be set quantitatively or qualitatively where there can also be different time horizons with different objectives.

The pricing policies are closely related to pricing methods and objectives but still in the literature these two different terms have different definition in the context of pricing. According to Lowengart & Mizrahi (2000) while pricing methods refer to the specific formulas used in order to set a price, the pricing policies are associated with the actual prices levied and the way they are presented to customers. Oxenfeldt (1983) defines the pricing policies as: "*the particular actions and procedures necessary for reaching the*

*final price*". Oxenfeldt (1983) also adds that these policies can achieve consistency and validity in a firm's pricing decisions and provide answers to unanticipated pricing circumstances. Blythe & Zimmerman (2005, p.183) state that pricing policies include deciding upon: list prices, discounts levels, allowances, rebates, and price difference in different geographic regions. In the list pricing the authors' state that the practices can vary in different industries, from which reason there is the possible risk that the list prices are set overly high level which no customer is willing-to-pay. Because of this different levels of discounts should be offered based on e.g. the purchasing amount and time of order. There is also categorization made from pricing policies, where Búrca et al. (2004, pp.380–381) have defined three different pricing policies:

- Ethnocentric
- Polycentric
- Geocentric

In ethnocentric policy, the price is set to a worldwide standard after taking into account elements which will affect on the final price such as: exchange rates, and taxes. This pricing approach ignores both competitive environment and conditions in the market. Polycentric policy is on the other hand more flexible than ethnocentric policy. Polycentric approach allows local sales managers or distributors to establish whatever price they feel is acceptable. In this case the prices are not coordinated between different markets. The geocentric policy on the other hand recognises the variation in different markets conditions, and allows local managers and distributors to make autonomous pricing decisions in different markets. (Búrca et al. 2004, pp.380–381)

In the literature there are also many other views on what matters pricing policies can cover. Avlonitis & Indounas (2007) have made wide research from the service pricing policies. The authors did manage to identify 14 different policies which occur in the literature, these policies are:

- Cash discounts: discounts for those customers that pay their total amount within a pre-determined time period (Langeard, 2000)
- Differentiated pricing: offering different prices to different customers on the basis of a number of criteria such as the time of the purchase, the place of the purchase or consumption of the service and the customers' personal characteristics (Hoffman and Bateson, 1997; Lee and Ng, 2001; Yelkur and DaCosta, 2001; Zeithaml and Bitner, 1996)
- Efficiency pricing: the effort to lower the company's cost to a minimum level (e.g. through the adoption of sophisticated technologies) that will continually

permit the determination of low prices for those customers that are price-sensitive (Berry and Yadav, 1996)

- Geographical pricing: offering different prices to customers that are located in different geographical locations (Channon, 1986)
- Image pricing: setting a high price in order to convey an exclusivity image (Gendall et al., 1997; Gendall, 1998; Rao and Monroe, 1996)
- List pricing: setting one price without differentiating it according to the different market segments that the company might target (Langeard, 2000; O'Connor, 2003)
- Loss-leader pricing: a service is offered at a low price (even below cost) in order to attract customers that will be offered other more profitable and higher-priced services (Kurtz and Clow, 1998)
- Mixed bundling: a type of price bundling, where two services that can be purchased independently or are offered at a reduced price (Guiltinan, 1987; Kurtz and Clow, 1998; Munger and Grewal, 2001)
- Negotiated pricing: prices are determined on the basis of individual agreements between the company and its customers (Berry and Yadav, 1996)
- Pure bundling: a type of price bundling, where two or more services that cannot be purchased independently are offered at a reduced price (Guiltinan, 1987; Kurtz and Clow, 1998; Munger and Grewal, 2001; Naylor and Frank, 2001)
- Quantity discounts: discounts for those customers that purchase large quantities (Langeard, 2000)
- Relationship pricing: a customer-oriented approach, which aims at developing long-term relationships with customers, understanding their needs and pricing according to these needs (Berry and Yadav, 1996)
- Trade discounts: discounts to agents and distributors in order to promote and support the product or service (Langeard, 2000)
- Yield management: managing the company's existing capacity by monitoring the different market segments' demand and charge maximum price to segments that they are willing to pay (Coulter, 2001; Kimes, 2000)

From different pricing policies presented above it is notable that price bundling policy is stated to be only feasible to establish for services, where Hutt and Speh (2010, p. 275) have discussed the idea to use bundling pricing policies in business services. The authors states that when the business services have a high ratio of fixed cost to variable cost and the costs of the services are highly related to each other. This situation makes it feasible to consider mixed bundling or pure bundling policies in service pricing because the additional costs of providing additional services with the core services are generally low.

There are also other authors discussing the service special consideration, where Zeithaml et al. (1985, p.41) have stated the main matters from service pricing policies point of view is the importance of balancing the demand of the business services. In this point of view the perishability of the services is in great emphasis because the demand for the services is rarely steady and predictable enough. For this the authors solution is pricing policies which are aiming to stabilize the demand period by selling services at discount prices during off-peak period by offering discount price packages to different target groups.

From the researches presented earlier, it is possible to identify 16 different matters which can be used to formulate the pricing policy, or policies, which have an effect on the pricing. These different matters can be associated for example with:

- Market segments
- Customer differentiation
- Geographical differentiation
- Customer individual consideration
- Customer significance consideration
- Payment policies
- Offerings promotion, or protection
- Offerings price levels
- Profitability level of offerings
- Image of the company
- Offerings prices association to others offerings
- Customer relationship consideration
- Demand estimation
- Supply capacity estimation
- Costs estimation
- Quality of the product or service

To understand what are understood to be pricing objectives and policies in industrial service pricing, it can be synthesized from the literature presented above, that there is no clear definition what can be understood to be pricing objectives or pricing policies. There also are not clear differences identified from what objectives and policies are used in the industrial service pricing or conventional industrial product pricing. Both of these matters are taking into account relatively same matters such as: profitability, markets and customers. However it can be understood that the pricing objectives are setting the higher guidelines for the pricing whereas pricing policies are set to give more precise guidelines to the actual pricing process or operative phase of the pricing. From the service pricing point of view the intangibility and relatively low variable costs of services can affect in the pricing objectives and policies where the pricing should consider the capacity usage in the pricing by offering price reductions to stabilize the demand.

In this research the main objective is not only focusing on the pricing objectives and policies. For this reason the pricing objectives and policies are introduced in general to give the idea what the pricing objectives should cover.

### **2.3.4 Different pricing methods**

The pricing methods are one of the elements which are widely researched in the Business-to-Business pricing literature (see e.g. Avlonitis & Indounas 2005, pp.48–49; Hinterhuber 2008; Kotler & Keller 2006, pp.432–449; Anderson et al. 2009, pp.208–222; Jobber 2010, pp.425–439). The research made from an industrial service pricing perspective is however limited, because there is scarcity especially of the empirical research published from the industrial service pricing methods. There is also a difference how the pricing methods, policies, and strategies are understood in the literature, which makes it problematic to compare the literature when there is confusing with the early mentioned terms usage. To clarify what can be understood to be pricing methods, Oxenfeldt (1983) have defined pricing methods as: *“the explicit step or procedures by which firms arrive at pricing decisions.”*

From the literature there are different categorizations made how the pricing methods can be divided. In table 2.3.4.1 there are presented categorizations from three different authors'. It can be recognized that the different authors divide the different pricing methods broadly the same way. All the authors have divided the pricing methods to three different categories where the cost-based and competition-based methods are the same with all the authors. The third pricing method Jobber (2010, p.423) is using nomination of Market-based pricing whereas as Avlonities & Indounas (2005, pp.48–49) is using Demand-based and Hinterhuber (2008, p.41) is using Customer value-based. Although the different authors are using different nomination for the third pricing category, all the authors comprise the concept of “value” in their third method. Because of this reason the third method is nominated as: *“value-based pricing”* in this research.

**Table 2.3.4.1: Summary of the different pricing methods categorization.**

<b>Authors</b>	Jobber (2010, p.423)	Avlonitis & Indounas (2005, pp.48–49)	Hinterhuber (2008, p.41)
<b>Identified pricing methods</b>	1.Cost-based	1.Cost-based	1.Cost-based
	2.Competition-based	2.Competition-based	2.Competition-based
	3.Market-based	3.Demand-based	3.Customer value-based

A research of literature gives a list of known pricing methods. All of these pricing methods found can be divided to three main pricing methods presented earlier in this chapter. Table 2.3.4.2 summarizes the main pricing methods found in the literature both industrial product pricing and service pricing in business-to-business context.

**Table 2.3.4.2: Business-to-Business pricing methods known in the literature.**

<p><b>Cost-based pricing:</b></p> <ul style="list-style-type: none"> <li>•Cost-plus pricing (Anderson et al. 2009, p. 209); Búrca et al. (2004, p. 369)</li> <li>•Markup pricing (Kotler &amp; Keller 2006, p. 444)</li> <li>•Full-cost pricing (Jobber 2010, p. 423)</li> <li>•Direct-cost pricing (Jobber 2010, p. 423)</li> <li>•Marginal-cost pricing (Jobber 2010, p. 369)</li> <li>•Target-return pricing (Kotler &amp; Keller 2006, p. 444; McIver &amp; Naylor 1986; Meidan (1996)</li> </ul>
<p><b>Competiton-based pricing</b></p> <ul style="list-style-type: none"> <li>•Going-rate pricing (Jobber 2010, p. 425; Kotler &amp; Keller 2006, p. 447)</li> <li>•Market-place pricing (Búrca et al. (2004, p. 370)</li> <li>•Competitive bidding (Jobber 2010, p. 425; Hutt &amp; Speh 2010, p.377)</li> </ul>
<p><b>Value-based pricing (Customer-based, or Marketing-based pricing)</b></p> <ul style="list-style-type: none"> <li>•Perceived value pricing: the price is based in the customers' perceptions of value (Kotler &amp; Keller 2006, p. 445; Anderson et al. 2009, p.211–213; Jobber 2010, p.435–439)</li> </ul>

The table 2.3.4.2 gives the main pricing method categories which generate general understanding on how the performed pricing practices can be divided. The cost-based pricing methods uses the own cost knowledge for determine the price. When the costs are calculated there are usually added some percentage over the costs to match the market prices. The costs can be divided into fixed-cost and variable-costs. The fixed costs are



usually known as overhead costs which don't vary according to production or sales revenues. These fixed costs can be for example: rent costs, heat costs, interests' costs, and salary costs which are not affected by the output. The variable costs on the other hand can vary according to the output. Variable cost can be for example: raw material costs, purchased services costs, manufacturing salary costs, and energy costs. The total costs are a sum of variable and fixed costs for a given level of production. In intelligent pricing there should be knowledge of how the costs changes when the production level changes. The cost can also vary according to the customer needs where different customers can have differently adapted offerings and terms. This creates a challenge for the conventional cost-based pricing methods because there can be variations on activities which different customers require. For this reason it is suggested the activity-based-accounting (ABC) should be adapted in cost accounting, which tries to identify the costs associated with each customers' offerings and services. In the ABC approach both variable and overhead (fixed) costs are targeted back to each activity (or customer). The critical step for adopting the ABC effectively is to define the "activities" properly. (Kotler & Keller 2006, pp.441–444; Neilimo & Uusi-Rauva 2005, pp.56–59; Anderson et al. 2009, pp.209–210)

The Cost-based method is according to many researches one the most used methods in business-to-business markets (Indounas 2009; Shipley 1986; Anderson et al. 2009, p.209). The popularity of the cost based methods can be understood from the simplicity and easiness of the implementation of the cost based pricing method, more precisely the cost-plus method (Shipley & Jobber 2001).

In the literature there are different ways presenting, how cost-based pricing can be practiced. For example Cavusigl (1988) has introduced the pricing method-model where the cost-based pricing is divided to three different techniques:

- 1) Rigid cost-plus pricing
- 2) Flexible cost-plus pricing
- 3) Dynamic incremental pricing

In the Rigid cost-plus pricing the price is formed by adding the international cost and gross margin to the domestic price to ensure the profitability. The risk in this technique is the fact that the price can be too high for the foreign markets. One potential problem by aiming to get the same profit margin from all areas is the fact that it is not always possible to get the same profit margin because there can be differences in the competition in different areas. To overcome this problem it is possible to use Flexible cost-plus pricing. This pricing technique allows price to vary in different situations. The problem in varying the price, usually downwards, is the risk that the company loses eventually the export market when the production cost gap between competitors closes. For this problem the company can use the Dynamic incremental pricing technique. In this tech-

nique most of the fixed costs are reduced from the costs and only variable and international customer costs are calculated to the exported products price. This makes it possible to sell export goods profitably even when the prices are lower than the domestic market prices. (Cavusigl 1988)

The competition-based pricing methods shown in the table 2.3.4.2 are common methods for pricing if the price is determined from market information. In going-rate pricing the competitor's own cost, prices, and possible reactions into prices are considered. Also the evaluation of competitor's offerings is performed. If the competitor offerings include some extra features which the own firm is not offering which can be related to service, quality, or brand differences. There should be estimation done from the worth of these extra features which should be subtracted from the firm's prices. Also if the firm's products or services contain features which are not offered by the nearest competitors, the firm should evaluate the value of these offerings from customer point of view, which should be then added over the competitor's prices. (Kotler & Keller 2006, pp.443–444)

The view of Anderson et al. (2009, pp.210–211) of competitor-based pricing is slightly differing from Kotler & Keller (2006, pp.443–444) model. In the view of Anderson et al. (2009, pp.210–211) the pricing is defined to be less flexible where the price is set according to competitors' price and can have minor differences depending on: the quality, service, or reputation differences. Jobber (2010, p.425) is also supporting the view that in competition based pricing there can be small price differences compared to the market prices, giving an example that coffee bean delivering company was capable of pricing their products five percent higher than the competitors when they offered more reliable delivery services. From Hutt & Speh's (2010, p.370) point of view in the competition based pricing the competitors establishes the upper limit for the prices, from which it is possible to differentiate from competitors because the price is just one factor in the costs and benefits equation. The firm can differentiate from competitors with different dimensions other than the physical product's characteristics such as: reputation, delivery reliability, and technical expertise. Búrca et al. (2004, pp.370–371) also add to the competition-based pricing view that in addition to considering the quality differences of the competitors' and own products. The authors also add that there should be calculated customer cost of getting the product, which then needs to be subtracted from the own product prices to understand the international ceiling price for the products.

Jobber (2010, pp.425–426) have presented the competitive bidding pricing method which differs from the other previously presented competition-based pricing methods because of the sealed bidding practice where the competition based information available is limited. The author's view is that the sealed bid practice is used generally in contract negotiations. In sealed bids the potential supplier quotes a price which is confidential to both parties. If the bids are similar with all potential suppliers, the buyer can

choose the least expensive one. Because of this the likely bid of the competitors needs to be estimated. For evaluation of the bids successfulness, a statistical model can be used to estimate the expected profit of the bid. The expected profit can be calculated by using the equation:

$$\text{Expected profit} = \text{Estimated Profit} \times \text{Probabapility of winning the bid}$$

The expected profit is clearly a theoretical figure which is based on the estimated profit (bid price - costs) and the probability of the bid price winning the bid. The probability of winning the bid can be estimated from past experiences. However the probability estimation can be problematic. Therefore the author suggests that there should be adapted an efficient competitive bidding information system.

From to the authors' views of the competition-based pricing presented earlier in this chapter, it can be summarized that the competition-based pricing is exploiting the competitor related information to give the guideline for the set price levels, which then can be then adjusted by analyzing the differences of the offerings provided by the competitor and the firm. These differences can relate to: quality, service, reliability, technical expertise, or reputation. The competition based-pricing is related strongly with the value-based pricing which is discussed next.

Many different authors suggest that the value-based pricing is approaching the pricing from a slightly different point of view than competition-based pricing (see e.g. Anderson et al. 2009, pp.211–212; Kotler & Keller 2006, pp.445–446; Jobber 2010, pp.435–443). Anderson et al. (2009, pp.211–212) suggest that in the value-based pricing approach the price is set using: market offerings value and prices, and firm's own value and price by comparing the alternative offerings costs and value to firms own value and price of offerings. For clarification of the value-based pricing method Anderson (2009, p.211) have created a value equation which shows the idea how it is possible to estimate the value of different offerings. The value equation can be presented as:

$$\text{Value}_f - \text{Price}_f > (\text{Value}_a - \text{Price}_a) \quad (1)$$

In this equation  $\text{Value}_f$  and  $\text{Price}_f$  are the value and the price of the own firm's market offerings, and  $\text{Value}_a$  and  $\text{Price}_a$  are the value and price of "the next-best-alternative". This equation can be rearranged to give more clear equation how the price and value is estimated from the customer point of view:

$$\text{Value}_f - \text{Value}_a > (\text{Price}_f - \text{Price}_a) \quad (2)$$

$$\Delta\text{Value}_{f,a} > (\text{Price}_f - \text{Price}_a) \quad (3)$$

In equation three it can be seen that the potential customer is comparing the offerings differences in value and price. Usually in B-to-B offerings, the value can be transferred into monetary terms. Anderson (2009, p.211) presents the phrase which the equation three presents when comparing two different offerings: “*What is the difference in the worth of two offerings to my firm, and how does it compare to the differences in their prices?*” The equation three can be rearranged to give the idea what price the company should be asking or using:

$$Price_f < Price_a + \Delta Value_{f,a} \quad (4)$$

On the left side of the equation four is  $Price_f$  which defines the limit for the fair price which is possible to charge from customers. In the competition-based pricing presented earlier the special case of value-based pricing is presented, where  $\Delta Value_{f,a}$  is zero or have minor value for adjusting  $Price_f$ . (Anderson 2009, p.211)

Kulmala (2006) has stated that, in the market-based pricing practice it is crucial to understand price elasticity of the customers, when there is a need to understand the customer’s payment ability and willingness-to-pay. If there is something special in the producers own products it is not feasible to sell it with a normal market price. On the other hand it is always not even possible to sell special products if the customer does not have the paying ability. For these reasons pricing should have accurate market and purchasing behavior knowledge.

The literature covering the area of service pricing methods is also consistent with the general pricing methods presented above. In research made by Zeithaml et al. (1985) the findings was that the cost-based and competition-based methods are the most used ones in the service industry. The authors also found in their study of the pricing behavior of covering 323 service companies in 13 different sectors in the USA, that the cost-based pricing was the most popular approach used by the service firms. Also more recent research conducted by Avlonitis & Indounas (2005) found that the most popular service pricing method were cost-based methods where the second most popular method was the pricing according to market average prices. The previously mentioned authors’ were assessing that the companies did have difficulties to determine the customers demand and needs which were required in the value-based pricing, from this reason the cost-plus method was applied due it simplicity to adopt in the pricing. The research was made of 464 services firms from six different sectors operating in Greece: transportation-shipping companies, insurance companies, medical service companies, it-companies, airlines, and banks. All of the companies where selected so that the companies did have sales revenues of over 1.5 million euros. The selection was implemented with the statement that smaller companies with revenue less that 1.5 million euros did not have a possibly to establish systematic ways for the service pricing, which would have weakened the research results.

**Table 2.3.4.3: Summary of the different pricing methods definition and requirements.**

	<b>Cost-based pricing</b>	<b>Competition-based pricing</b>	<b>Value-based pricing</b>
<b>Definition</b>	<ul style="list-style-type: none"> <li>• Cost-based pricing approach where the price is determined primarily from cost accounting</li> </ul>	<ul style="list-style-type: none"> <li>• Competition-based pricing approaches use anticipated or observed price levels of competitor's as the primary source of setting prices</li> </ul>	<ul style="list-style-type: none"> <li>• Customer value-based pricing approaches uses the value of a product or service delivered over "the next best alternative" for setting prices</li> </ul>
<b>Requirements</b>	<ul style="list-style-type: none"> <li>• Internal cost accounting information</li> </ul>	<ul style="list-style-type: none"> <li>• Competition information such as: prices, costs, offerings</li> </ul>	<ul style="list-style-type: none"> <li>• Information from the perceived benefit of the customer, information from "the next best alternative" such as: prices, costs and benefits for the customer</li> </ul>

In the summary seen in table 2.3.4.3 from the different pricing methods it is evident that the different methods have different definitions, and requirements for implementation. The cost-based pricing constructs the price from the firms cost where there can be differences on how the cost are directed to products and services. From this reason the cost-based method requires accurate cost-data and determination on how the cost are constructed and taken into account. The competition-based method constructs the price from market information needs which are generally external information from the markets and competitors offerings. In the value-based pricing the price is formed relating to the competitors price or so called: "the next best alternative" plus the added-value requiring both knowledge of the competitors' prices and perceived value of the customers.

### **2.3.5 Different pricing methods: strengths and weaknesses**

To understand which pricing method is the most suitable one in different industries, there is a need to understand the benefits and limitation which these different pricing methods have when executed. In this chapter literature research will be made from the pros and cons of the main three pricing method presented in the earlier chapter 2.3.4.

There is comprehensive literature covering the area of advantages and disadvantages of different pricing methods. Anderson et al. (2009, pp.209–210) present common issues which cost-based pricing encounters. One of the issues is the cost which is usually narrowly defined. Costs such as: cost-of goods sold, variable cost and full costs are in many companies inaccurate. Even if the companies have instituted activity-based cost-

ing (ABC) and have relatively accurate cost knowledge from the activities, there can be problems in the pricing of supplementary services where the costs structure can be still unknown. In the cost-plus pricing method the target gross margin (or net profit margin) serves usually as the plus component. This component is usually based on the historical margins from past market offerings. The issue in cost-plus pricing is that it assumes that the customer cares about the supplier's costs which can be a wrong interpretation where the risk of being competitively high priced or giving away value what is not understood. Anderson et al. (2009, pp.209–210)

For the cost knowledge issues Lancioni et al. (2005) also state that the usual problem in pricing is inaccurate cost accounting systems. When these inaccurate costs are used to price the products for example by using cost-plus methods, the price is usually too high or low. Anderson et al. (2009, pp.209–210) present an example why cost accounting can result in too high prices. In the authors' example the cost information usually relies on the assumption of a certain volume being produced. If the offering price is competitively high-priced, the number of items sold will decrease below estimates making the cost higher than anticipated in the original costing estimates due to production volume decrease.

Neilimo & Uusi-Rauva (2005) have also listed some potential problems concerning the Profit-based accounting practice which is usually used in the price estimation, some of the usual problems are:

- The costs are divided into variable and fixed cost with overly simplified logic
- The gross margin calculation is linear only with narrow areas in production quantity changes
- The profit is not the same as marginal profit
- The profit margin optimization needs to also consider the whole cost structure changes of the firm

Nagle & Holden (1995) have given some critical matters for the cost-based pricing method. Firstly the authors emphasize the importance of right targeted and determined cost for product pricing, because this creates the basis for marketing department to make the pricing decisions effectively. The critical aspect in the cost estimation is the understanding which costs are incremental and avoidable. If the costs are calculated from historical data there is the possibility that the company is selling the products too cheaply. If the fixed cost are estimated without incremental estimation, it is possible that highly profitable opportunities are calculated to be non-profitable. Also by ignoring the opportunity cost needed for example when investing in new capacity, the company can price its product overly low. In summary if the company is not fully aware of its cost structure; the company can have difficulties determining the actual profitability of different products or services.

From the service pricing perspective according to Hoffman & Arnold (1989) the cost-based service pricing methods have also potential limitations including:

- Not considering supply and demand
- Not maximizing profits
- Not incorporating unique service characteristic and selling conditions into decisions

In the literature there is also support for the cost-based pricing, for example Kotler & Keller (2006, p.444) are suggesting that the demand can be hard to determine which means that the cost-based method is the simplest option to use if other pricing methods are difficult to utilize. The authors also present the idea that the cost-based method is also fair to both buyer and seller. A seller does not take advantage of acute demand occasions and the seller earns a fair return on investment. Jobber (2010, p.424) also adds to cost-based pricing the point of view that it is wise to use cost structure as support when using other pricing methods, because cost-based pricing gives the minimum price which should be achieved to cover all the costs. The author also adds that it is possible to use break-even analysis to estimate the sales volume needed to balance the revenue and cost for alternative price ranges. Hinterhuber (2008, p.42) also states that the cost-based methods advantage is that the data is readily available.

The pros and cons of competition-based pricing is a widely researched subject in the pricing literature. Anderson et al. (2009, pp.210–211) present that in the competition based pricing one critical element is given to competitors while making marketing decision. There is also the risk of distorted price information, which can make competition based pricing difficult. If the competitors are using disguising techniques such as: off-invoice discounts, year-end bonuses, or rebates, it can make price comparison difficult. It is also possible that the customer or resellers are giving false information. (Anderson et al. 2009 pp.210–211)

In support to competition-based pricing Jobber (2010, p.426) has argued that it is possible to get information of competitors and market price levels even if there is distortion in the information, by using a grading system for the reliability of the information received. With this grading system it is possible for the sales unit to judge the information received when the competitor price level is used for the price determination.

Guiltinan (1987) has studied the competition-based pricing from a service pricing perspective and have suggested that the advantage of the competition-based pricing method is the simplistic nature of the pricing which provides a useful and quick pricing method. However the simplicity also causes it to lose its effectiveness when the business world becomes more complex. Arnold et al. (1989) also state that in general, a competition-

based service pricing approach provides no guidance on how much higher or lower the price of services should be set than competitors service prices. Also Tung et al. (1997, p.56) suggest that the competition-based method does not consider firms demand or supply adequately enough at that particular price level.

The main weaknesses and benefits of the value-based pricing are studied widely in the literature. Hinterhuber (2008) has identified four weaknesses that value-based pricing can have. Firstly the data required in the value assessment can be difficult to obtain and to interpret. Secondly value-based pricing may lead to relatively high prices. Also the “value”, needs to be often communicated to the customer. Lastly the overall best approach needs a direct link to customer needs. Hinterhuber (2008) has also listed some obstacles that value-based pricing can have when introduced, these obstacles are related to:

- Value assessments
- Communicating value to customer
- Market segmentation
- Sales force management
- Management support

In the value assessment it can be difficult to measure and understand how the customer is valuing the products or services. It can be also difficult to communicate the value for customer where the value such as “benefits for the customer” which can be difficult to show especially in accordance with customer needs. The third obstacle of the value-based pricing can be the issue of market segmentation where marketing studies have not managed to produce effective guidance. Because there are no sufficient studies to guide the market segmentation the segmentation is usually done based on customer need. The sales personnel can be also one obstacle for value-based pricing if there are no clear policies how the pricing needs to be practiced for example in the case of discounts. Also the senior management needs to support the value-based pricing for its successful implementation. (Hinterhuber 2008)

Tung et al. (1997, pp.55–56) also add limitations for the value-based pricing from the service pricing point of view. The author is using in the term: “service characteristic premium” for the extra-value created from the services. This premium can be hard to evaluate because it is abstract and subjective. Therefore it can be hard to evaluate these premium factors in monetary terms. Also the factor affecting the service premium provided is not easy to determine. From this reason the service knowledge level of the customer should be evaluated. Also estimation of the “premium” in pricing increases the complexity of the pricing tasks. (Tung et al. 1997, pp.55–56)



The advantages of value-based pricing are widely supported in the literature. For example Simon & Butscher (2001) have suggested that by customizing the price with willingness-to-pay information, it is possible to achieve new profit opportunities. The willingness-to-pay information is in this case the value of the product or services from customer point of view. From Hinterhuber's (2008) point of view the value-based pricing's main strength is its ability to take customer perspective into account.

The summary of benefits and limitations of the different methods is seen from table 2.3.5. The main limitations of cost-based pricing are drawn from its overly simplified logic where the costs are not considering factors seen in the table below. The high costs can result in high price compared to market prices or vice versa if the costs are at a lower level the company can provide its product overly cheaply to the markets. However the cost-based pricing method provides an easily practicable method were the information is readily available.

**Table 2.3.5: Summary of the different pricing methods limitations and benefits.**

	<b>Cost-based pricing</b>	<b>Competition-based pricing</b>	<b>Value-based pricing</b>
<b>Main limitations</b>	<ul style="list-style-type: none"> <li>• Risk of cost inaccuracy</li> <li>• Prices can be set overly high or low</li> <li>• Does not consider: unique service characteristics or customer perception of value in the price</li> <li>• Does not consider competition influences on price levels</li> <li>• Does not consider supply and demand</li> <li>• Does not maximize profits.</li> </ul>	<ul style="list-style-type: none"> <li>• Does not take customer perception of value into account</li> <li>• Risk of distorted competitive information</li> <li>• Does not function effectively if the business comes more complex</li> <li>• Does not consider supply and demand.</li> </ul>	<ul style="list-style-type: none"> <li>• Difficulties to interpret value and obtain accurate data</li> <li>• May lead to relatively high prices</li> <li>• The most complex pricing method</li> </ul>
<b>Main benefits</b>	<ul style="list-style-type: none"> <li>• Data readily available</li> <li>• easy to practice</li> </ul>	<ul style="list-style-type: none"> <li>• Data mostly available</li> <li>• easy to practice</li> </ul>	<ul style="list-style-type: none"> <li>• Takes customer perspective into account</li> <li>• Possibility for new profit opportunities</li> </ul>

The competition-based method offers also an easily practiced method, yet it requires accurate and correct knowledge from the competitors or market price levels, which can be difficult to obtain. Also competition-based method does not consider all the matters due its simplicity. The value-based method enables the discovery of the maximum price what the customer is willing to pay from the product. However, the value-based pricing can be difficult to implement due to its complexity.

### 2.3.6 Customer perception of value and price

It is possible to answer the question: “*what is fair price for customer?*” by understanding the value which the customer is receiving from the offerings. For this reason the questions such as: “*what is value?*” and “*can value be measured?*” are essential to understand if the company is determining a fair price for their offerings. Many papers have wide literature covering the area of value in B-to-B context which is studied in this chapter.

In the literature the value-based pricing is a relatively new and highly researched topic. The value-based pricing bases on the idea that the price is formed or revised by evaluating the value what the customer gets from the purchase. In the B2B-context the value has many definitions, which is clarified in this chapter to give the reader a better understanding of what the value can be. According to Hutt & Speh (2010, pp.363–366) value can usually be measured by monetary benefits which can be divided into cost savings or revenue gains. Ulaga (2003) and Ulaga & Chacour (2001) have taken a more defined view for the value in business markets. In their views’ the value in business markets can be understood to be:

- 1) A subjective concept
- 2) Trade-off between benefits and sacrifices
- 3) Multidimensional
- 4) Defined relative to competitors
- 5) Segment specific
- 6) Future oriented

Ulaga (2003) has also summarized a qualitative study from industrial sector where eight value aspects were identified which the supplier can create. These aspects are:

- 1) Product quality
- 2) Service support
- 3) Delivery performance
- 4) Supplier know-how
- 5) Time-to-market
- 6) Personal interaction
- 7) Price
- 8) Process cost

These value aspects are used to compare different alternative suppliers’ value delivery. Present survey was implemented to 35 marketing managers, general managers, and sales managers from four different industries: energy delivery, mechanical engineering, chemical industry, and food processing industry. Yet Ulagas’s (2003) model is not all-

encompassing and is lacking some aspects that the value delivered can comprise of. The research made by Bolton and Drew (1992) previews the idea of “easy to do business”. In this concept the customers overall assessment with its policies and practices is important. If the policies and practices are made in such a way that service is easy and pleasant it can be valuable to the customer and can be regarded as value. There are also other authors supporting this value perception for example Hammer (2001) suggests that the concept of “easy to do business with” or “ETBW” is important for companies to succeed in modern business environment.

Blythe & Zimmerman (2005, pp.178–179) have also taken into consideration the idea of the customer’s point of view of the costs-versus-benefits. The customer receives the core product and other value creating activities such as support services. This is the value that customer gets which should be rightly balanced against the cost which the customer is paying. The costs are not in this case just the cost of the product but the amount of funds or the net costs needed from the customer to get value from the product provider. Customer view of the costs and benefits can be seen in the table 2.3.6.

**Table 2.3.6: Customer view: cost versus benefits. (Blythe & Zimmerman 2005, pp.178–179)**

<b>Benefits</b>	<b>Costs</b>
<u>Functional</u> <i>(physical aspects of product)</i>	<u>Acquisition</u> <i>(initial price, less discount, plus freight, installation taxes)</i>
<u>Operational</u> <i>(reliability/durability)</i>	<u>Internal cost</u> <i>(training, lost production, disposal)</i>
<u>Financial</u> <i>(payback period)</i>	<u>Potential Risks</u> <i>(to operations, personal)</i>
<u>Personal</u> <i>(commendation for choosing right product)</i>	

Here the benefits are categorized into functional, operational, financial and personal groups. The functional group means the physical aspects of the product. The operations can create value with benefits such as reliability of the operations or their durability. The Financial benefits can be for example a payback period. There can also be personal benefits which for example the buyer can get when choosing the specific product.

The cost includes procurement costs which contain initial cost plus freight minus discounts and installation plus taxes. There are also internal costs such as training, lost production, eventual disposal costs, and risk costs if for example the purchased product does not function properly and also personal risks. In order to manage the pricing of the products successfully, it is important to have a good understanding how the customer is valuing its own benefits and costs.

By synthesizing the literature it is evident that the value can be a subjective and multi-dimensional matter which is considered differently from different segments. The value is also compared relatively to competitors and can contain several elements which can be qualitative or quantitative.

### **2.3.7 Measuring and pricing the value**

In the chapter 2.3.6 pricing methods the term “value” has been widely used, therefore for clarification for the reader it is sensible to study how it is possible to measure the “value” in B-to-B context. For the value measurement Anderson et al. (1993) have identified nine different methods:

1. Internal engineering assessment (“expert interviews”): Supplier firm’s specialist estimates customer value perception by using e.g. laboratory tests.
2. Field value-in-use assessment: Customer firms are interviewed to determine a comprehensive list of the cost using the offering and comparing it to the competitive offering. The estimation can include life-cycle-costs estimation. Relevant costs associated with the offerings are used for making explicit value estimations.
3. Indirect survey questions: a field research study where a company is asking what effect would the offerings have if one or more changes were made to it. By analyzing these answers and combining the results with some other known information, it is possible to estimate the value or worth of each offering.
4. Focus group value assessment: a study where a target group is presented with potential offerings and asked what is the worth of the potential offering for their firm.
5. Direct survey questions: a field research survey where, respondents are given a description of possible offerings (product or service concepts) and then asked what would be the value of the possible offerings to their firm.
6. Conjoint or trade-off analysis: a survey research where respondents are asked to estimate potential offerings by using their firms purchase preferences for each offering. Each offering includes a selection of attributes and features, the selection of attributes will vary systematically according to the offering. The survey will give the respondent purchase preference rating (or ranking) for the potential offerings. By using statistical analysis the ratings or rankings are used to estimate the relative value of each attributes.

7. Benchmarks: a field research survey where a benchmark offering is described for respondents. The benchmark offering can be a description of a typical product offering from the industry. The offering will be used when asking respondents how much would the customer pay more for additional to the offering or vice versa how much less would the customer pay for reductions to the offering.
8. Compositional approach: is a field research survey where respondents are asked directly about the value of different level of attributes when the offering is held constant.
9. Importance ratings: is a field research survey where a set of attributes or features of offering are introduced to respondent and they are asked to rate or rank them by using the preferred importance of their firm. They are also asked to rate or rank the competitive offerings to get a competitor analysis of the value delivered.

These nine different methods mentioned give some idea about how it is possible to evaluate and measure the value delivered to customer which can help the pricing to decide a fair price to offerings from the customer's point of view. Each of these methods has some differences in: the difficulty, feasibility, and reliability for value measurement. For example for the direct survey questions method to be accurate, it requires the respondent's honesty and real knowledge of the firm's preferences of the offering's attributes and features. In the research of Anderson et al. (1993) made in US the most common used method for the value measurement by industrial firms and marketing research firms was the group value assessment and the highest practical success rate did have the conjoint-analysis. The conjoint analysis however was the most challenging to exploit due to its more complex implementation. (Anderson et al. 1993)

When the value of the offerings is understood, it is possible to set the price according to the perceived value. For the value-based pricing Kotler & Armstrong (2010, p.315) have created the figure about how the price should be set with consideration of the value given to the customer and costs which is presented in figure 2.3.7.



**Figure 2.3.7: Setting the price framework. (Adapted from Kotler & Armstrong 2010, p.315)**

The price ceiling creates the value perception for the customer and the lower limit for the price sets the actual costs of the product and service. If the price is set over the value perception of the customer, there will be no trades made because the customer is not willing to pay over the value perceived. On the lower side of the price are the costs of the product or services. If the price is lower than the costs, there will be no profit made. For setting the fair-price for both customer and seller the price should be set below customer's perceived value and over the cost, which would satisfy both parties. (Kotler & Armstrong 2010, p.315)

### 2.3.8 Evaluating price levels

One element which arises in the pricing literature is the evaluation of how well-practiced and successful the pricing is. For successful and well-practiced pricing, the term effectiveness is used frequently in the context of pricing literature (see e.g. Cram 2006; Gabor & Granger 1979; Eugster et al. 2000). The term effectiveness means: *“successful in producing a desired or intended result”* (MOT, 2012).

Cram (2006) has introduced four different methods on how it is possible to measure the pricing effectiveness from the customer perception of price:

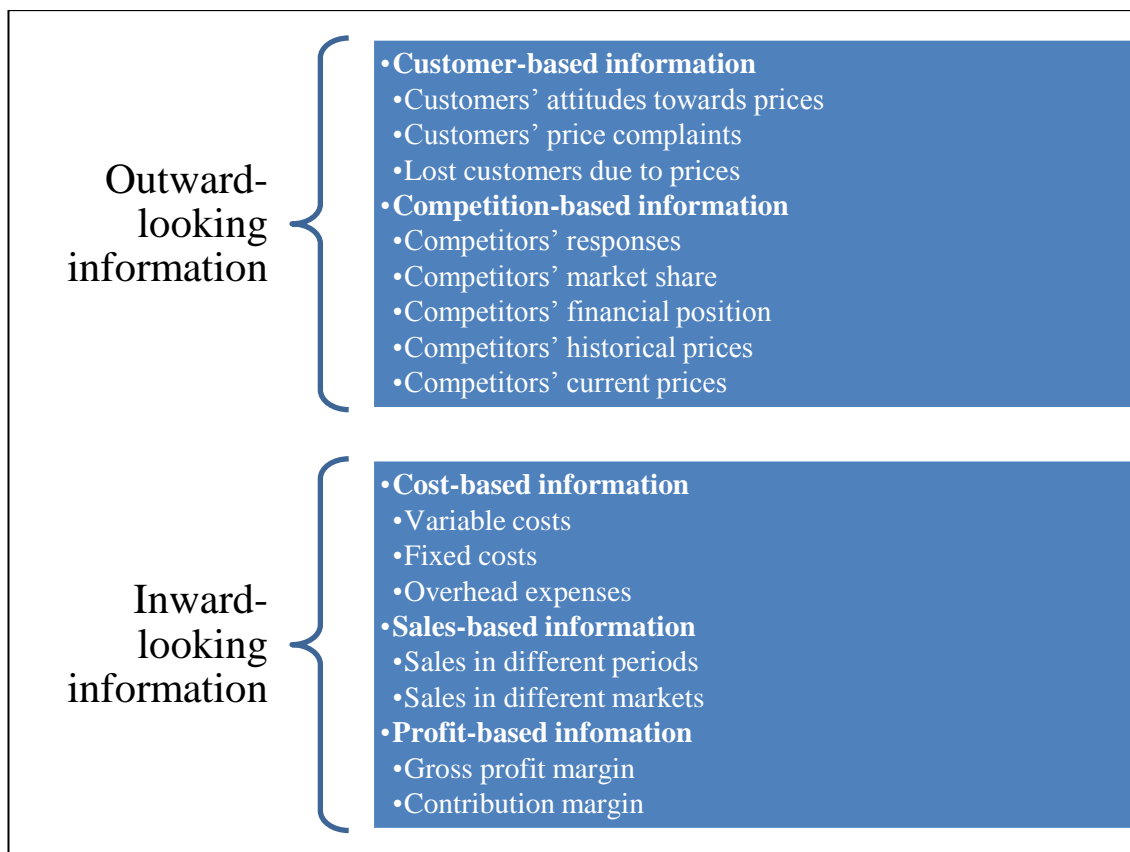
1. Failed order rate or the “look to look” ratio
2. Sound of silence
3. Switching rate
4. Market share movement

In the failed order rate, the pricing effectiveness is measured from the customers who make quotation. When the “look to look” ratio is remarkably high for example near 100 percent or rising, the price can be at a level that is too low. Other way of measuring the effectiveness is the sound of silence. If the customers are not complaining that the prices are too high, it can be that the prices are too low. Third way for the effectiveness measurement is analyzing the switching rate by examining how many customers have

switched to other suppliers or are not buying this year. If the rate of switching customers is declining, the price can be too low. The market share movement can also work as an indicator for the pricing level. If the market share is gained from comparable competitors, it can indicate that the price level is too low and vice versa decreasing market share can indicate too high prices. Eugster et al. (2000) have also introduced the “fixed cost per unit sold” way for determining the right price level. In this method decreasing fixed cost per unit sold can be seen as an indicator for too low price level and vice versa.

### **2.3.9 Pricing information**

The information used and needed in the service pricing decisions is also one matter which is reasonable to study to get the understanding for the information needs for pricing decisions. According to Avlonitis & Indounas (2006, pp.347–348): *“Pricing decisions are influenced by a number of factors some of which can be controlled by companies more easily than others. In order to assess and control these factors it is important to collect the appropriate types of information”*. To understand the different types of information used in the pricing Tzokas et al. (2000, p.101) have stated on their research from the pricing information that: *“In general this information can be distinguished into inward and outward-looking information. The former consists of information pertaining to the costs, profits, production and sales volume of the firm, and can be easily collected and processed internally. The latter is associated with market-based information, which addresses the customer-base and competitive environment of the firm. Clearly, firms need to collect both types of information”*. In the previously mentioned research, 15 different types of information were identified based on 178 usable questionnaires received from industrial firms in the UK. The authors’ categorization of the pricing information types can be seen from figure 2.3.9. The authors’ research was also only focusing on the pricing of physical products and not considering service pricing related information needs. To understand the service pricing information needs Avlonitis & Indounas (2006) also performed research based on the Tzokas et al. (2000) research. In Avlonitis & Indounas’ (2006) research four more information types were added to Tzokas et al. (2000) model: demand for the service, macroeconomic environment, corporate objectives, and customer needs giving total of 19 different information types related to pricing. The added information types from Avlonitis & Indounas (2006) research were derived from 26 qualitative in-depth interviews of service firms which were operating in Greece. From these four added information types “customer needs” and “demand for the service” were also derived to be important matters to consider in the service pricing.



**Figure 2.3.9: The pricing information. (Adapted from Tzokas et al. 2000)**

By summarizing these two different studies it is possible to recognize that the information needed for physical product pricing is using mainly the same information types than service pricing. However service pricing can also need additional important information such as: demand for the services, and customer needs.

### 2.3.10 Pricing process

Different pricing elements are used in the pricing process in different ways. There are frameworks to guide pricing as a systematic process where different elements are considered in the pricing process step-by-step.

The pricing process made by Blythe & Zimmerman (2005, pp.175–188) is dividing the pricing process to eight steps seen in figure 2.3.7 (left-hand side process). The authors model starts the pricing process from “*Set Pricing Objectives*” step which according to the authors should be in-line with corporate objectives. From the authors point of view the pricing objective choices depend on the nature of the industry for example where few sales are made in a year. The target return on investment can be suitable approach whereas in the high volume business where sales are made in daily basis, the margin of sales can be a more suitable approach. However the author suggests that the most favorable pricing objective would be the customer value approach. However, this approach

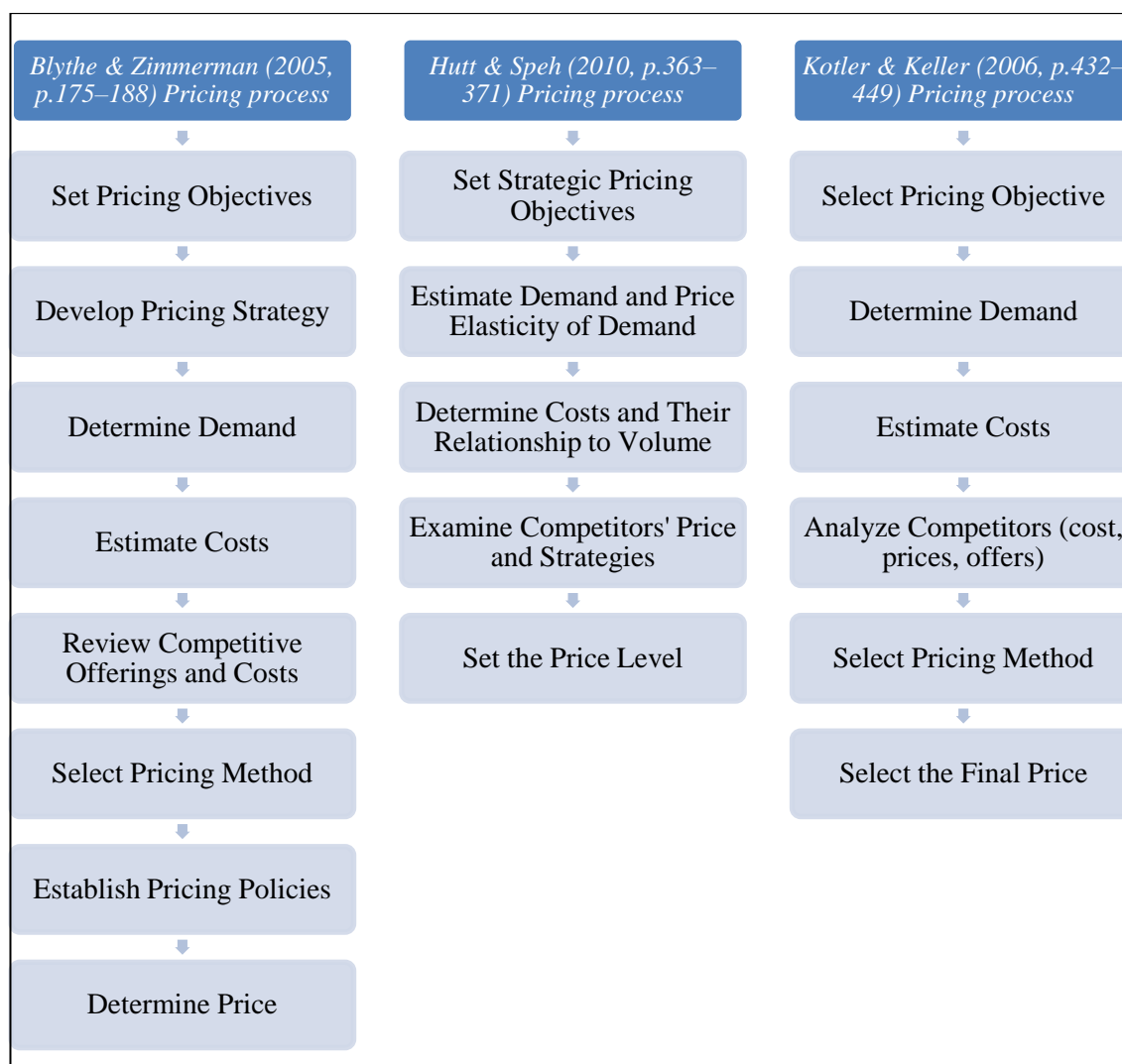


requires in-depth knowledge of the customers' business. (Blythe & Zimmerman 2005, pp.175–188)

The second step is the "*Develop Pricing Strategy*" presented in the chapter 2.3.2. After the strategy development the step three is "*Determine Demand*" phase where the authors suggest that there should be evaluation made from the customers' perception of: the price, benefits, costs, and customers' price sensitivity. Step four is "*Estimate Costs*" phase. In this phase the authors view is that reliable cost estimation should be developed to guide the pricing decisions. The authors suggest methods such as activity based accounting (ABC) could be used, which is considered to be relatively accurate cost accounting method, which also creates transparency in the costs. (Blythe & Zimmerman 2005, pp.175–188)

The step five named "*Review Competitive Offerings and Costs*" focuses in a competitor evaluation. In this phase own offerings prices are compared and evaluated to competitors' offerings prices. According to the authors the company's strategic position in the markets is one factor which effect on the pricing decisions. If the company is a leader in the market, it possibly can set the price higher than the competitors: If the company has a small market share in monopolistic markets, the pricing lower than competitors may not be possible because of the risk of price responses of the markets leaders. The authors also suggest that besides the understanding of the competitors' current position. There should be also evaluation of the competitors' reaction to price changes, which usually require experience and knowledge. (Blythe & Zimmerman 2005, pp.175–188)

In the step six named: "*Select Pricing Method*", the authors suggest that the selection of the pricing methods is usually affected by the objectives selected in the first step. For example status quo orientated objectives can result in that the firm will follow competitors' prices and bases the pricing decision based on the competition. The seventh step in the authors' process is "*Establish Pricing Policies*". The authors suggest that policies vary by industry by also referring to Keegan's (2003, pp.61–193) point of global marketing's price margins that: "there is no such thing as normal margin". The authors also add that there should be determination made legality of the pricing policies, because many nations regulate pricing in many ways. The last step is "*Determine price*". This step is according to the authors requires consideration on many factors from earlier steps and can be referred as an "alchemy" due to its complexity. (Blythe & Zimmerman 2005, pp.175–188)



**Figure 2.3.10: Pricing processes frameworks from different authors. (Adapted from Kotler & Keller 2006, pp.432–449; Hutt & Speh 2010, pp.363–371; Blythe & Zimmerman 2005, pp.175–188)**

Hutt & Speh (2010, pp.363–371) have introduced five step model for the pricing process seen in figure 2.3.10 (middlemost model). In the authors model the pricing process first step is to “*Set the Strategic Pricing Objectives*” which must be based on objectives congruent with marketing and overall corporate objectives. The objectives are first drawn from principle objectives which then are added collateral pricing goals e.g. achieving target return on investment, achieving market-share goal, or meeting competition. There can also be many objectives extended beyond profit and markets share taking into account extra factors e.g. taking into account competitors channel relationship, or product-line consideration. The authors also emphasizes that the pricing objectives have far reaching effect from which reason the pricing objectives should be established with care. (Hutt & Speh 2010, pp.363–371)

The second step in the authors model is “*Estimate Demand and Price Elasticity of Demand*”. The authors suggest that a strong market perspective is fundamental in pricing.

In the markets there can be differences in how the products are used by different customer segments, which makes it possible that there can be wide differences in the price sensitivity, also the potential profit levels can vary across market segments. From these reasons the authors suggest that to establish an effective pricing policy, there should be an evaluation of the value that a customer places on a product or service. In the third step “*Determine Costs and Their Relationship to Volume*” the costs are estimated and determined and the cost relationship to economies of scale are evaluated. In the authors’ point of view a strict cost-plus pricing overlooks competition, customer perception of value and the interaction of volume and profit. (Hutt & Speh 2010, pp.363–371)

The fourth step: “*Examine Competitors’ Price and Strategies*” is estimating the upper limit for the prices. The authors emphasize that the price is only one component in the cost and benefit equation. For example, there can be several advantages over competitors such as: reputation, technical expertise, and delivery reliability. In the fifth step “*Set the Price Level*” all the early steps are grasped when approaching the multidimensional pricing decision. The authors also suggest that there should be legal factors evaluated where the legality of the price discrimination should be evaluated. (Hutt & Speh 2010, pp.363–371)

Kotler and Keller (2006, pp.432–449) have introduced a six-step pricing process which ends with the selection of the final price and the established pricing policy seen in figure 2.3.10 (right-hand side model). The first step, named “*Select Pricing Objective*”, in the authors’ model is focusing on market offerings positioning where the objectives are set. The clearer the objectives are, the easier it is to set the prices. The second step is “*Determine Demand*”, where the authors present that the elasticity of the demand and price sensitivity should be evaluated. In the third step, named “*Estimate Costs*”, the authors present that the price floor is estimated while in the second step the price ceiling was estimated. The authors present that the types of cost and levels of production should be considered. (Kotler and Keller 2006, pp.432–449)

In the fourth step “*Analyze Competitors*” phase the authors suggest that there should be an evaluation made from: competitors’ costs, prices, and possible reactions to price changes. This is done with the consideration of the knowledge from the earlier steps. The fifth step, named “*Select the Pricing Method*”, is implemented by using the three Cs: the Customers’ demand, the Cost function, and the Competitors’ prices. The costs set the floor to the price while the Customers’ assessment of unique features establishes the price ceiling. There can be chosen how many of these Cs are used in the pricing method. When in the fifth step the pricing methods were used to narrow the possible price ranges, in the sixth step, named “*Select the Final Price*”, supplementary factors are considered including: the impact of other marketing activities, company’s pricing policies, gain-and-risk-sharing pricing and the impact of other parties. (Kotler & Keller 2006, pp.432–449)

By comparing and synthesizing these three different pricing frameworks it is evident that there are relatively clear steps for the pricing process where these three different models are considering wide range of partly same and partly different matters in the pricing process steps which are mostly supporting and complementing each other. All the models made from different authors are supporting the idea that establishment of clear pricing objectives are in order in the first steps of the pricing process. In the core part of the pricing process, there are evaluation made from the customers' view of the product benefits and cost and also own costs and competitor related information are evaluated. By using the information acquired from early mentioned steps. It is possible to estimate the price ceiling and price floor. The pricing methods are presented in two of the three models. In the pricing methods the sales can decide the complexity of the pricing by deciding how many different information sources there will be used. It was also discovered that the objectives set in the beginning of the pricing process can be affecting to pricing method decisions. All of the presented pricing models are also presenting the view that the final price is established in the final phases of the pricing process by using the knowledge and information of the earlier phases.

## **2.4 The initial conceptual framework**

Based on the literature from the pricing elements, an initial conceptual framework was built seen in figure 2.4. The framework structure bases mainly from the pricing process models of: Blythe & Zimmerman (2005, pp.175–188), Hutt & Speh (2010, pp.363–371), and Kotler and Keller (2006, pp.432–449) of the pricing elements division. The framework includes seven different elements in the pricing of products and services. The first element is the pricing strategy which is considered to be one important element in the beginning of the whole pricing process, where a wide area of different factors is considered such as: competitors, own product consideration distribution channels, environment, and customers. A second element in the framework is the established pricing guidelines such as pricing objectives and policies which provides the direction for the pricing. These guidelines can vary considerably and there is wide area of different guidelines known for product and service pricing. Other important elements considered in the framework are the pricing methods, where three main methods are known: cost-based pricing, competition-based pricing and value-based pricing. From these pricing methods the price setting relies upon the availability of information and capabilities to analyze the information. The sixth significant pricing element is the price level evaluation where the price of the product and services is evaluated and revised. The last element in the service pricing is the special service characteristic consideration, where the service related special costs and customer perception of the value are evaluated to understand the risks and potential of the services.



**Figure 2.4: The initial framework of the pricing elements.**

## 3. RESULTS

This chapter will cover the empirical part of the research. The purpose of this chapter is to systematically talk through the challenges and ideas which were derived from the interviews and observation by relating them to the elements in the tentative theoretical framework.

The interviews were made in small groups of two to three interviewees in an interview and also individual interviews. The group interviews were suggested by the sales personnel with the argument that it is easier to think up answers for the researcher's questions in small groups than individually. The most relevant problems of the finding are presented and discussed in this chapter.

In the beginning of the interviews it was evident that most of the persons emphasized the matters which related to their own field of work. This of course could be expected and the first interview round purpose was just to give general understanding for the researcher from the current matter in the case company. It was also notable that there was also personal differences how the employees did see the current state of the case company. In the observation there was also seen some personal differences in how the pricing matters were approached.

### 3.1 Pricing strategy

As it was found in the literature the pricing strategy is one matter to consider in the beginning of the pricing process. In the interviews the pricing strategy turned out to be an unfamiliar matter to most of the Exports Assistants. However the Sales Managers expressed various matters concerning the pricing strategy.

The Sales Managers stated that there were many issues and matters which should need more consideration and analysis from the higher level of the whole pricing. One of the issues was the bigger projects which needed more consideration how the pricing should be performed. One important matter to consider in different projects was the competition, which should be influencing in the projects' bidding price levels.

*“In some markets there can be lack of competitors making more highly fabricated steel tubes. In these markets it could be possible that the customers are not so price sensitive, which means higher profit margin can be used.” [Sales Manager #2]*

*“Bigger project also needs the competition consideration in the pricing, where larger projects will start to interest bigger competitors as well. From this reason we cannot set too high prices in the project bids.” [Sales Manager #3]*

In the interviews there was also mentioned that the distribution channel competitiveness should be evaluated and used in the pricing to evaluate the final prices.

*“The optimal place to produce the tubes from distribution point of view would be in Central Europe. This is because the Central Europe has strong two-way logistics which can take advantage from the two-way freights, which lowers the freight costs. Because the case company is located in the Nordic Countries the freight cost are higher because the logistics cannot use two-way freights as sufficiently.” [Sales Manager #3]*

From the interviews the issue of insufficient resources to cope with the wide area of the different strategic pricing factors was in general understood to be one weak link in the pricing. Some of the interviewees addressed that there is no systematical process where environmental, competitors or distribution channels are considered.

*“To consider other factors is too much work for the seller because there are just too many orders to fill, if there would be some more consideration from the industry, customer, markets etc. it should be done some other person than seller, which would then give instructions for the sellers.” [Sales Manager #2]*

*“These higher elements such as competitor or environmental consideration are out of our league, we are just assistants.” [Export Assistant #2]*

In summary the view on the pricing strategy consideration was, that the operational pricing should be more specifically considering the pricing strategy, however it should be easy for the seller and there should not be too many factors to consider, this is because it would take too much time to handle all the orders.

### **3.2 Pricing guidelines**

The pricing guidelines were identified in the literature as one element that guides the pricing decision making. The guidelines are divided in the literature to pricing objectives and policies, but there is no clear distinction between these two different matters. These two matters were usually mixed in the interviews, which is why the general terms “pricing guidelines” and “pricing instructions” were used to give more open discussion opportunities and understanding to the subject.

The matter which repeated in the interviews was the lack of clear pricing guidelines such as specific norms for the sales personnel. There was also the issue of the variability in the pricing practices between sales personnel. It was also emerged that the lack of agreed pricing guidelines has led to situation that the sales personnel have developed their own ones.

*“There is variation how different sales personnel price the products, some can use different approaches how to determine the price than another.” [Export Assistant #3]*

*“There is lack of systematic way of practicing the pricing, where there are lots of exceptions done” [Sales Manager #2]*

*“I think there were specific instructions addressed to different regions some years ago, but they are not in use anymore” [Export Assistant #4]*

*“We generally do not know what the higher lines for the pricing are; I think they are derived from management.” [Export Assistant #1]*

*“Here the creativeness of the individuals is in a big role.” [Sales Manager #1]*

*“Everyone has their own favorites in the pricing.” [Sales manager #1]*

*“If I set the price according to the list prices and the system show negative profits, it is a big temptation to raise the price to the level that it starts to show some profits. I think the general practice is here that we are not selling products with negative margins.” [Sales Manager #2]*

Yet there were pricing guidance established for sales personnel to give guidelines in the profit margins, discount percentages, and selling quantities. However some of these established policies were seen to be hindering sales. For example selling below minimum established quantities was considered to be one possible improvement in the future.

*“There are some guidelines used in the pricing, for example we have some instruction established which are sorted according to different customers and markets.” [Export Assistant #3]*

*“There are list prices for the standard tubes, what can be used for the standard tube pricing. However it is not always mandatory to use these prices.” [Sales Manager #2]*



*“There were more specific list prices some years ago however these days the prices have marginal differences between different areas, from which reason we stopped using those list prices.” [Marketing Director]*

*“There is the weight limit for the decision making; if it is exceeded I need to ask from the Sales Manager” [Export Assistant #3]*

*“Every now and then there are situations that customer would like to order small quantities and would agree to pay extra for it but the system does not allow that.” [Sales Manager #3]*

*“Sometimes the minimum quantity limits are placed remarkably high which customer is not willing to buy, this makes it impossible to sell even these minimum quantities, if there is not any products in the stock what we can sell.” [Export Assistant #3]*

From the observation it was discovered that the marketing director arranged an update meeting once a week for the sales personnel to give general guidelines and information from the current market situation. In the meeting sales from past weeks was summarized to get general perception from the situation. Also new guidelines were given for the sales personnel, if there was a need to change the sales targets or practices.

It was also concluded from the interviews that it would be necessary to established better pricing guidelines to help the sales unit’s daily operations. One issue in the sales policies which needed more guidance was how to tackle the problem of decreasing and increasing material prices, which presented a major part of the case company’s costs from the whole cost-structure. The second issue related to the inconsistency of the offers which could be corrected with better common guidelines. Also product pricing for larger orders such as larger projects was considered to need more guidance.

*“There should be more clear instructions for sales personnel for what profit margin to use when raw material prices starts to decrease; the increasing raw material price on the contrary is not a problem.” [Sales Manager #1]*

*“There should be clearer norms and guidelines how the sales should act on different market situations. For example the discount percent was not given precisely but instead it was the seller’s decision at last hand to decide what specific percent to use.” [Export Assistant #3]*

*“In the case of sellers’ absence, it would be nice to have instructions for the stand-ins.” [Export Assistant #2]*

*“It would be nice if we could offer the same price to subsidiary companies and parent companies, it would give a nice impression for the customers.” [Sales Manager #1]*

*“The project pricing is also important to understand because there is sometimes major order, which needs to be considered more carefully.” [Sales Manager #1]*

The matter of pricing in different market situations was also mentioned, where both Production and Logistic Managers mentioned that the sales should also consider to possibility for more flexible pricing guidelines to get more stable production and delivery, which would lower the costs and would make the logistic and production easier to operate. From this case the flexibility of pricing was driven by the idea that in high peak seasons the pricing should adjust the prices higher to avoid selling the product over the production capacity and vice versa in low demand seasons the pricing should be adjusted for more affordable price levels for the customer to keep the production running.

*“It would be nice of course if the pricing would be done by production line point of view were the stability of the production lines would be the target, this would make the production planning easier if the production flow is more stable.” [Logistics Manager]*

*“One thing to consider in the pricing from production perspective would be of course good predictability and smooth flow of orders.” [Production Manager]*

There were also statements against the pricing guidelines. Many interviewees stated that the markets are variable and setting norms for pricing is difficult in a way that they do not hinder the pricing adjustability. Other statement was that different markets have different way of “doing business”, which makes it more difficult to price the products in a more standard form.

*“It is hard to perform the pricing systematically, because there are lots of variables in the pricing.” [Sales Manager #1]*

*“Sales is not black and white, we need space to maneuver the prices, there are lots of different elements involved and because of this, it would be hard to build systematic pricing rules.” [Sales Manager #4]*

*“If there would be strict norms in the pricing, it would take all the fun out of the work.” [Export Assistant #4]*

*“It is not always even possible to give a bid in standard form, for example customers in India want the prices based on the tubes weight not the dimensions of the tubes like in Europe.” [Sales Manager #3]*

From the administration interviews, it became clear that the financial side has different point of view from good pricing guidelines. One general point of view which was stated several times was that waiting invoices could be lowered by using more accurate agreed payment methods, which would give better cash holdings for the case company.

*“From financing perspective it is important to get the money from the customer according to what is set in the invoice terms.” [Chief Accountant]*

*“In the pricing there should be better rules for the methods of payment, there is too much exceptions, if the seller sets unclear payment conditions, it will lead to later payments from customers.” [Controller]*

*“In financing perspective we want the cash as soon as possible other words cash payment before delivery, on the other side there is the sales unit point of view, which wants to bend the rules of from the payment methods to get the sales, of course the truth is some were between.” [Controller]*

*“In summary from financing perspective, the credit control of the customer should be improved because it is not always guaranteed that the customer follows the payment conditions, which should be considered in the pricing.” [Controller]*

*“There could be easy solutions for this which could be used in the pricing phase, for example if we would check is there invoices waiting for the payment from the customer when new purchase is done.” [Controller]*

From these different statements it is possible to make a conclusion that there are established pricing guidelines in the case company. However it was generally agreed that present pricing guidelines are not functioning perfectly. From which reason the interviewees were agreeing that there should be established better guidelines for pricing, which would support the sales daily pricing practices. Also there were some opinions that the pricing should have relatively flexible guidelines considering specific markets and products.

### **3.3 Pricing method: cost-based pricing**

In the literature the pricing methods was considered to be one of the pricing elements which is essential to consider in the product and service pricing. In the literature the

pricing methods are divided to three different main methods (Cost-based, Competition-based, Value-based) which have their own limitations and benefits. The literature was also suggesting that the value-based pricing methods is providing the most advantages and is also the most complex from all of the methods.

It was noticed from the observations that the case company's pricing method is mainly based on the costs and historical price information, making the pricing mainly cost-based. The invitations for bid price forming were related to: the materials, dimensions, and quantities of the order from which the cost were estimated. After the costs were estimated the price was adjusted by setting the desired profit margin. To compare the prices the seller was mainly using the sales history data to determine the correct price ranges and deciding the final price.

From the interviews the current pricing methods weaknesses were derived from many interviewee opinions to be the inaccurate costs, which did give the feeling for the sellers, that the estimated profits are uncertain.

*“The profit margins are sometimes not telling the whole truth, when we calculate the accurate cost afterward, it is usual that the costs are estimated too low.”*  
[Chief Accountant]

*“For the products what we make rarely it can be hard to define a profitable price because the costs are without a doubt inaccurate.”*[Export Assistant #2]

*“Last place where I worked it was extremely important where the bills were needed to allocate. Here I feel it is not so accurate”* [Export Assistant #2]

*“One of the reasons why we have the minimum selling quantities is because our cost calculations are not accurate enough when selling small selling quantities.”*  
[Production Manager]

*“Big tubes cost can vary considerably more than small ones from which reason the profit margin is needed to set higher than standard tube, the standard tubes costs are quite well-known”* [Controller]

*“Our Achilles' heel is the small quantity production because our production lines were designed originally to mass scale production quantities, it should be calculated more accurately how much it takes time to make the order and how much profit we get from the order to get the profit earned in timely basis.”*  
[Production Manager]

From the observation and interviews it was discovered that there were difficulties associated in the differences of the market prices compared to the company's cost-based prices. The differences were relating to the determination of the raw material prices used in the pricing. The company's internal raw material prices were stated to be sometimes in a conflict with the current markets prices when raw material prices started to decrease in the markets. The decreasing market price was making the company's purchased raw material historical value overly expensive for the price setting; this situation was seen problematic for the pricing.

*"The market-price and cost-based price are often in a conflict." [Sales Manager #1]*

*"It is difficult trying to determine which cost for raw material will be used because the products stock value and markets current prices area in many occasions contradictive." [Sales Manager #3]*

*"The raw material is varying remarkably these days, if it is going up it is not a problem, but decreasing raw material prices are challenging to transfer into own products prices." [Sales Manager #1]*

There were also issues relating to more rarely made products. It was mentioned, that the rarer products which were sold less often, the sales history was only showing too old sales history data, which from many interviewees opinion did not give any relevant information for the price setting. The new products pricing issues were also addressed. The new products pricing issue was arising from the matter of trying to find relative reference pricing information, where the new product prices could be compared.

*"There is no use to make a bid for rare product if you look from the sales history and the last successful bid is four years old, this does not really give any relative information for the price setting." [Sales Manager #2]*

*"If the sales last successful bid which the customer accepted is more than three months old, the sales history information is too old and does not give any usable information from the current market price levels." [Sales Manager #2]*

*"One quite difficult situation is the new product price setting, it can fail spectacularly." [Export Assistant #2]*

*"It is sometimes difficult to set fair price to the customers because there are not any references where to compare." [Export Assistant #1]*

### 3.4 Pricing methods: competitor- and value-based pricing

The competition-based pricing approach was also adapted in the pricing methods, where more commonly bought tubes did have their own list prices, which were estimated and established within the company to give guidelines on what the price levels are for a more common products. It was also mentioned that, it is possible to get the price information from the counter offers, which are considered in the pricing. There were also statements that the information sources did have variability in the reliability of the information.

*“The price levels are adjusted by asking about the prices from the customers and drawing a line to understand, where the price level roughly goes.” [Sales Manager #4]*

*“If some products are not ordered, I sometimes call back and ask why the customer did not order; then it is possible to ask what the price in the counter offers was. However, there is always needed to be considered is the information reliable.” [Sales Manager #4]*

*“Sometimes the customers can also try to bluff that there is lower price offers existing.” [Sales Manager #4]*

*“I have customers which gives me the information from the counter offers 100 percent correct.” [Sales Manager #1]*

*“To regular products we have our own list prices, which are established inside the company...the prices in the lists are set by Sales Managers.” [Export Assistant #3]*

In the literature the customer’s perception of value was considered to be the most complex method for the pricing, which would offer the most advantages in the pricing if could be implemented. The establishment of successful value based-pricing practices would however require knowledge of how the customers are valuing the case company’s products and also knowledge of the value and price from the competitive offerings.

From the interviews it was noticed that the case company has products which are highly standardized in the industry where there is not any variability in the products features compared to competitors. These products usually did have widely accepted list prices called: “the eurolist”, which were derived from the industry’s largest players. The products were sold at almost the same prices than the list prices. Interviewees also made

statement that some customers are just looking at the cheapest price and are not interested from the extra features such as reliability of the deliveries.

*“The prices from standard tubes are looked from the eurolist and added price plus minus one percent to get the order.” [Sales Manager #4]*

*“Last project where I visited the buyer just looked the cheapest price, he was not interested in reliable deliveries or anything; the question just was: who is the cheapest.” [Sales Manager #2]*

The more rare products in the markets what the case company manufactures were considered to be the extra value creators. From the interviews emerged the belief that parts of the products are quite rare in the markets, which makes the usage of higher profit margin possible. Many interviewees did also see that the benefit creators for the customers could be several factors, which were considered to create advantages over the competitors. Some extra services provided to some customers were considered to be “the extra-value creators”.

*“Accurate documentation is for some customers extremely important, they cannot afford that there are documents missing.” [Sales Manager #2]*

*“Well of course, the accuracy of our deliveries could be one benefit over the competitors.” [Export Assistant #3]*

*“I think we are quite flexible when it comes to different dimension ranges and order quantities...from us, it is possible to order quite small quantities.” [Export Assistant #3]*

*“We can make customized order quantities, which makes it possible for the customer to order accurate quantities and not the standard market bundle sizes.” [Export Assistant #3]*

*“Special materials, rare dimensions and some extra machining will make the products rare in the markets.” [Sales Manager #1]*

*“Products, which are made in order and are not stored in the industry, can be highly valued by the customers.” [Sales Manager #2]*

*“Some customers pay from the better stock turnover.” [Sales Manager #2]*

*“Our product are packed better than competitors...the packing ensures that polished tubes do not have scratches when the customer gets them” [Logistic Coordinator]*

However when the value or extra-benefits did get many comments from their existence, the monetary measurements of the extra-benefits or “the value” was discovered to be difficult. The issues were in general that the more special tubes and offered extra services did not have references where to compare. However, it was stated that sometimes the customer suggests his or her perception of the fair price by giving counter offers. Also one interviewee stated that the benefits could be maybe evaluated by using the established customer questionnaire system.

*“When I have questionnaire from some special service or tube, the question is: what will I ask from this? I usually ask the opinion from other sellers to get better perspective for the price setting.” [Sales Manager #2]*

*“We know roughly the competitors prices, however we do not know how the competitors are functioning more accurately.” [Export Assistant #3]*

*“Usually the customer makes a notion if the prices are just over the edge.” [Export Assistant #2]*

*“Sometimes the customer gives directly the acceptable price range what he or she is willing-to-pay.” [Export Assistant #2]*

*“We have the questionnaire system what we can use when we collect the information of our performance.” [Export Assistant #4]*

From these above comments it is possible to summarize that the company’s offerings are including regular products were list pricing is considered to be the general way how the products are priced in the industry. From the regular products it is considered to be difficult to price the products based on the extra-value created over the competitors because the extra-value is not significant. Secondly more rare tubes and added-services were derived to be extra-value creators where the value-based pricing approach could be possible. However the value was considered to be difficult to measure and turn into monetary benefits, which makes the value-based pricing approach yet difficult to adapt. The competitive information needed in the competition-based and value-based pricing was considered to be possible to acquire in the case company’s industry from the customers’. However, it was seen that there can be variability how reliable the competitive information can be.



### 3.5 Price level evaluation

The factor of price level evaluation was drawn from the literature and from the first interviews to be one important factor. From the observation it was noted, that the price levels were estimated in sales meetings, which were held once a week. In the weekly meetings the price levels were estimated comparing offered and ordered tons. This was the same method what Cram (2006) have presented in the literature (Failed order rate or the “look to look” ratio). The offered and ordered tons were however considered to be in many observations relatively inaccurate methods to compare the company’s price levels. The inaccuracy was caused by the distortive factors in the orders and offers. These distortive factors were mentioned to be the projects where the same tubes inquiry was received from many customers. However, the tubes were ordered, if ordered just one from the many customers. These projects did distort the offered and ordered ratio, which complicated the price level evaluation.

There was also the consideration that the failed order rate or the “look to look” ratio usage in the pricing was inaccurate to the stainless steel industry’s relatively highly competition and the industry’s present over capacity problems, which is distorting the price level evaluation, where sometimes the competitors can set the tubes prices lower even than the current raw material prices. There was also the issue of high volatility of the demand and supply, where the market prices can change rapidly from which reason it was seen important that the prices information from the markets should be followed actively.

*“The competitors’ prices are sometimes contradictive with the raw material prices...The problem in this industry is its relatively high and unhealthy competition.” [Marketing Director]*

*“The price movement of the competitors and raw material prices can go criss-cross.” [Sales Manager #2]*

*“Some years ago the price started to go up rapidly, those companies how were stubborn to keep the same low price level lost lots of potential profits because they did sold all their capacity cheaply, from this reason it is important to actively follow the price changes.” [Marketing Director]*

From these observation and interview findings it can be summarized that there is systematic ways established how the price levels are followed and revised. However there are yet some factors, which are considered to be distorting the price level evaluation such as the project offers distortion and competition unsuspected price changes.

### 3.6 Special service consideration

From the interviews, it was asked: what are services and how they are defined? The view of services did get fairly diverse views of how the services can be defined. The services were defined to be relating to: delivery reliability, special products, special documentation, special order sizes, and extra fabrication made to the products. There was also more differing point of view with the Logistics Manager, that the special arrangements such as warranty or risk sharing changes can be seen as service, which was also mentioned to be difficult to price.

*“The special arrangements are considered to be on pricing issue because; it can be difficult to determine the price for different special arrangements set with the customers.” [Logistic Manager]*

*“The future service pricing issues can be the new contract terms of different areas of responsibility which will change, in this new contract comes the issue of pricing these new risks properly, where the responsibility transmission from customer to us creates new potential risks to us.” [Logistic Manager]*

Many interviewees suggested that there is not always clear definition in the case company what is regarded as extra billable service, from which reason the pricing of services, such as extra or special work related to customers order, was considered to be fairly challenging. It was also mentioned that extra service cost are not considered sufficiently enough. However there was also diverging views of the service cost knowledge, where it was believed, that the service costs were quite well known from some extend, because many services were still outsourced keeping the cost tracking relatively simple.

*“We really have not considered the pricing from the services point of view in anyway.” [Sales Manager #2]*

*“There can be many different special arrangements with the customer, where the pricing of these extra services can be challenging.” [Sales Manager #2]*

*“The extra-services provided to customers are not considered in the costs even if there is extra work required. For example, the custom quantities require extra work, where the bundles are unpacked and packed again.” [Controller]*

*“Many services are still outsourced, from which reason we know the costs.” [Logistic Manager]*

The service pricing issues related to Hoffman & Arnold (1989) point of view was also considered. In the authors point of view the service pricing issue can be: profit leakage,

and the minor consideration of the special characteristic of the services; this was also discovered from the interviews.

*“The game field will change when we start to offer new services, there is a special requirement to understand customers’ needs or otherwise, it is possible that we are selling over quality.” [Logistic Manager]*

*“We should identify the capabilities what we have for new special services and capabilities pricing these new special services.” [Logistic Manager]*

### **3.7 IT systems related to pricing**

In the previous papers, the IT systems were not considered to be an important element in the pricing. However from the interviews and observations, the case company’s current Enterprise Resource Planning system (ERP system) was stated several times to be an element, which was complicating sales units the pricing tasks.

The current IT system did get several statements on, how it should be developed in a way that it would be a more supportive for the sales pricing operations. In the interviews the greatest emphasis was that the case company’s IT system was time consuming to operate. The IT system did have also many different safety features, which needed confirmation before the pricing was possible to continue. Also the operative pricing did include manual data filling, which was mentioned to be possible at least partly automate. The case company’s IT system was also mentioned to operate slowly, which made the IT systems usage more time consuming.

From the observations, it was also pointed out in many occasions, that the current IT system did not support the service pricing and should be upgraded, before the services is getting more higher share from total sales revenues. It was also discovered that the sales would need more transparent IT system, which would enable the possibility to do more analysis from the past sales.

*“It is frustrating to fill the offer lines and wait for 30 seconds to get the information, particularly when you multiply the 30 seconds by the 100 offers which are needed to be priced.” [Sales Manager #3]*

*“It is time consuming to find the costs from the different systems, all the cost should be found inside the same system.” [Sales Manager #3]*

*“It is difficult to feed the orders when some products cost needs two days waiting to get the statement.” [Export Assistant #3]*

*“The price history would be nicer to check if the offered and ordered lines were in different colours” [Sales Manager #2]*

In summary it was discovered from the sales interviews and observation that the ERP system should need consideration in the early phase of the pricing development.

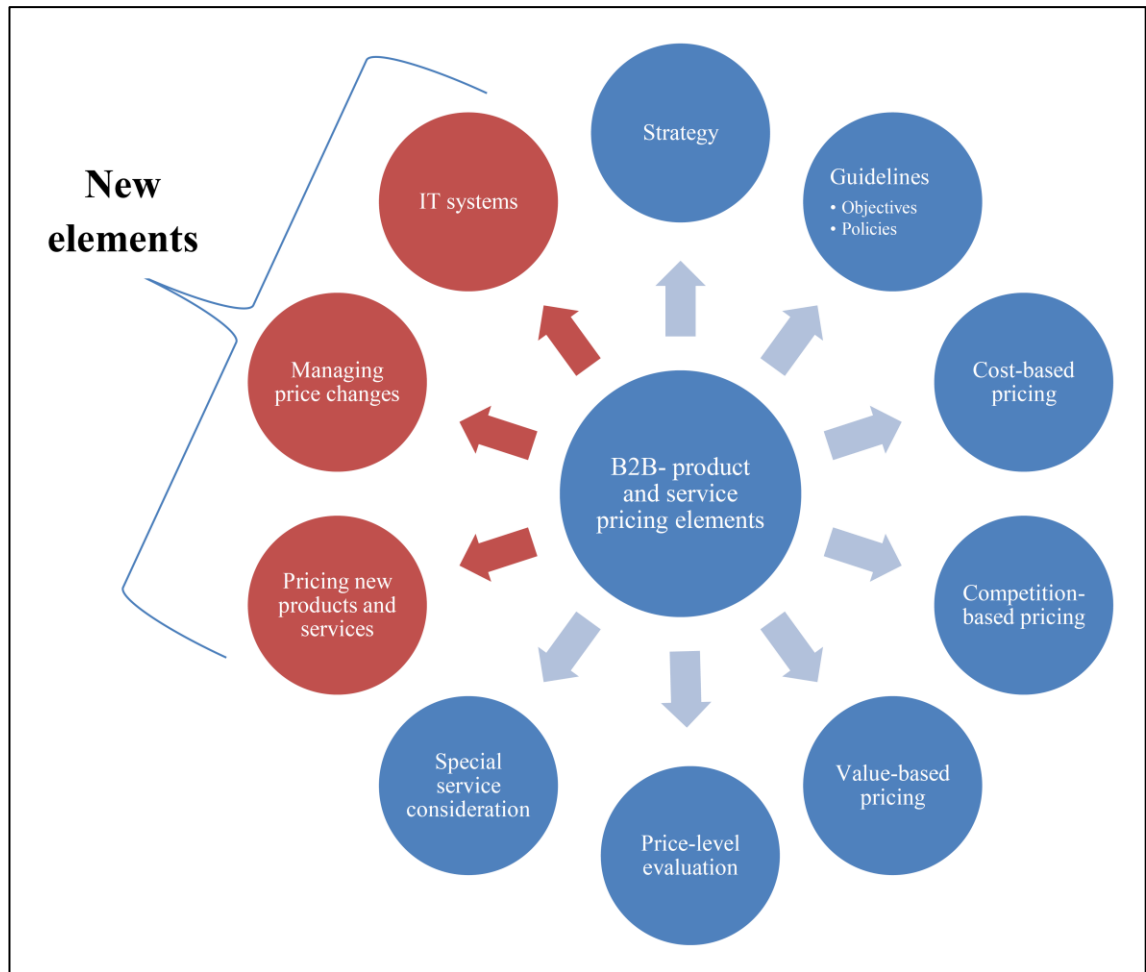
## 4. DISCUSSION

This chapter starts by giving a revised framework which is constructed from the empirical results. The revised framework presentation will continue with a classification of the pricing elements by estimating how successfully the revised frameworks elements are currently practiced and how important the different elements are considered to be for the case company. The classification will facilitate the next phase, where the different elements promotions in the future are considered. Lastly a framework for the pricing promotion process is presented to answer the main research question.

### 4.1 Revised framework

The initial framework presented, was based on the literature suggestion of the main elements related to the pricing. Based on the empirical results a revised framework is created to synthesize the elements which were discovered from the empirical research and first initial framework.

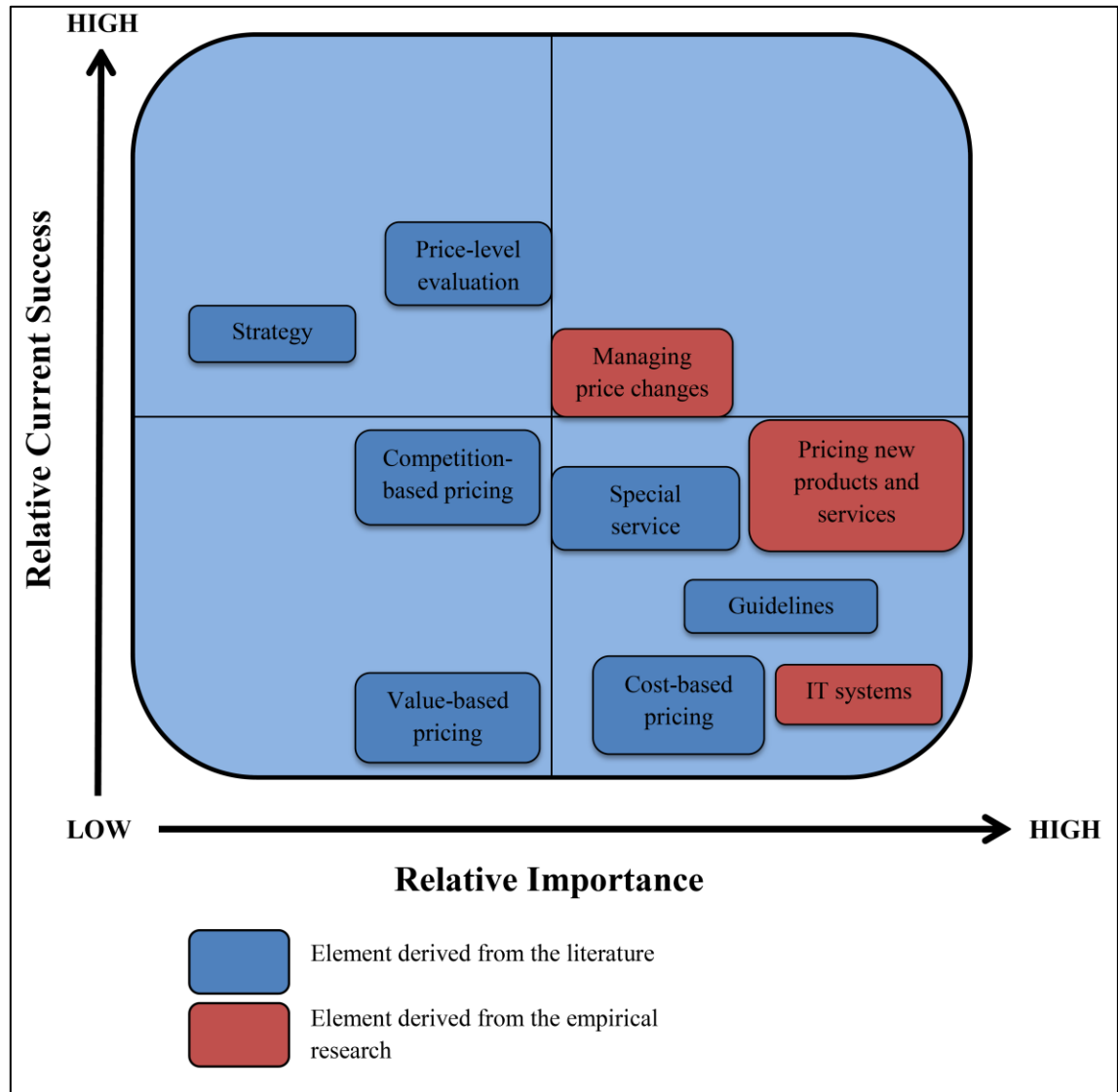
In the revised framework seen in figure 4.1 three new elements were identified which were not covered in the previous literature. One of the new elements was the IT systems which emerged only from the empirical research. Both in the interview rounds and observation rounds it was identified that the current IT systems does not support sales pricing operations sufficiently. The second new element was the price changes management which emerged only from the empirical research. In this element the estimation of the industry's price changes were seen to be a relatively important for the case company. The price changes were relating to both raw materials and market prices of the products. These both matters were derived to be problematic to consider and transfer into the company's own prices. The third new element was the pricing of new products and services, which was also emerged only from the empirical research. All of the seven elements considered in the initial framework were also covered in the empirical research as relevant pricing elements. There was also variance between interviewees in how important the different elements were considered.



**Figure 4.1: The revised framework of the pricing elements.**

## 4.2 Classification of the pricing elements

To understand the relative importance of the different elements found from the literature and from empirical research. A classification is made to visualize the importance of the different pricing elements from the case company's point of view. The classification has two dimensions, where the horizontal line illustrates the relative importance of the element for the case company and the vertical line is illustrating the relative current success of the implementation of the different elements in the case company. The classification is determined from both interviews and observations. Therefore, the classification is only an approximation where the positions of the different elements are based on the amount of cited comments from the different elements. The classification is presented in the figure 4.2.



**Figure 4.2: The pricing elements classification.**

In the figure 4.2 the upper left corner presents the pricing elements that are relatively successfully practiced and have relatively low importance, matters including in this segment are considered to be the least important for future development. The upper right corner comprises the matters which are successfully practiced and have relatively high importance for the case company. The lower left corner comprises the elements which are weakly practiced and have relatively low importance for the case company. The lower right corner comprises the most important elements which need promotion because they are weakly practiced and are relatively important for the case company.

From the results it can be considered that in the lower right corner the most strongly positioned element was the pricing oriented IT systems. Other elements considered to be included in the same segment were pricing guidelines, cost-based pricing methods,

pricing new products and services, and special service consideration. The classification of these elements precisely in the figure can be difficult and somewhat controversial. However, the previously mentioned elements are considered to need promotion in the future, because they are weakly practiced but are highly important for the case company.

From the upper left corner, it was seen that the pricing strategy was the least important element in the pricing, which from many opinion did need consideration in the pricing process. This can be concluded from the Export Assistants' scarce amount of quotes from the subject of pricing strategy. There were also statements that the operative pricing does not have time to consider the strategic part of the pricing. However, most of the Sales Managers did see the pricing strategy relatively important, which was also taken into consideration, when more special orders were made. The controversial statements make the pricing strategy's positioning in the figure somewhat controversial. The price level evaluation was also considered to be relatively well practiced with relatively low importance for the case company's pricing.

The price change management was not considered to be relatively successfully practiced as the price change evaluation. The results also suggested that the price change management was more important for the case company's pricing. For the previous reasons, the element of managing price changes was positioned in the upper right corner of the framework.

In the lower left corner were positioned the value- and competition-based pricing methods. The value-based pricing method was considered to be relatively inadequately established in the pricing, it was also seen that the value-based pricing is not possible to establish because of the limited resources and wide variation in the value formation between the customers. This was also the reason that the value considerations in the offerings were driven to be relatively inadequately practiced and lowly important due to their complexity and laboriousness. The value-based pricing importance was somewhat controversial in the case company where some of the sellers saw the value consideration as more important than others. The competition-based pricing method was considered to have relatively low importance in the case company. However there was more consideration associated with competition-based pricing than value-based pricing, which is why the competition-based pricing is seen to be practiced more successfully than value-based pricing.



## **4.3 Factors to be promoted in the future**

### **4.3.1 Pricing strategy**

From the literature the pricing strategy was considered to be one element, which needs consideration in the early phase of the whole pricing process, because it gives the objectives for the pricing. The pricing strategy did need consideration from wider perspective considering matters relating to: firm related factors, environment, distribution channels, competitors, and customers. From the previously mentioned matters it was discovered that the case company is considering some of the matters presented in the literature, such as distribution channel competitiveness and competitors. However, it was discovered from the empirical research that there was confusing of how and how should make the strategic decisions. One of the reasons for the confusion can be matter, that pricing strategy was considered to be difficult to consider in the pricing. Also, the strategic consideration was not sufficiently established practice in the case company's pricing process. From the previously mentioned reason, it can be understood that the case company should establish more formalized practice, which should consider the pricing strategy and would give the higher objectives for the pricing. The benefit for the more formalized strategic consideration would give better objectives for the pricing, which would ease the operational pricing practices.

### **4.3.2 Pricing guidelines**

In the literature it was unanimously considered that the pricing guidelines are crucial to set in the beginning of the pricing to guide the pricing process to give sufficient guidance for the price setting. These guidelines are according to literature usually taking into consideration or relating to wide area of different matters such as: profitability, markets and customers. The literature was not able to give suggestions what specific matters the pricing guidelines should cover to guide the pricing most successfully. However, the earlier studies suggested, that the eventual target for the pricing is the maximum attainable profits, which can be established by using intermediate objectives from several different classes to give better tools to operationalize the guidelines for the pricing. From the empirical research it was noticed, that the case company has established guidelines, which were considering matters mentioned previously. The guidelines were also seen to be important for the case company's pricing. One of the guideline which did have the highest level of attainment was the calculated profits or cost coverage, which usually created the basis for the whole price setting. In this practice the general guidelines for the price setting was to calculate a profitable price for the orders, however more accurate attainable profit maximization were yet seen to be difficult and was also seen to be insufficiently operated.

From the current guidelines, it was mentioned several times in the interviews, that the guidelines are not established widely enough to consider all the products and services or

different market situations. Also, the larger orders were seen to be difficult situations for the pricing, because the guidelines were not established for these pricing situations. Also some of the currently established instruction and boundaries were seen to hinder the sales such as the minimum selling quantities, which were established because the minimum selling quantities costs were inaccurately estimated.

The theoretical research did manage to identify 14 different policies. From the empirical research, it was seen that the company was using policies such as: list pricing, and negotiated pricing. The established lists prices within the case company were seen to be relatively widely practiced. The list prices established were considering several different factors such as: customers, competition, and profitability. However the list prices were seen to not always to be suitable for the pricing situations also there were variation how the list prices were used in the pricing, because the seller had autonomy in the pricing decisions. From the previously mentioned reasons the list prices were seen to need enhancement in the future. The unsuitability of the list price is discussed more in the chapter 4.3.3. The negotiated pricing practices were highly used in the case company. The negotiated pricing was used when the customer made competitive bidding, where the customer asked the product offers and prices from many manufacturers and selected the most suitable one. From this reason it was seen that the pricing guidelines should be relatively flexible where the guidelines allow the sellers to maneuver the prices case-by-case to adjust the offers prices. These pricing policies area also identified in the literature, where for example Búrca et al. (2004, pp.380–381) have identified the polycentric and geocentric pricing policies, where the seller has autonomy in the price settings.

The volatile nature of the demand was also generally considered to be one factor, which was complicating the use of pricing guidelines relate to demand stabilization. There was however seen that the price setting should establish better guidelines, where the pricing in different market: downturns' and upturns' would be advised more specifically.

In summary it can be draw a conclusion that the pricing guidelines are not yet sufficiently established in the case company where there are matters that the guidelines are too general to support the sellers sufficiently. One of the reasons for the pricing guidelines to be in too general level in the case company was the matter of the needed flexibility in the price setting. In the matter of price setting flexibility, it was considered, that the pricing also needs relatively flexible guidelines, these can be making more difficult to establish enough strict guidelines, which would also provide the flexibility needed.

To understand what straight benefits the more appropriate guidelines would bring for the case company was yet relatively unknown. However, based on the literature and empirical research, it was seen that the more enhanced guidelines would bring more stable practices for the pricing which would ease of the measurement and management

of the pricing. Also it is clear that the process such as pricing should be advised as well as possible to give sufficient support for the sellers.

### 4.3.3 Special service consideration

The specific consideration needed in the service pricing was scarcely research subject in the pricing literature. However, it was possible to summarize the previous studies made. In the literature, it was discovered that the service pricing did need special consideration due to intangibility of the services. The intangibility of the services was in the literature seen to need special consideration in the supply and demand of the services and the special characteristics.

In the empirical research the supply and demand was also seen important for the case company, because the stainless steel did have relatively volatile demand. Although the company did offer tangible physical products the high variability in the stainless steel tubes dimensions made the storability of the products difficult due to high amount of possible dimensions, material and other characteristics, from this reason the products were seen to have unique and rare characteristics, which were seen to need more consideration in the pricing. However, it was seen to be relatively difficult to determine specifically, what products and services were seen to have unique and rare characteristics. The issue of determine the true value of the service from customer perspective was also seen to be difficult from early made research made by Avlonitis & Indounas (2005). In the research the difficulty to determine the true value of the service resulted in the usage of cost- or competition-based pricing methods to determine the price for the services. However in the literature there were presented many tools and practices how the special characteristics were possible to measure and determine (presented in chapters 2.3.7 and 2.3.8). From the early mentioned reason, it is recommended for the case company to acquire more understanding of the special characteristics from the products and services provided for the customers. It was also found in the empirical research, that if the special and rare characteristics should have better pricing guidelines, which would ease the pricing of the orders. The pricing of the services were assumed to need clearer instructions which services would effect on the price and which would not, in other words guidelines which show: *“which services have special characteristics and which services can be regarded as standard ones in the industry”*.

The supplementary services costs were also seen in the literature to be a potential problem were Anderson et al. (2009, pp.209–210) have stated that the supplementary service cost structure can be relatively unknown. The cost calculation was also seen to be important in the literature since the costs provide the floor price for the services. The early mentioned issue of inaccurate costs was also drawn from the empirical research to be a factor which needs promotion in the future. The empirical research did discovered, that many services provided to customers such as: supplementary services or special arrangements were seen to have issues in the cost calculation and risk management. From

previously mentioned reason, the cost calculations were seen to be need enhancement in the early phase of the upcoming development projects. The most important matter how the better cost knowledge would bring for the case company would be the enhanced knowledge of the floor prices for the special services.

In summary it was acknowledged the case company should more accurately consider the special characteristics of the offerings in the pricing and also the special cost related to the special services. The more sufficient understanding of the special characteristic of the services would mean that the pricing could be performing more effectively. The effective pricing in this case would mean higher consideration in the attainable profit maximization, where the more valuable services would be priced more precisely based on the customers perception of the value. The more accurate understanding of the special services cost would mean, that the profitability of the special services could be more precisely acknowledged.

#### **4.3.4 Pricing methods**

From the literature the different methods how price can be constructed were divided into three different pricing methods: cost-based, competition-based, and value-based. From these methods, the cost-based methods was seen to be the one of the easiest to establish due to its relatively easy approach to the pricing information gathering, where only internal information from cost accounting is used to determine the prices. The main limitations for the cost-based pricing according to literature were seen to be several factors due to the overly simplistic practice to price the products.

From the empirical research it was discovered, that the case company's pricing was based mainly on cost-based pricing methods. The case company's cost-based pricing approach was also supporting the literature, where the cost inaccuracy was seen to be an issue in the price setting. The costs based pricing did also get new perspective from the empirical researches, which was not considered in the literature. One of the new findings was that the cost-based pricing was considered to be challenging when the raw material prices started to decrease where the cost-based price and market-based price can be in a conflict.

The competition-based pricing was according to literature to be simple to use and providing a suboptimal solution for the pricing when the competitors were providing similar products and services. However, when the business world comes more complex, the competition based pricing is also lacking to consider the differences over competitors, from which reason the competition-based pricing was also mentioned to be overly simple. There literature also suggested that the there is a risk from distorted competitor information from which reason the risk of pricing being overly high or low, when using competitor-based pricing is also possible. These findings did get support from the empirical research.

From the interviews and observation, it was discovered that it is possible to get competitive information from the customers at some extent. There was also mentioned the matter, that some list priced items have relatively generally acknowledged prices in the industry. However, there was not consideration established what the competitors are offering more accurately, which can weaken the usage of same price levels when the offerings can have differences between competitors. The literature did also suggest that the competitors could use price disguising techniques, which can make the price comparison more difficult. These disguising techniques the case company was not yet considered. Also it was discovered in the empirical research, that the customers can give false competitive information. From the early mentioned reason it is possible to conclude that it is possible that the prices are yet not in an optimal level in those list prices, which are based partly in the inaccurate and improper competitive price information.

The value-based pricing was according to literature providing the most advantages by considering the value of the offerings from customer point of view, which can create new profit opportunities. According to literature the value can be multidimensional concept, which can vary between industries. From the empirical research many value creative matters were raised to be potential “value creators for customer”. These value creators were example documentation, which was not considered to be an extra value creating service for the customer even though it was mentioned to be particularly important for some customers. It was also mentioned that there was not yet established knowledge what the competitors offerings contain more accurately. Such as extra-service provided were relatively unknown from which reason, it is possible that the case company’s prices are overly high or low in some products when the products included potential extra services which value is inaccurately priced.

In conclusion for the case company’s pricing was mainly using the cost-based pricing and was also established list prices, which were considering competition based pricing methods. However it was discovered that the early mentioned pricing methods were for some products and services seen to be insufficient from several inaccuracies in the cost and competitor related information. These inaccuracies are causing the prices to be overly high or low. By minimizing the factors causing the inaccuracies the case company can establish more suitable prices for the customers and generate new profit opportunities.

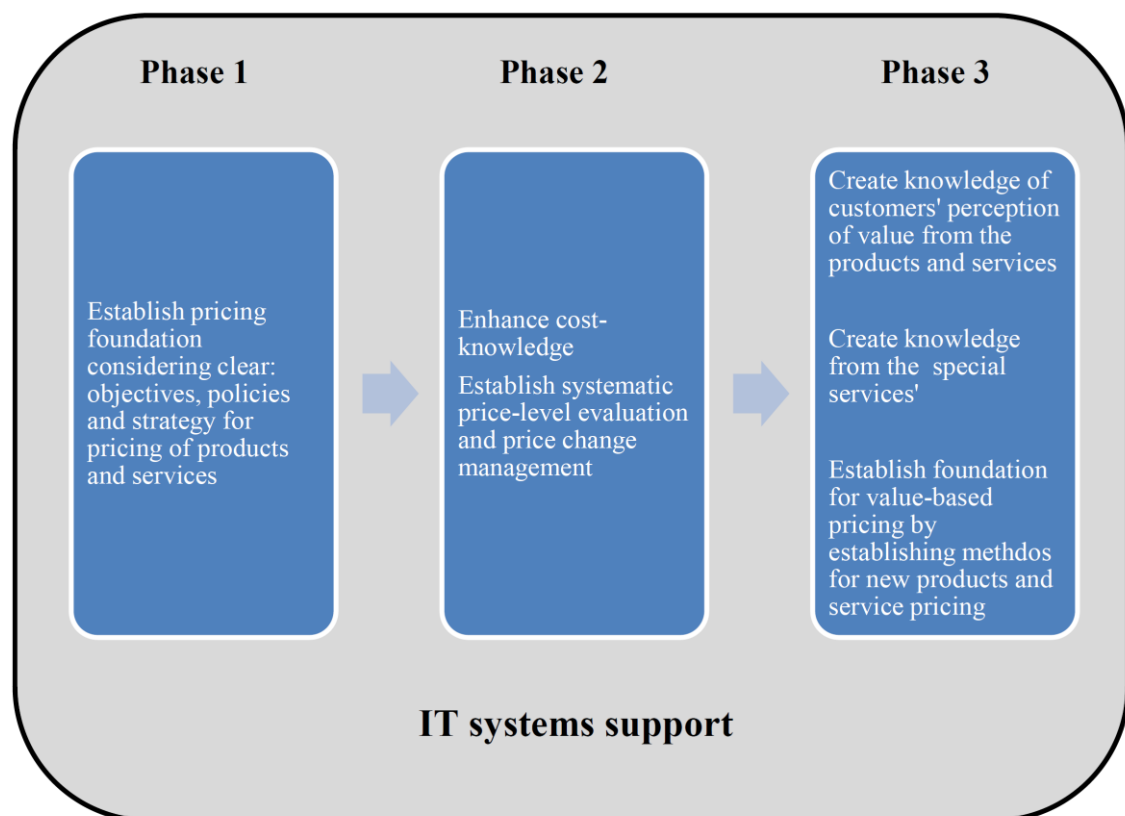
#### **4.3.5 IT systems**

The IT systems were driven to be one of the elements, which were discovered to be important matter in the pricing only in the empirical research. The IT systems were seen to be complicating the operational pricing tasks and making more difficult to analyze the sales history. The analysis was related to the literature where tools for the pricing enhancement were introduced. One of the enhancement tools was the competitive bidding

information system, which was according to literature needed to establish if there was competitive bidding used. The information system would use the sales history data to analyze the sales past successfulness. This was mentioned to be difficult in the case company, because the IT systems do not support the sales history analysis sufficiently. The IT system was not also supporting the sales operational pricing. Also the matter of extra-service pricing was considered to be difficult due to matters that the sales IT system was supporting mainly the cost-based pricing method. When the pricing was used to price orders that included special services, the pricing was becoming overly complex to establish prices due to more difficult price calculations. From the previously mentioned reasons the IT systems were seen to need promotion in the early phase of the case company's pricing development process. The benefits for the sales IT systems enhancement would be that it would offer better tools for the operative pricing and also for the pricing analysis.

#### 4.4 Promotion phases

In the earlier chapters: 4.1, 4.2, and 4.3 the different elements in the case company's pricing was estimated to understand better what can be the potential future challenges for the case company's pricing. The most important matters relating to the future challenges and promotions were the current IT systems development to support the sales pricing operations in every step in the development process (see figure 4.4)



**Figure 4.4: The pricing elements promotion framework.**

From the figure 4.4 it can be seen, that the first phase of promoting the pricing elements there should be establish the pricing strategy future direction and common platform for the pricing process. After the pricing strategy, new guidelines for pricing are needed to be created to accomplish a more systematic way for the deployment of the pricing. In this phase, an evaluation needs to be carried out from the matters of how the pricing objectives and policies should be established to ensure enough systematic pricing, but also to avoid overly rigid guidelines that can have a negative impact on the sales performance.

The second phase will concentrate in the cost estimation and systematic price level adjustment. In this phase the foundation for effective pricing is created where own price levels are more sufficiently estimated and questioned to provide the needed effectiveness for the price level evaluation and price change management.

The third phase focuses on the value-based pricing establishment. This phase will start by creating knowledge from the customer references and the perception of the value from the products and more importantly from the provided services. One of the most important value creators, which value should be capable to understand should be the new product and services. Also the special services are one of the factors, which are considered to be a value creator, which requires better understanding and classification. On this phase it is also possible to make more accurate guidelines for the pricing where the value of the special services can be more accurately considered. The promotion process is also presented in timely basis in appendix 2.

## **5. CONCLUSION**

This chapter summarizes the main findings of this research by firstly summarizing the research and its main finding. After this the academic contribution and limitations are considered. Lastly the recommendations for the future are presented.

### **5.1 Summary of the research**

This main objective was to find the most important elements in the context of industrial product and service pricing and identify how the case company is managing all these elements. The research literature review did made a wide overview of the whole industrial product and service pricing to give a wide and general view of the pricing literature. The empirical data was gathered with semi structured interviews and observation within the case company.

The two sub questions in this study asked: what are the essential elements in the pricing of offerings, and how the case company is currently taking the critical pricing elements into account? This research discovered several elements from the literature, which are considered to be important in the product and service pricing. These elements which were seen as an important factor in the pricing were: the pricing strategy, pricing policies, pricing objectives, pricing methods, price level-evaluation, and special service consideration. From the empirical part of the interviews and observation three more elements were identified to be important in the case company's pricing, which were also seen important to promote in the future. These elements were: IT-systems consideration, managing price changes, and pricing new products and services.

The primary research question inquired what changes were needed to improve service pricing in the case company. The most important change was discovered to be the change in the special service pricing, which should be changed from cost-based pricing towards value-based pricing. However, the value knowledge of the special service is needed to enhance firstly, before the value-based pricing could be establish in the level, that the knowledge of the special service value can be translated into monetary value.

### **5.2 Academic contribution and limitations**

This research has been made as an assignment of the case company where the objective was to identify the important elements specifically from the case company's point of view, this can decrease the generalizability of this research results. The initial frame-



work created covers the elements drawn from the previous papers. However, the elements chosen were affected by the empirical research, which weakens the compatibility of the element for further academic use.

However, this research was mostly supporting the previous literature written from the context of pricing. The special characteristic of this research was the identification of three new elements, found from the empirical research, which have not been considered in the previous studies. The new elements shows that the pricing is not effective if the company is considering all the elements what are considered in the literature, but the successful pricing is also highly related to matters such as IT systems used, which have major effect on how successfully the company is pricing the products and services. The empirical research also showed a good example on how the industry needs special consideration in the pricing. In the case company's business the high volatility of the demand and supply was making difficult to establish pricing practices, which were considered to be the best ones according to previous studies.

According to Saunders et al. (2009, pp.156–158) there are three types of error which can affect the validity and reliability of the research. The first of the limitations is the subject or participant error, which can have an influence on the research reliability and validity. In this research the interviews were made sometimes in a busier day and there was variation in the times when the interviews and observations were arranged. Therefore, there can be error related to the participants as the different interview times and workload can distort the interview results. Also the interviewees did not have time to prepare for the interview, which can affect in the matters where e.g. the most recent issues in the pricing could have got more emphasizing in the interviews and observation rounds. The second limitation is the subject or participant bias where there can be e.g. inaccuracy what the interviewees say and what they think what their author wants them to say. Without a doubt in the interviews may have had the early mentioned influence due to fact that the researcher was directly working with the Marketing Director and Project Manager which can create some distortion in the interview results because of the authors near presence. The third limitation is the observer error or bias from this research the researcher did have own knowledge of the research subject which may have effected to the observation and interviews where the researcher have his own personal way of asking questions and interpreting answers.

Other critical consideration from the limitation can relate to the research assignment. Because this research was made with the assignment of the case company, where the objective was not to create generalizable theory or framework which could be used more widely, there are limitations related to the company and industry which can have an influence on the external validity of this research. From this reason this research result may not be possible to use in some other research. Also the interview and observation notes were written by the researcher. From this reason there is possibility that the

researcher have written the most important notes from his own point of view. The interview question tables also developed during the interview which can have an effect of this research validity and reliability. The researcher also worked close to the team where different amount of time were spent between different members in the organization. From this reason the researcher may have given more value to different members' opinions than others.

### **5.3 Recommendations for the future**

In this research the objectives was identify the most important elements associated to the pricing of the case company's products and services. From the interviews there were three new elements emerged which would need more research to understand how is it possible to develop this elements and create knowledge of the new emerged elements.

For the case company there was a framework containing a promotion process for the pricing elements developed to give general guidelines how the pricing is possible to develop further. It is recommended for the case company to implement the created promotion process. To give necessary support for the pricing development there should be adequate resources directed to the pricing development for example there should be party which would be responsible of the pricing development. The value-based pricing and the price level evaluation were in this research presented in brief. To understand better the case company's industries value creation and tools for the price level evaluation and management there should be more research done relating to these two matters.

## BIBLIOGRAPHY

Anderson, J., Jain, C. & Chintagunta, P. 1993. Customer value assessment in business markets: A state-of-practice study. *Journal of Business-to-Business Marketing*. Vol. 1, Issue 1, pp. 3–29.

Anderson, J.C. & Narus, J.A. & Narayandas, D. 2009. *Business Market Management. Understanding, Creating and Delivering Value*. Upper Saddle River, New Jersey, Pearson Prentice Hall, 470 p.

Ansari, A., Siddarth, S. & Weinberg, C.B. 1996. Pricing a bundle of products or services: the case of nonprofits. *Journal of Marketing Research*. Vol. 33, Issue 1, pp. 86–93.

Arnold, D.R., Hoffman, K.D. & McCormick, J. 1989. Service pricing: a differentiation premium approach. *Journal of Services Marketing*. Vol. 3, Issue 3, pp. 25–33.

Avlonitis, G.J. & Indounas, K.A. 2005. Pricing objectives and pricing methods in the service sector. *Journal of Service Marketing*. Vol. 19, Issue 1, pp. 47–57.

Avlonitis, G.J. & Indounas, K.A. 2006. Pricing practices of service organizations. *Journal of Services Marketing*. Vol. 20, Issue 5, p. 346–356.

Avlonitis, G.F. & Indounas, K.A. 2007. An empirical examination of the pricing policies and their antecedents in the services sector. *European Journal of Marketing*. Vol. 41, Issue 7, pp.740–764.

Avlonitis, G.F., Indounas, K.A. & Gounaris, S. 2005. Pricing objectives over the service life cycle: some empirical evidence. *European Journal of Marketing*. Vol. 39, Issue 5, pp. 696–714.

Bateson, J.E.G. 1995. *Managing Services Marketing: Texts and Readings*. 3<sup>rd</sup> edition, The Dryden Press, Orlando, FL, 680 p.

Berry, L.L. & Yadav, M.S. 1996. Capture and communicate value in the pricing of services. *Sloan management Review*. Vol. 37, Issue 4, pp. 41–51.

Blythe, J. & Zimmerman, A. 2005. *Business to Business Marketing Management. A Global Perspective*. 1<sup>st</sup> edition, Thomson, London, 312 p.

Bolton, R. & Drew, J. 1992. Mitigating the effect of service encounters. *Marketing Letters*. Vol. 3, Issue 1, pp. 57–70.

Bonnici, L.H. 1991. Pricing dimensions in health-care service. *Journal of Professional Services Marketing*. Vol. 8, Issue 1, pp. 92–98.

Búrca, S., Fletcher, R. & Brown, L. 2004. *International Marketing. An SME Perspective*. Prentice Hall, Harlow, 720p.

Butterfield, J. & Kersley, G. 2012. *Stainless Steel World*, March.

Cannon, H.M. & Morgan, F.W. 1990. A strategic pricing framework. *Journal of Services Marketing*. Vol. 4, Issue 2, pp. 19–30.

Cavusigl, S.T. 1988. Unraveling the Mystique of Export Pricing. *Business Horizons*. Vol. 31, Issue 3, pp. 57–59.

Channon, D.F. 1986. *Bank Strategic Management and Marketing*. John Wiley & Sons, Chichester, 674 p.

Coulter, K.S. 2001. Decreasing price sensitivity involving physical product inventory: a yield management application. *Journal of Product & Brand Management*. Vol. 10, Issue 5, pp. 301–317.

Cram, T. 2006. The art of smarter pricing. *Market Leader*. Spring 2006, pp. 55–58.

Diamantopoulos, A. 1991. Pricing: Theory and Evidence-A Literature Review. In *Perspectives on Marketing Management*. M.J. Baker (ed.), London, Wiley, pp. 61–193.

Drake, L. & Llewellyn, D.T. 1995. The pricing of bank payments services. *International Journal of Bank Marketing*. Vol. 13, Issue 5, pp. 3–11.

Eugster, C., Kakkar, J. & Roegner, E. 2000. Bringing discipline to pricing. *McKinsey Quarterly*. Vol. 1, Issue 4.

Gabor, A. & Granger, C.W. J. 1973. *A Systematic Approach to Effective Pricing*. Vol. 17, Issue 8, pp. 742–760.

Gendall, P. 1998. Estimating the effect of odd pricing. *Journal of Product & Brand Management*. Vol. 7, Issue 5, pp. 421–432.

Gendall, P., Holdershaw, J. & Garland, R. 1997. The effects of odd-pricing on demand. *European Journal of Marketing*. Vol. 32, Issue 11, pp. 799–813.

Grönroos, C. 2008. Service-dominant logic revisited: Who creates value? And who co-creates? *European Business Review*. Vol. 20, Issue 4, pp. 298–314.

Grönroos, C. & Helle, P. 2010. Adopting service logic in manufacturing: Conceptual foundation and metrics for mutual value creation. *Journal of Service Management*. Vol. 21, Issue 5, pp. 564–590.

Guiltinan, J.P. 1987. The price bundling of services: a normative framework. *Journal of Services Marketing*. April, Vol. 51, pp. 74–85.

Hammer, M. 2001. *The agenda: What every business must do to dominate the decade*. Crown Business, New York. 288 p.

Hinterhuber, A. 2008. Customer value-based pricing strategies: why companies resist. Vol. 23, Issue 4, pp. 41–50.

Hoffman, K.D. & Bateson, J.E.G. 1997. *Essentials of Services Marketing*. The Dryden Press, Orlando, FL. 301 p.

Hoffman, K.D. & Arnold, D.R. 1989. Professional service pricing: an extended cost-oriented approach. *Journal of Professional Services Marketing*. Vol. 5, Issue 1, pp. 29–39.

Hutt, M. & Speh, T. 2009. *Business marketing management*. 10<sup>th</sup> edition. South-Western, Cengage Learning, 652 p.

Indounas, K. 2009. Successful industrial service pricing. *Journal of Business & Industrial Marketing*. Vol. 24, Issue 2, pp. 86–97.

Jobber, D. 2010. *Principles and Practice of Marketing*. 3<sup>rd</sup> edition. McGraw-Hill Education, 946 p.

Kasanen, E., Lukka, K. & Siitonen, A. 1993. The constructive approach in management accounting research. Vol. 5, Issue 1, pp. 243–263.

Keegan, W.J. & Green, M.C. 2003. *Global Marketing*. 3<sup>th</sup> edition. Upper Saddle River: Prentice-Hall, NJ, 500 p.

Kimes, S.E. 2000. Revenue management on the links: applying yield management to the golf-course industry. *Cornell Hotel and Restaurant Administration Quarterly*. Vol. 41, Issue 1, pp. 120–127.

Kotler, P. & Armstrong, G. 2010. *Principles of Marketing*. 13<sup>th</sup> edition, Prentice Hall & Pearson Education, 637 p.

Kotler, P. & Keller, K.C. 2006. *Marketing Management*. 12<sup>th</sup> edition, Prentice Hall & Pearson Education, 729 p.

Kulmala, H. 2006. *Hinnoittelu –mitä se on käytännössä* (in Finnish). VTT. [WWW]. [Referred 27.10.2011]. Available: [[http://www.vtt.fi/proj/leanver/files/hinnoittelu\\_stateoftheart.pdf](http://www.vtt.fi/proj/leanver/files/hinnoittelu_stateoftheart.pdf)]

Kurtz, D.L. & Clow, K.E. 1998. *Services Marketing*. John Wiley & Sons, New York. 592 p.

Laine, T. 2009. Exploring pilot projects of a manufacturer on service R&D to understand services as an accounting object. Doctoral dissertation. Tampere University of Technology, Publication 806, 195 p.

Lancioni, R. 2005. Pricing issues in industrial marketing. *Industrial Marketing Management*. Vol. 34, Issue 2, pp. 111–114.

Lancioni, R., Schau, H. J. & Smith, M. F. 2005. Intraorganizational influences on business-to-business pricing strategies: A political economy perspective. *Industrial Marketing Management*. Vol. 34, Issue 2, p. 127.

Langeard, E. 2000. Specificity of the pricing policy in service activities. Paper presented at: *Innovations and Perspectives in the International Research Seminar in Service Management*. La Londe Les Maures, 6-9 June, pp. 243–256.

Lee, K.S. & Ng, C.L. 2001. Advanced sale of service capacities: a theoretical analysis of the impact of price sensitivity on pricing and capacity allocations. *Journal of Business Research*. Vol. 54, Issue 3, pp. 219–225.

Lovelock, C.H. 1996. *Service Marketing*. 3<sup>rd</sup> edition, Prentice Hall. Englewood Cliffs, NJ. 660 p.

Lovelock, C. & Gummerson, E. 2004. Whither Service Marketing? In Search of a New Paradigm and Fresh Perspectives. *Journal of Service Research*. Vol. 7, Issue 1, pp. 20–41.

Lowengart, O. & Mizrahi, S. 2000. Applying international reference price: market structure, information seeking and consumer welfare. *International Marketing Review*. Vol. 17, Issue 6, pp. 525–533.

Marn, M. & Rosiello, R. 1992. Managing Price, Gaining Profit. *Harvard Business Review*. September-October, p. 85.

McCarthy, E.J. & Perrault, W.D. 2002. *Basic marketing: A Global Managerial Approach*. McGraw-Hill, New York. 350 p.

McIver, C. & Naylor, G. 1986. *Marketing Financial Services*. 2<sup>nd</sup> edition. The institute of bankers, Canterbury. 184 p.

Meidan, A. 1996. *Marketing Financial Services*. Macmillan Business Press, London.

MOT. 2012. MOT Oxford Dictionary of English 1.0. [WWW]. [Referred 18.1.2012]. Available: [<http://mot.kielikone.fi/mot/stala/netmot.exe>]

Munger, J.L. & Grewal, D. 2001. The effects of alternative price promotional methods on customers' product evaluations and purchase intentions. *Journal of Product & Brand Management*. Vol. 10, Issue 3, pp. 185–97.

Nagle, T.T. & Holden, R.K. 1995. *Strategy and tactics of pricing: a guide to profitable decision making*. 2<sup>nd</sup> edition, Prentice Hall, New Jersey, 409 p.

Naylor, G. & Frank, K.E. 2001. The effect of price bundling on consumer perceptions of value. *Journal of Services Marketing*. Vol. 15, Issue 4, pp. 270–281.

Neilimo, K. & Uusi-Rauva, E. 2005. *Johdon laskentatoimi* (in Finnish). Edita, Helsinki, 366 p.

O'Connor, P. 2003. On-line pricing: an analysis of hotel-company practices, *Cornell Hotel and Restaurant Administration Quarterly*. Vol. 44, Issue 1, pp. 88–96.

Oxenfeldt, A.R. 1983. Pricing decisions: how they are made and how they are influenced. *Management Review*, November, pp. 23–25.

Palmer, A. 1994. *Principles of Service Marketing*. McGraw Hill, London, 345 p.

Payne, A. 1993. *The Essence of Services Marketing*. Prentice Hall, London, 253 p.

- Rao, A.R. & Monroe, K.B. 1996. Causes and consequences of price premiums. *Journal of Business*. Vol. 69, Issue 4, pp. 511–535.
- Rathmell, J.M. 1966. What is meant by services? *Journal of Marketing*. Vol. 30, Issue 4, pp. 32–36.
- Saunders, S. & Lewis, P. & Thornhill, A. 2009. *Research Methods for Business Students*. 5<sup>th</sup> edition, Prentice-Hall, Harlow-FT, 614 p.
- Shipley, D.D. & Jobber, D. 2001. Integrative pricing via the pricing wheel. *Industrial Marketing Management*. Vol. 30, Issue 3, pp. 301–314.
- Shipley, D. 1986. Dimensions of Flexible Price Management. *Quarterly Review of Marketing*. Vol. 11, pp. 1–7.
- Shostack, G.L. 1977. Breaking Free from Product Marketing. *Journal of Marketing*. Vol. 41, Issue 2, pp. 73–80.
- Simon, H. & Butscher, S.A. 2001. Individualized Pricing: Boosting Profitability with the Higher Art of Power Pricing. *European Management Journal*. Vol. 19, Issue 2, pp. 109–111.
- Tashakkori, A. & Teddie, C. 2003. *Handbook of mixed methods in social and behavioral research*. Sage Publications, Thousand Oaks. 768 p.
- Trepstra, V. & Sarathy, R. 2000. *International Marketing*. 8<sup>th</sup> edition, Dryden Press, Fort Worth, Texas, 753 p.
- Tung, W., Louis, M., Capella, K. & Peter K. 1997. Service pricing; a multi-step synthetic approach. *Journal of Service Marketing*. Vol. 11, Issue 1, pp. 53–65.
- Tzokas, N., Hart, S., Argouslidis, P. & Saren, M. 2000. Industrial export pricing practices in the UK. *Industrial Marketing Management*. Vol. 29, Issue 3, pp. 191–204.
- Uлага, W. 2003. Capturing value creation in business relationships – a customer perspective. *Industrial Marketing Management*. Vol. 32, Issue 8, pp. 677–693.
- Uлага, W. & Chacour, S. 2001. Measuring customer-perceived value in business markets – a prerequisite for marketing strategy and implementation. *Industrial Marketing Management*. Vol. 30, Issue 6, pp. 525–540.
- Woodruff, H. 1995. *Services Marketing*. Pitman Publishing, London. 307 p.



Yelkur, R. & DaCosta, M.M.N. 2001. Differential pricing and segmentation on the internet: the case of hotels. *Management Decision*. Vol. 39, Issue 4, pp. 252–262.

Yritystele. 2011. Statatube Oy, economic data. [WWW]. [Referred 19.12.2011]. Available: [<http://www.yritystele.fi/node/95466>]

Zeithaml, V.A. & Bitner, M.J. 1996. *Services Marketing*. McGraw–Hill, Singapore, 700 p.

Zeithaml, V.A., Parasuraman, A. & Berry, L.L. 1985, Problems and strategies in services marketing. *Journal of Marketing*. Vol. 49, Issue 4, pp. 33–46.

## **APPENDICES (2 pieces)**

APPENDIX 1: The second interview round questions

APPENDIX 2: Suggested promotion process timeline

## **APPENDIX 1: THE SECOND INTERVIEW ROUND QUESTIONS**

### **1. Services**

- a. Is there definition for the services in the firm?
- b. What kinds of services are offered?
- c. To whom the services are offered?
- d. How the service pricing is established
- e. What issue are related to the service pricing

### **2. Pricing strategy**

- a. What factors the pricing is considering from the environment and from inside the company?
- b. Is the pricing strategy established?
  - i. Is the pricing strategy including all the important factors?
  - ii. What elements the strategy should include (Environment, Markets, Competitors, Product, Economy, Distribution channel, Product)
  - iii. Other consideration?

### **3. Pricing guidelines**

- a. Are there established guidelines?
- b. Where the guidelines related to?
- c. Can there be rules or policies established?
- d. Could there be regulations or guidance for pricing?

### **4. Pricing methods**

- a. How the price is constructed?
- b. What elements are included in the price?
- c. What effect to those elements?
- d. What information (external and internal) is used in pricing?

### **5. Value**

- a. Is it possible to estimate the benefits (value) of the products and services?
- b. How can these benefits be measured and estimated in the case company's business environment?
- c. Are the benefits varying between customers?
- d. Is it possible to measure the monetary value of these benefits?
- e. Is it possible to communicate the benefits for customers?
- f. Is it possible to compare the benefits and prices with competitors?
- g. Is it possible to set the prices according to the estimated benefits?

**6. Price evaluation**

- a. How the evaluation of the pricing level successfulness is practiced?
- b. How it should be practiced
- c. How do you see how sensitive the customers are to price changes?
- d. Are there differences in the customers' price sensitiveness?
- e. Are the customers "value buyers" or "the cheaper the better buyers" or both?

## APPENDIX 2: SUGGESTED PROMOTION PROCESS TIMELINE

