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Improving profitability through pricing in highly competitive B2B markets

Master's Thesis

Supervisors: Kalle Elfvengren, Associate professor
Ville Ojanen, Associate professor

ABSTRACT

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In highly competitive B2B markets companies are searching for the next frontier of competitive advantage vigorously. Decades of productivity and efficiency exercises on the supply side of the value chain has finally reached its end and researchers and practitioners are turning their eyes on pricing with the hopes of improved profits and competitive advantage. Multiple studies have already validated the positive link between value-based pricing and company performance, and many companies have taken this as the countdown to new strategic era.

The study was conducted as qualitative research with single case study method. The case company's current state in pricing, its strategies and structures, were analysed and an investigation into pricing capabilities conducted. With the data collected from seven interviews and the extensive literature review provided on the topics, development actions on pricing processes and capabilities were made.

The biggest gaps in pricing were identified and they were related to the topic of pricing knowledge. Also, pricing tools and processes had significant defects, which were given specific action recommendations.

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Kovan kilpailun teollisilla markkinoilla yrityksillä on kova tahtotila löytää seuraava kilpailuedun lähde. Vuosikymmeniä jatkunut tuottavuuden ja tehokkuuden kehittämistoimet tuotantopuolella ovat vihdoin saaneet puristettua viimeisetkin mehut irti tuotantolaitoksista ja nyt yleinen huomio on kääntynyt hinnoitteluun siinä toivossa, että sen avulla saataisiin lisättyä tuottoa ja kehitettyä kilpailuetua. Useat tutkimukset ovatkin osoittaneet tämän jo todellisuudeksi, ja positiivinen korrelaatio arvoperusteisen hinnoittelun ja yrityksen suorituskyvyn välillä on fakta.

Tämä tutkimus toteutettiin laadullisena yksittäistapaustutkimuksena. Case-yrityksen hinnoittelun nykytila sekä hinnoitteluun liittyvät strategiat ja rakenteet analysoitiin ja tarkempi tutkimus yrityksen hinnoittelukyvykkyyksistä suoritettiin. Seitsemästä haastattelusta kerätyn datan sekä perusteellisen kirjallisuuskatsauksen avulla kehitysehdotuksia sekä hinnoitteluprosessiin että hinnoittelukyvykkyyksiin voitiin tehdä. Suurimmat puutokset tunnistettiin ja ne liittyivät pääasiallisesti tietämykseen hinnoittelusta. Myös hinnoittelutyökaluissa ja -prosesseissa oli merkittäviä puutoksia, joihin annettiinkin toimenpide-ehdotuksia.

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Helsinki, 30.04.2018
Olli Västilä

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ABBREVIATION LIST

LBU – Local Business Unit

BU – Business Unit

DIS – Distributor

PBL – Panel Builder

OEM – Original Equipment Manufacturer

INST – Installer

B2B – Business-to-Business

B2C – Business-to-Consumer

CBP – Cost-based pricing

COBP – Competition-based pricing

VBP – Value-based pricing

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1 INTRODUCTION

"If you've got the power to raise prices without losing business to a competitor, you've got a very good business. If you have to have a prayer session before raising the price by 10 percent, you've got a terrible business." – Warren Buffett (Mulier, 2011, p. 21)

The impacts of pricing on company profitability in an industrial context have been extensively proven in plethora of studies. Nevertheless, pricing can still be seen as an under-researched topic in industrial marketing. Pricing accounts for less than 5% of articles published between 1993 and 2006. (Liozu & Hinterhuber, 2013, p. 633) Pricing strategy research has in the last decade expanded its focus from goods to services. Another major shift has been in the topics of research where differential pricing and product-line pricing have dominated in the last decade. It is significant to mention, however, that even though the numbers of articles related to pricing strategy research have increased since the early 2000s, they still cover a mere 2% of articles published. This raises a clear need for pricing studies in the marketing research context. Moreover, the majority of research is focused on B2C markets, which leaves studies on B2B markets heavily underrepresented. (Kienzler & Kowalkowski, 2017, pp. 107-108)

Even though pricing has been part of the traditional marketing mix 4P since it was coined in the 1960s, no other P has been as much neglected by the marketing professionals. According to Nagle & Holden (2002) most companies still use cost-based or competition-based pricing strategies. Only 15-20% report to use value as the basis for pricing.

1.1 Background of the thesis

Throughout the recent decades industrial companies have focused on increasing the efficiency of their production functions. Fixed and variable costs have been under tight scrutiny and driving unit production costs down has been seen as the best

method to improve margins. Lately however, the researchers and practisers alike have awoken to breaking down the other end of profit increasing variable – price paid by the customer. Pricing is one of the most efficient means to increase a company's profitability and it is no wonder that companies are investing into tools and developing new processes to improve their capabilities in setting the right price and getting the maximized profit from the market.

In the case company there has been significant changes in the organizational structure for the past four years. While the new structure has helped align product offerings and streamlined the organization as a whole, it has done little for the pricing function. Like in many industrial companies, pricing at the case company concerns many functions in the organization, but no single function has total responsibility over it. The latest global strategy has given emphasis on pricing and it has been put under close monitoring on a global scale. The case company has also initiated multiple process development projects with the aim to provide inter-market processes and tools to be utilized in all of the countries with sales organizations in them. In the Finnish subsidiary of the case company (referred to as the Case Company in this thesis), the pricing strategies and culture relies heavily on the know-how of the sales team and there is no systematic structure behind the pricing of components. The Case Company has initiated a project to gain control over pricing, to improve its pricing efficiency and to maximize its profitability. This thesis serves as a baseline investigation into the pricing function of the Case Company.

1.2 Research objectives and the scope of research

The aim of this thesis is to clarify the latest theoretical development of pricing strategies in industrial markets and to provide insight into how companies can gain more profit by merely adjusting their pricing.

The main research question for the study is:

- *How to improve profits through pricing?*

In order to understand how pricing is currently approached, what kind of pricing capabilities exist and what benefits company has for improving its pricing the following three sub-questions are presented:

- *What type of pricing strategies are used in the Case Company? (RQ1)*
- *At what level are the pricing capabilities of the sales function? (RQ2)*
- *What benefits can the Case Company derive from adjusting its pricing? (RQ3)*

The first question (RQ1) is structured to investigate the status quo of pricing strategies and processes in the case company. This helps assessing the company's sales function's overall knowledge on pricing and gives a benchmark for a comparison to findings in marketing and pricing literature. Answers found for the RQ1 also helps to adjust the actions recommended for the case company. The second question (RQ2) is designed to drill down to sales function's capabilities and identify the strongest areas in pricing and also the key development areas. The qualitative study approach focuses on these questions.

The third question's (RQ3) purpose is to demonstrate how the case company could have benefit from adjusting its pricing. The data collected for this research question differs from the previous two and the research approach to answer this question is close to quantitative study. With these sub-questions the case company will be able to position its pricing against current view of the researchers and practisers, identify the key development areas for the pricing processes and to gain understanding what type of pricing actions can bring quick-wins for profitability. The sole purpose of this study is to help the case company gain control over pricing.

The Case Company that is referred to in this study is the Finnish LBU of an international company. This LBU is the sales and marketing function of the Finnish subsidiary. This study focuses on the component business (product sales) only, which restricts the research to contain three out of five Business Unit's products.

The market served by the LBU is the Finnish market and only the major customer channels of the LBU are included in the study: Distributors (DIS), Panel Buidlers (PBL), Original Equipment Manufacturers (OEM), and Installers (INST)

1.3 Structure of the thesis

This thesis has nine chapters, which are presented in Figure 1 below. The thesis begins form theory formation on pricing in industrial context, customer perceived value and zone of indifference, and pricing capabilities of an industrial company. These topics are investigated in chapters 2, 3 and 4, respectively.

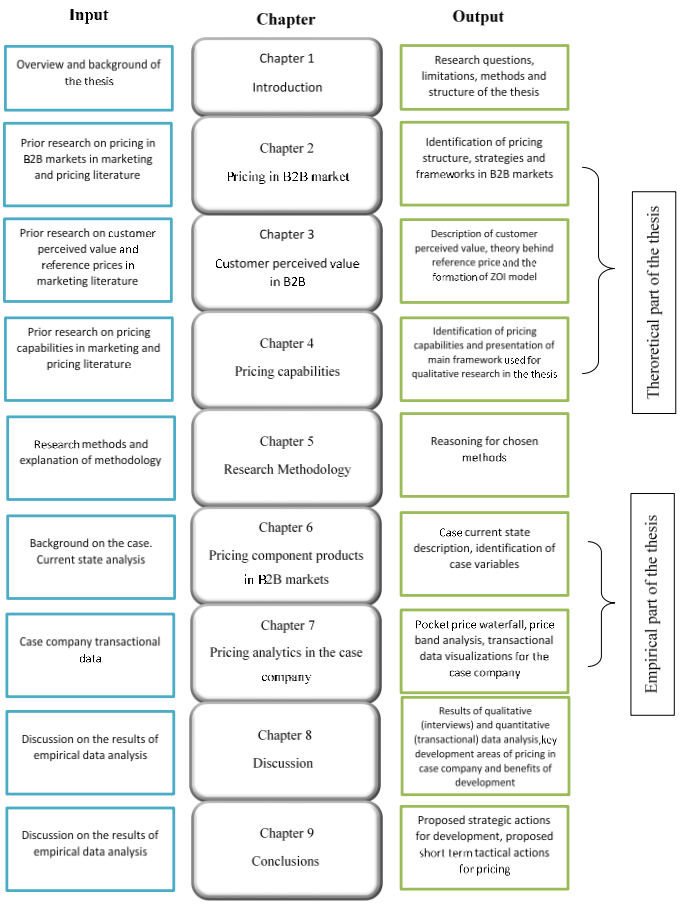

Figure 1. Structure of the thesis

After establishing a theory foundation for the study, the chosen research method is presented in chapter 5. The data collection method is defined, and the validity and reliability of the study assessed.

In chapter 6 the case company and its pricing function are presented. Additionally, the interviews are analysed according to the topics set by theory. Chapter 7 contains the pricing data analytics examples for the case company.

In chapter 8 the results of the study are discussed and the managerial implications presented. Chapter 9 gives a short conclusion for the thesis.

2 PRICING IN B2B MARKET

In this chapter the basic concepts of B2B pricing and the evolution of pricing strategy research are presented. The best practice pricing orientation, value-based pricing, is presented and latest findings on it investigated. The most common pricing tactics are also showcased. Finally, the latest theoretical findings on industrial pricings' challenges are reviewed.

2.1 Introduction to modern pricing

A company's main goal is to provide profits to its shareholders. The means by which this profit is created differs between companies, their target markets and the industries they are part of. In competitive markets, all companies need to have a competitive advantage to generate sales. Competitive advantage can be generated through multiple different means, some of which are harder to imitate than others and some that are available only for selected actors. Pricing as a competitive advantage however, is unique in the sense that any company can use it to leverage their position in the market. Even though pricing has been neglected by practitioners for a long time, its benefits have been confirmed both theoretically as well as in practice.

How powerful is pricing then? Baker et al. (2010, pp. 4-5) studied 1200 companies around the world and time scale of 5 years to create an average cost and profit structure of a company, which is presented in figure 2 below. The fixed costs represent 20,5% of revenue while variable costs drain 68% of revenue. The average operating profit is 11,5%. Applying just 1% increase to the revenue through a price increase generates profit increase of 8,7%.

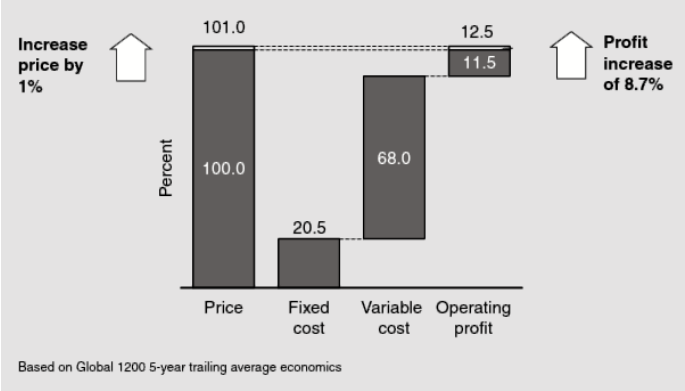

Figure 2. Average cost structure of the Global 1200. (Baker, et al., 2010, p. 4)

Typical approach to increasing profits is to increase the productivity and efficiency in the company. While cutting variable and fixed costs have positive impact on profit, their impact is far less significant than that of price. Most industrial companies focus on increasing their sales volume. While it is true that organic growth is a requirement of any business, the increase in volume does not have as major impact on profitability as price. (Baker, et al., 2010, p. 6) In figure 3 below, different levers for profitability are compared by their impact on profitability when they have 1% increase or decrease issued.

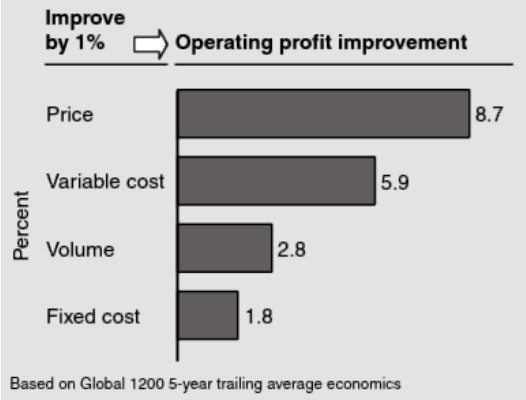

Figure 3. Levers for increased profitability. (Baker, et al., 2010, p. 5)

As the figure illustrates, volume increase of 1% improves profitability by a mere 2,8%, which is only one thirds of the impact that is generated with price increases. In conclusion, getting a 0,3% price increase through to customers increases company's profits the same amount as reaching growth of 1% without increasing

any costs. Another point of view on profits that is typically discussed in companies is the trade-off between price and volume. Applying a 5% price decrease to the same average customer of 1200 companies around the world requires 18,5% increase in sales volume just to break even (Baker, et al., 2010, p. 7). In practice increases this high is impossible, which highlights the seriousness of pricing. If a company has no control over pricing, price slippages are bound to happen. Sales representatives driven by their volume-based incentives are often ready to hand over money to customers in the form extra discount just to secure the deal. Also, many companies suffer from the "white horse syndrome" where senior management, driven by their sales quota targets, step in at the end of the quarter or year to boost up sales by issuing extra discounts and effectively crumbling any price basis the sales representatives had created. (Holden, 2008, pp. 14-15) In figure 4 is the illustration of this behaviour from Holden & Burton's (2008, pp. 16-17) case study of one leading-edge technology company that did not have a strategic and organization-wide process for pricing, and was in cycle of volatile sales volume and increasing discounts.

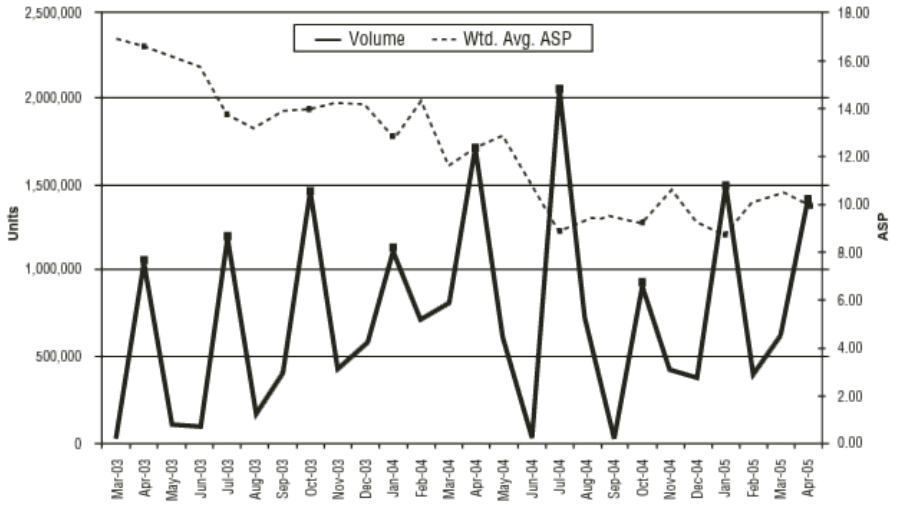

Figure 4. Monthly sales and running average unit price. (Holden & Burton, 2008, p. 17)

As can be seen form the figure, at the end of each quarter there is a significant spike to sales volume and a decrease in average selling price. "White horse syndrome" influences the market in a negative way by deteriorating the negotiation capability

of the sales representatives and encouraging customers to withhold their orders to receive better price at the end of a quarter. In the case study, kicking the habit actually increased sales by 17% and profits by 37%. (Holden & Burton, 2008, p. 17)

2.1.1 Pricing strategies

Holden & Burton (2008, pp. 51-54) suggest that there are three relevant pricing strategies: Skim pricing, neutral pricing and penetration pricing. In skim pricing the prices are set higher than the competitors. Key aspect of this strategy is the differentiation of company's product in comparison to competitors. When the differentiation level reduces, companies must be able to let go of the skim pricing and adjust a new strategy accordingly. In neutral pricing the prices are matched with competitors to move the focus away from price. The strategy is well-suited for markets that have stagnated. In essence, neutral pricing prevents price wars, which decrease the price level of every supplier in the market. Penetration pricing aims at keeping the price as the only weighing factor in purchasing decision. It can be used to establish a dominant market position, but many companies misuse it as a method to gain market share. However, when penetration pricing is applied with the sole purpose of increasing market share, competitors typically match the price cuts, and nobody gains any volume or share. (Holden & Burton, 2008, p. 53) Price-first strategies have a few significant flaws in them. Customers that were attracted by price, will be the first one's to leave when more affordable offer emerges. Also, unless the company has significant competitive advantage with their technology, some competitor will likely coin a way to do product the same offering with a lower price tag. The impacts of company's pricing strategy influence profitability with a large delay. Therefore, it is crucial for any company to have efficient means to monitor pricing actions in strategical, tactical and operational level (Kohli & Suri, 2011, p. 570). Pricing at strategical level is often done by marketing, but at the transactional level it is the sales function setting the prices (Kohli & Suri, 2011, p. 571).

2.1.2 Pricing tactics

Pricing tactics refer to the short term action that companies implement in an attempt to manipulate the price of a product to achieve some business objective. Some of the most used pricing tactics in industrial context are presented below.

Versioning is the tactic where the different customer segments of the market are matched with different versions of the same product. Companies can signal high quality and increased amount of benefits by having a premium priced version on the market. Versioning helps companies divide markets from a single price level to multiple price levels, which in turn means that the different price points attract more customers to purchase the product. Versioning can be an effective tactic to both drive revenue growth by reaching new customer segments and to increase profits by driving customers to higher profitability price levels. (Kohli & Suri, 2011, pp. 568-569)

Discounting as a tactic is very similar to versioning. The main difference is that instead of altering the product offering to split the demand in the market, the market is divided into segments by simply issuing justifiable reasoning for differentiated discounts for customer. Discounting itself can however be harmful for the profits. If not managed properly discounts have a tendency to drive prices down. One way to prevent this is to create barriers that prevent exploitation of discounts by customers. (Kohli & Suri, 2011, p. 569)

Multiple discounts are efficient and meaningful when they are created. However, over time they often lose their focus and create overlap, which in turn becomes extremely hard to manage and makes the impact analysis of each discount impossible due to the interactions of the discounts. (Kohli & Suri, 2011, p. 572)

Price bundling is a pricing tactic where multiple product are bundled together and only one price is given for all. In price bundling it is important to make the cost savings clear to the customer, and listing prices for each product helps customers

calculate both the savings on individual products as well as on the bundle altogether. Bundling products together also creates savings on the packaging, delivery and inventory costs of individual products. (Kohli & Suri, 2011, p. 570)

Price unbundling is the tactic where the offering is reduced to its components and each component is priced individually. Typically the core product in the offering is priced aggressively and information about it is spread generously. The augmented product components are in turn priced with a high premium to bring the profitability of the bundle up again. This tactic is efficient in situations where the core product's price is under heavy monitoring by the customers and a deciding factor in the purchase decision. (Kohli & Suri, 2011, p. 570)

2.2 Evolution of pricing strategy research

Noble & Gruca (1999) studied the pricing strategies implemented in U.S. markets with a research design that complements both the strategic aspect of pricing as well as the pricing environments influence on pricing decisions, which the authors refer to as pricing strategies and determinants, respectively. In the study, ten different pricing strategies were identified, which were further divided into four categories to highlight the similarities and differences in determinants of different pricing strategies. The authors also listed numerous pricing strategies that are directly part of or homogenous to one of the selected ten strategies, i.e. these strategies would under similar conditions result in same price level. To differentiate price strategies in same category, the authors define determinants for pricing situations and pricing strategies according to the previous findings in literature. In summary, pricing strategies under same category share the determinant for pricing situation but have differences in determinants of pricing strategies. Noble & Gruca presented a pricing framework in which each of the four different pricing situations are given suggested pricing strategies and the determinants of each strategy are described for easier managerial implication. Interestingly, in their study of 270 U.S. companies, Noble & Gruca found out that the dominant pricing strategy was cost-plus pricing with

over 56% of managers implemented it primarily in their pricing efforts and over a third of managers combined it with one of the other pricing strategies.

Dutta et al. (2002) describe a model for pricing capabilities that revolves around three capitals: human capital, systems capital, and social capital. These together form organizational capabilities that exceeds the sum of its parts. Human capital in essence are the people working in the organization. To improve human capital, the company needs to train their existing employees and/or hire new people with pricing expertise in their belt. Internal training is nevertheless important, because if the managers don't have sufficient knowledge on pricing, they won't be able to even spot talented recruits to hire. Systems capital refers to the infrastructure of the company. In order to truly capitalize on skilled pricing professionals in the organization, companies have to make sure their systems are up to speed and can support the pricing analytics and decision-making. System investments have to be made in consideration of the other capitals or otherwise companies end up with expensive and underutilized hardware. (Dutta, et al., 2002, pp. 64-65) Social capital is the ability to set the right price at the right time. It acts as a glue that hodls together different parts of the pricing process. Social capital can not be bought, at least not with money. Often significant investments of time are required to build up and manage the social capital. (Dutta, et al., 2002, p. 65) Liozu (2015) refers to these capabilities as intangible capabilities. Pricing capabilities related to the social capital are most difficult to gain but they are also best at generating competitive advantage since they are practically impossible to mimic. Social capital are the capabilities designed to support organizations change into VBP through means of change management in pricing capabilities, development of collective confidence levels or integration of mindful learning programs in pricing. (Liozu, 2015, p. 314) A model of these three capitals is presented in figure 5 below.

Figure 5. Three capitals of pricing capabilities (Liozu, 2015)

Carricano presents a framework for pricing where environmental factors are separated from company's decision-making process. In the framework, environmental factors are divided into two external determinants, market conditions and competitive conditions, and two internal determinants, company conditions and product conditions. Each condition represents multiple factors that determine the environment in which pricing decisions are made. The decision-making process is separated into three sections: pricing strategy, pricing structure and offer structure. Pricing strategy aims at generating maximum return with scarce resources in set time schedule with pre-defined actions (Holden & Burton, 2008). In his study Carricano defined six price strategies, adapting Noble & Gruca's findings into French context. Pricing structure is price customizations that enables the company to differentiate its pricing for each customer segment. In the study, six different forms of price structure were presented. Offer structure refers to the company's product-line structure, which enables the company to combine products into one offering. In the study, three different forms of offer structure are identified. Similarily, Kohli & Suri (2011) identify three levels for pricing: market forces, marketing strategy, and transactions.

In table 1 below the main findings on pricing strategy research are collected for a clear overview of the literature review.

Table 1. Literature review on pricing strategy research

Author	Study variables	Resulting framework	Key input to pricing literature
Noble & Gruca (1999)	Pricing situations and pricing strategies related to them, determinant conditions	Table of managerial pricing practices in industrial market	Fulfills the gap between normative research and managerial pricing practice by showcasing which price strategies are utilized in different pricing situations and what kind of determinants affect the pricing strategy decision
Dutta et al. (2002)	Human capital, Systems capital & Social capital	The three capitals of pricing	Identification and explanation of the three most important pricing capabilities for a company
Kholi & Suri (2011)	Strategic pricing, pricing tactics & price monitoring	General guidelines for enhancing profitability by adjusting pricing	Combined multiple theory sources together, key pricing tactics
Hinterhuber & Liozu (2012)	Price orientation – price realization (price setting vs. price getting	Pricing capability grid	9 item matrix for categorization of a company's price orientation and realization. Identified key strengths and challenges for the extreme zones and the middle zone
Carricano (2014)	Pricing strategies, pricing structures and market determinants	Significant pricing determinants for each pricing strategy, Evalutation of pricing power	The vast majority of pricing strategy determinants are related to competition. Use of sophisticated pricing structures increases decision-making based on market/product dynamics. The key drivers for premium pricing are differentiation and inelasticity, which indicates that companies overestimate competitors' reaction to price policies and should give more focus to basic indicators.

The current view on best approach to pricing

The extensive amount of studies conducted in industrial context on different pricing strategies implemented in companies, the researchers and practitioners have seemed to agree that pricing in general follow one of the three pricing orientations: cost-

based pricing (CBP), competition-based pricing (COBP), or value-based pricing (VBP). Additionally, a consensus has been made on the superiority of one the pricing orientations – value-based pricing. Multiple studies on VBP have managed to find significant correlation between VBP and the pricing power and performance of a company (Liozu, 2016, p. 18). (see e.g. Nagle & Holden, 2002) The most commonly applied pricing strategy is the COBP

To gather better understanding on the difference between organizations that are still implementing cost-based or competition-based pricing and organizations that have managed to implement value-based pricing in their operations, Liozu et al. (2012) conducted a study where they investigated the differences in managers' approach to making pricing decisions and participating in the pricing process. The goal of the study was to identify practitioners view on organizational factors that affect the strategic pricing decisions in a company. Key findings of the study are:

- Value-based pricing can only be implemented with the help and active participation of top management
- Companies using value-based pricing invest heavily on the capability of their personnel and promote specific formalized training programs in the organization for both existing and newly hired employees
- Confidence of employees in companies using VBP increased because everyone shares the strong beliefs in company's offering, technology and value. The support and can do-mentality of the whole organization, gives sales people courage to stand behind VBP even in front of customer price objections. Successful implementations of price receive a heroes welcome in VBP organizations. (Liozu, et al., 2012, pp. 199-202)
- Pricing functions are gathered under "one roof" in VBP companies. These specialized units have highly skilled professionals whose aim is to support the pricing decision-making process across the company.

In his study on VBP, Liozu (2016, p. 28) concluded that VBP should be approached as a science, which requires capabilities, strategic commitment by the top

management in the organization, and positive internal atmosphere that creates confidence inside the organization to commit to VBP. Liozu (2016, p. 28) continues to state the key drivers for organizations to improve their chance of adapting VBP as a pricing orientation:

1) Learning, organizational collaboration, internal confidence
2) VBP must be seen as a go-to-market approach instead of a mere strategy
3) Dedicated pricing professional in the organization act as champions of pricing and actively promote the VBP inside the organization

2.3 Challenges in industrial pricing

Monroe and Cox (2001) describe eight typical misconceptions that companies have about pricing. First, a vast majority of companies do not conduct research on their customers or competitors. Pricing decisions have no strategic context and when prices are changed, most companies do it without any quantitative analysis of the market. Also, in most companies individual price decisions are not referenced against pricing strategy, which creates discrepancy between customers.

Second, companies view pricing as a one-time exercise that can be forgotten about for the rest of the pricing period. This contradicts with the day-to-day operations where the biggest hardship is pricing. Recognizing pricing to be an on-going process and having proactive price management enables a company to have distinct pricing strategy and tactics, to coordinate price decisions throughout organization and to have a dedicated function responsible for monitoring changes in pricing environment and maintaining price policies.

Third, companies assume that their customers have good access to competitors' prices and can easily calculate definite price differences. In reality the purchasing decisions are a complex mix of psychological aspects that need to be carefully assessed to completely understand their influence on purchasing decisions (Monroe & Cox, 2001, p. 44).

Fourth, companies think that product prices are absolute and only alternative products' prices are comparable. However, customers always have a reference price in mind to which they compare. It can be based on multiple different baselines and

its absolute value and the acceptance to diverge from that value differ between products and they might change over time. Also, each customer has their own reference price.

Fifth, companies assume that there is only one acceptable price for each of their products. Fitting to the concept of reference prices, customers typically create imaginary boundaries for product prices. The upper and lower price thresholds are not constant, and they change over time due to changes in customer's knowledge of the market or because the environment in the market changes, for example new alternatives emerge. The lower threshold represents the price that the customer is comfortable to pay. Any price lower than that generates negative impressions and shift customers focus to alternative products. The upper threshold represents the maximum value for the product. Salamandic et al. (2014, p. 475) give good examples of questions designed for mapping reference price. Perceived value of the product can increase through improved customer satisfaction or loyalty of customers and decrease when competitive products emerge in the market. Lack of price information narrows the gap between the thresholds and lowers the value of both limits. Also, customers who focus on price tend to have lower price limits than customers who prefer quality (Monroe & Cox, 2001, pp. 44-45).

Sixth, customers do not perceive price differences rationally and tend to relative prices over absolute prices. The sensitivity of customers to a price change can be assessed with the concept of price elasticity of demand. When the customer notices a price change it might affect their purchasing behaviour. If the change is small, there may not be any influence on demand. When the change is noticeable, the demand shifts significantly.

Seventh, companies fail to recognize the importance of price positioning both within a product line as well as compared to competitors' products. In most cases, companies sell different versions of the same product and at the very least their competitors' product have minor differences. These differences create unique price positions in the market and understanding them, enable companies to gain leverage against their competitors. Customers typically steer away from extremes and prefer middle-prices options in the market. Product prices are always compared to similar

solutions in the market, so efficient differentiation from competitors helps create perception of improved value for money.
Eighth, companies misconstrue that price elasticity is constant and work similarly in price decreases and increases. For a company it is significantly easier to lose demand by implementing price increases than it is to gain demand through price reduction.

Hinterhuber (2016) in turn tackles the six myths found in literature and managerial practice. First, costs should not be the basis for pricing. Companies need to strive to understand and create customer value. Second, small price increases have significant impact on profitability. As discussed before, even the slightest changes in price can increase company profitability by noticeable amounts. Companies should fight for pennies and focus on each and every transaction. Third, customers typically do not know what prices they are paying and are in fact more sensitive to total cost of ownership than to prices per se. Companies need to adjust their pricing structure to host segments for different customer needs. Fourth, even commodities can be differentiated. One of the biggest mistake companies make is to call their own product commodities because before they know it, the statement becomes true. Companies have to always find ways to differentiate their offering. Fifth, gaining market share does not equal to higher profit. Increase in volume has significantly lower impact than increase in price. Companies should rather focus on improving their capabilities in customer insight than their share on the market. Finally, pricing is not only about changing the prices. Pricing is a complex set of systems, processes and skills that aim at creating and communicating customer value. Even if prices are not changed, price management is needed to keep prices at the same level. (Hinterhuber, 2016, p. 73)

Focus of the organization should be on the profit maximization instead of volume. Typically, sales function is compensated based on sales revenue, which hinders the willingness of sales people to keep extra discounts for customers at bay. Just a 5% discount for a product in typical company setting will be seen as a 5% decrease in revenue by the sales person but in actuality lower the profit by 50%. (Kohli & Suri,

2011, p. 571) Learning how and when to say no to price decreases is one of the hardest lessons to learn for the sales function. Also, saying no is not an individual task, but rather an organizational effort, where culture, strategic goals and operational processes all support the decision-making at the individual level. Managers need to support sales force in pricing, not override their pricing decision. (Holden, 2008) One efficient way of influencing the sales culture in an organization is rewarding. Incentives of the sales function have to be adjusted correctly to enable change in the mindset of sales people. Incentives that emphasize total volume discourage sales force from taking the risks that are needed to prevent profit-slippage when negotiating price with customers (Baker, et al., 2010, p. 25). Profit-based compensation drives the individual to assess the impact of prices on profitability whenever making a significant deviation from the normal pricing process.

Lowe & Alpert (2010, pp. 868-869) studied the influence of pricing strategy in new product pricing scenario to the reference price of the customers. In the study, penetration and skimming strategies were compared in two product categories in a situation where the product technology was a pioneer solution in the market. The results indicated that lower initial prices erode the value perceptions of customers whereas higher prices substantiate them. It is also worth to mention that customers do not rely solely on one brand when calculating internal reference price but rather use some sort of average of available prices. When put into industrial context, it is important to note that often the amount of alternative solutions are limited to few and the reference price is heavily influenced, even if it an average calculation, by single operator. Nevertheless, analogy between consumer and industrial markets exist in the sense that higher prices signal higher quality, and applying skimming strategy helps companies influence the reference price of customers upwards.

As mentioned before, even though companies in industrial market have professional purchasing functions, the individuals acting inside these organizations are still influenced by the same psychological biases as the customers of consumer markets. In his study Hinterhuber (2015, p. 67) presents an extensive inquiry to current

marketing literature on violations of rational decision making both in the price setting and purchasing decision perspective. The results of the inquiry are presented in figure 6 below.

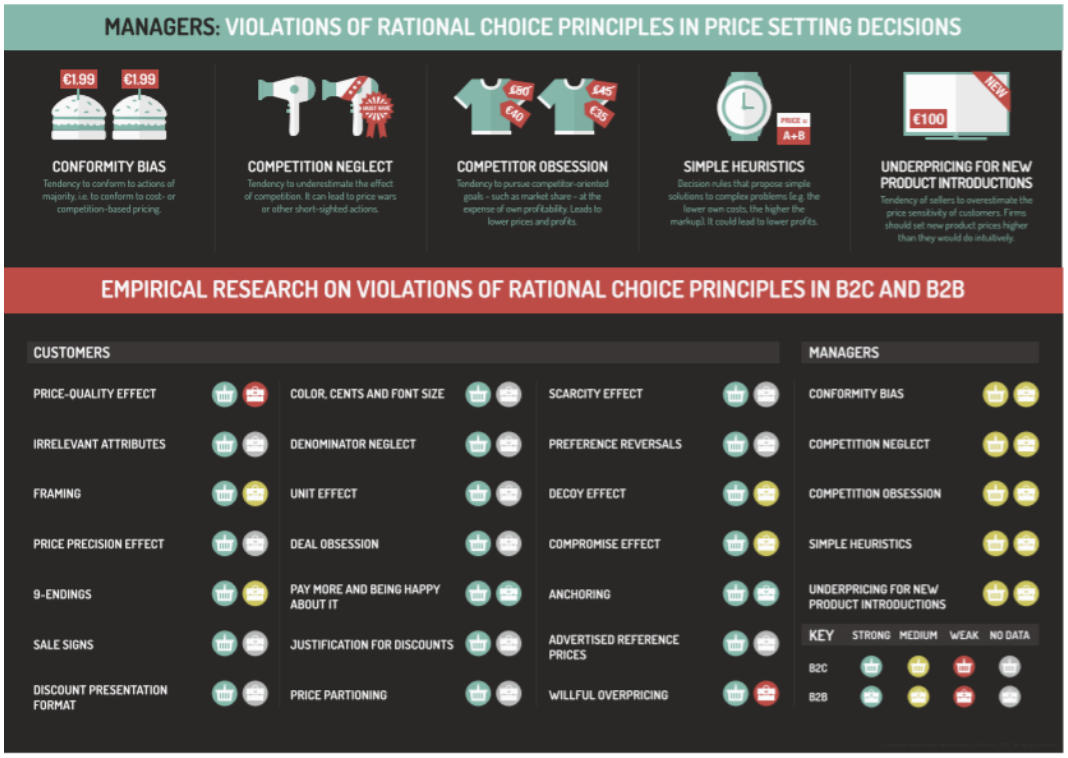

Figure 6. Violations of rational decision-making (Hinterhuber, 2015)

On the price setting perspective there are five rationality violations identified and they are all estimated to influence the price setting decisions by managers.

Conformity bias relates to individuals tendency to follow others in order not to stand out from the crowd. In industrial context this bias gives an explanation to why value-based pricing is not currently the status quo pricing strategy in most of the companies, even though it has on multiple studies been confirmed to be the most profitable approach to pricing. (Hinterhuber, 2015, p. 70)

Competition neglect refers to the overconfidence of the managers, which leads to a situation where influence of competition is underrated and competitive markets are entered with expectation of low competitive response. Experience and educated

managers typically steer away from high competition and manage to secure better revenue. (Hinterhuber, 2015, p. 70)

Competitor obsession is present in the industrial market. Companies compare their market shares to competitors and at worst cases set market share as a performance indicator. This creates a situation where the company's goals are defined by competition instead of focusing on optimizing profitability. Studies have found that competitor obsession leads to lower prices and lower profit. (Hinterhuber, 2015, p. 70)

Simple heuristics means use of simplified tools to solve complex problems. Theoretical implications claim that since most simple heuristic tools relate to cost or competition, they lead to lower profitability, but no definite study on the topic exists. Reducing price decision-making down to one or two variables often leads to false picture of the pricing environment. Therefore, simple heuristics is a violation of rational decision-making. (Hinterhuber, 2015, p. 70)

Underpricing new product introduction confirms the earlier findings of Lowe & Alpert also in the industrial context. Companies often overestimate price sensitivity of customers even in situations where price information is not easily available for the customer. Instead managers should actively set new products' prices at a premium level to maximize profitability. (Hinterhuber, 2015, p. 70)

On the purchasing decision perspective the studies found in marketing literature revolve mainly around consumer market. On the industrial context the following violations of rational decision-making have been studied: price-quality effect, framing, 9-endings, pay more and being happy about it, decoy effect, compromise effect, anchoring, and wilful overpricing.

Price-quality effect describes the quality signalling effect of pricing. Even though price and quality are weakly correlated, in consumer markets customers tend to see higher priced product to be of better quality. In industrial markets, the studies have

received mixed results and no clear indication of quality signalling effect can be made. (Hinterhuber, 2015, p. 66)

Framing relates to the prospect theory where customers compare the end results of decision to the reference price and depending on whether the outcome is a gain or a loss, they become risk-averse or risk-seeking, respectively. As an example, offering free on top of order leads to higher sales than offering the same monetary value as a price reduction to the order. Most studies on framing have been conducted in consumer market context. Therefore, direct implications to industrial context can not be made. (Hinterhuber, 2015, pp. 66-67)

9-endings is the misappraisal of prices ending in 9. Companies can utilize this to steer demand to products with prices ending in 9 or to increase profitability by increasing product prices to end in 9. In a study in industrial context, the largest spike in demand was reported with prices ending in 0, but prices ending in 9 also showed a spike in comparison to other digits. (Hinterhuber, 2015, p. 68) However, cross-industry implications can not be made since the culture and structure of purchasing function in different industries can vary significantly.

Paying more and being happy about it is strongly related to the discomfort of metering use, the desire to protect against variation in cost of use and the overestimation of actual usage. In industrial markets multiple studies have concluded that especially the insurance effect and overestimation effect drive companies not to make rational decisions and end up paying more for products and still feel increasingly satisfied. (Hinterhuber, 2015, p. 68)

Decoy effect means that companies introduce a mid-range product to drive up demand of the premium priced product with the help of false premise of receiving "a good deal" on the premium product. Customers that have an intuitive style of thinking are more likely to follow this logic and start buying the premium priced product instead of a low-priced product. Currently there are no studies on the decoy

effect in industrial context but there are signs of companies beginning to utilize it. (Hinterhuber, 2015, p. 69)

Compromise effect describes the natural tendency of people to do compromises in situations where no dominant option is available. Studies show significant demand spikes for intermediary options both in the consumer and industrial markets. (Hinterhuber, 2015, p. 69)

Anchoring describes the phenomena where completely sales-unrelated factors influence the final price paid by the customer. In multiple studies related to negotiations, catalogue retailing, investment decisions, contingent valuations, and even lawsuit settlements have confirmed the relevance of anchors to decision-making. In industrial context the following logic applies: “The more seller asks, the more they get”. (Hinterhuber, 2015, pp. 69-70)

Wilful overpricing refers to the customers willingness to pay more on product, because the higher price validates the need for product and makes customers more committed to buying the product. This phenomena does not only exist in consumer markets but there are anecdotal evidence found also in the industrial markets. (Hinterhuber, 2015, p. 70)

3 CUSTOMER PERCEIVED VALUE IN B2B

Customer value creation and the ability to deliver better value than competitors is one of the key components of B2B marketing. (Keränen & Jalkala, 2013) In this chapter the customer perceived value is investigated in its purest form, the customer reference price. Later, the concept of reference price is utilized in the formation of the zone of indifference model.

3.1 Reference price

Reference price is the price expectation, fused together by customer's memory or contextual information (Mazumdar, et al., 2005). Töytäri et al. (2015, p. 55) define reference price as the difference between perceived net benefits and the price paid by the customer. The price is always set between the customer perceived net benefits and the cost for the supplier and the final level indicates the ratio by which the value is distributed among the participants, the seller and the buyer. The closer the price is to cost, the less the supplier has gained value in the sale. The value range is always in relation to context and is highly dynamic, which means that depending on the sales opportunity and even time of the sales, the range has different evaluations. In the figure 7 below, this value range is illustrated.

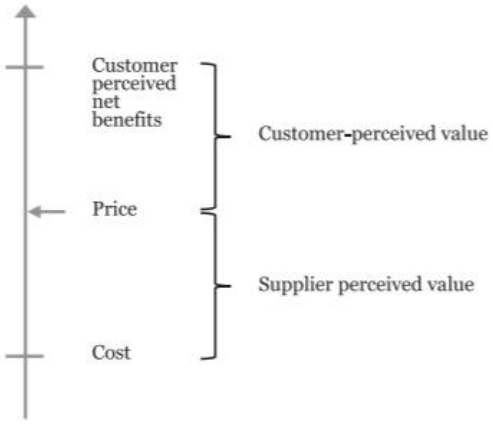

Figure 7. Value range and price in relation to this range. (Töytäri, et al., 2015)

Mazumdar et al. (2005, pp. 85-86) divide the conceptualizations of reference price found in literature into three types: expectation-based reference price, normative reference price and aspiration-based reference price. The first conceptualization suggests that reference price is a predictive price expectation that is based on customers adaptation level against which price stimuli are judged. The adapted level is constructed from customer's purchase history and the existing purchase environment. Normative reference price builds on the notion of "fair" price. The fairness is determined by customers purchases and competitors price levels as well as the customer's assessment of company's profit of the product. Companies are expected to only generate normal profit and disobeying the standard, will decrease demand. Aspiration-based reference price relates to social comparison theory, where customers inside same social group expect to receive same price level. As with other conceptualization theories, also in aspiration-based theory the customers purchase history and environment influence reference price. Casado & Ferrer (2013, p. 418) suggest that reference price is based on historical prices received by the customer combined with the internal notion of "fair price" or that it reflects the price point of competing or substituting products. According to Anderson et al. (2010, p. 74) companies often apply "50/50" sharing rule to "make the customer feel good about the price", hence generating a "fair price". Holden & Burton (2008, p. 22) state that one of the keys to better pricing is the ability to create pricing strategies and price levels that capture a fair share of the value created by the company.

3.2 Zone of Indifference

Traditionally, customers in B2B-markets have been seen as rational actors whose organizational purchasing processes focus merely on functional qualities of the product when conducting a purchasing decision. All emotional qualities related to the product or seller are surpassed in this process, and the customers choose their supplier based on pre-defined criteria and cost-benefit analysis. However, this view has been challenged in the recent years, which is noticeable in the amount of studies conducted related to B2B brand equity and management. Increased attention

towards branding as value adding feature of the product creates analogy with B2C-market behaviour. After all, behind every organizational pricing decision is a person, who defines the selection criteria and selects supplier from a short list. Similarly to consumers, these decision makers have a reference price to which they compare suppliers price. This price is not absolute, but only a fuzzy direction that sets the range of acceptable prices for the customer. There are multiple definitions found in literature for the range of acceptable prices: Latitude of Price Acceptance (Kalyanaram & Little, 1994; Casado & Ferrer, 2013); Pricing indifference band (Baker, et al., 2001); Price Thresholds (Monroe & Cox, 2001); and Zone of Indifference (Han, et al., 2001). This range of acceptable prices is founded on three theories. First, adaptation level theory propses that prices are comparable only in situations where they are identified as indifferent. Assimilation theory expands from this and states that when price differentiation occurs, decision-makers compare prices to a reference point and act only on prices that significantly differ from this reference point. Lastly, prospect theory implies that stimuli that are equal in intensity but opposite in direction, create different degree of reaction in an individual. (Casado & Ferrer, 2013, p. 419) Hence demand change resulting from a price increase or a price decrease of same amount are different in size.

The width of zone of indifference is affected by multiple factors. Kalyanaram and Little (1994, pp. 415-416) identified the following three: reference price level, frequency of purchase, and brand loyalty. Customers with higher reference price level have wider ZOI. Monroe and Cox (2001) extended the definition to include also the lower extreme and defined that customers with reference price further away from market average have wider ZOI. Customers with high purchase frequency have narrow ZOI because they have more knowledge about the price distribution in the market. This is supported by the findings of Monroe and Cox (2001) as well. Customers with high brand loyalty have tolerance for price fluctuations, which results in wider ZOI. However, as Kalyanaram and Little point out, constant promotional discounting of product's price lowers the customer's reference price, which in turn reduce the profit gain available for the product in the market. Han et al. (2001, pp. 451-452) separate the gain and loss threshold of zone of indifference

in their study and provide validation to the assumption that there is asymmetric effect of price volatility on the thresholds. The threshold for gains might be smaller than the threshold for losses. In these cases, price increases could be done without affecting the demand because the resistance to price increases is high. Also, small threshold for gains creates opportunity for effective promotional pricing, where small reductions to price are well-noticed by the customers, which drives demand growth.

The range of acceptable prices varies between products. For branded beauty product the range can be as wide as 17%, whereas for industrial products the range is 10% and for financial products only a mere 2% (Baker, et al., 2001, p. 123). Nevertheless, the impacts of moving up the zone of indifference are enormous. As the study by Marn and Rosiello (1992, p. 85) on 2600 companies and the study by Baker et al. (2010, p. 5) on 1200 companies show, increasing prices by 1% generate 11% improvement on profit margin. Han et al. (2001) suggest utilizing zone of indifference as a segmentation attribute.

Mazumdar et al. (2005, p. 100) suggest that reference prices can be utilized in customer segmentation by behavioural characteristics, such as price sensitivity and brand loyalty, and sociodemographic factors. In industrial context, these characteristics can be described as price sensitivity, customer relationship and quantitative and qualitative traits of the customer, such as sales channel, industry, size and growth. Mazumdar et al. (2005, p. 100) also point out that expanded view of reference price is necessary when customers set their price thresholds to a task instead of individual components. In industrial context, companies should consider price bundling as an effective tactic to match customers reference. Communicating the price to customer is crucial since customer internal reference price might be represented in nonnumeric form. In these cases, companies should also be able to communicate their prices in same form, since for example lower priced products are typically associated with lower quality (Mazumdar, et al., 2005, p. 100).

The zone of indifference has been studied both qualitatively and quantitatively in consumer market. Casado and Ferrer (2013) studied demand changes in retail industry and confirmed that there are thresholds inside which the demand is inelastic, and that venturing outside these boundaries affects demand in line with the prospect theory. Casado and Ferrer (2013, p. 426) also illustrate the significant difference between gain and loss threshold. At 15% discount 64% of studied values were present in gain threshold while at loss threshold 72% of values were present in discounts between 25-35%. This finding highlights the asymmetricity of perceived gain and loss.

To gain a complete picture of the development of the ZOI theory, a simple illustration of all the previous studies and their input to the ZOI theory are presented in figure 8 below. The charts are adapted from a presentation by Dr. Hossam Zaki, but they can all be traced back to their original sources.

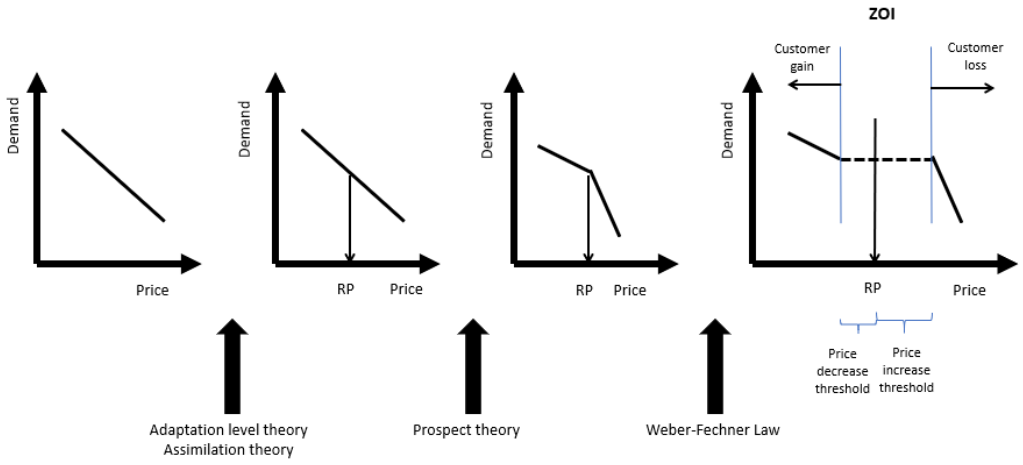

Figure 8. ZOI model

In the first chart the traditional demand curve is presented. According to the law of demand increase in product's price reduces the quantities sold. When this law is put into an industrial market environment, external and internal factors begin to influence purchasing decisions. The customers' purchasing operations have become more sophisticated and they have acquired skills and tools to extract and

analyse each component of supplier's offering. Most industries have become global arenas of competition where customers shop the world for best prices and force prices down globally after receiving the lowest prices on the market in one location. Competitors are implementing cost-saving programs to better compete with aggressive pricing strategies and distribution channels have evolved into bigger consortium with real negotiation power over suppliers. (Baker, et al., 2010, pp. 8-9)

In the second chart the adaptation level theory and assimilation theory are added to the traditional demand curve. According to adaptation level theory prices can only be compared if they are identified as different. Assimilation theory on the other hand states that once there are different prices in the market, the price is compared to a reference price. Also, in order to generate any action, the difference from reference price has to significant for the customer before any change will occur. (Casado & Ferrer, 2013, p. 419)

Third chart illustrates how demand curve shifts when prospect theory is applied. Prospect theory is an old economic analysis model that is used to estimate how people make decisions in situation where the probabilities of the outcomes are unknown, and the decisions involve risks. Barberis (2013) summarizes the theory to be composed of four elements: reference dependence, loss aversion, diminishing sensitivity, and probability weighting. First, people assess gains and losses as relative change instead of absolute values. For example, estimating outdoors temperature is easier to do as comparison to indoor temperature than it is to estimate the absolute value for temperature outdoors. Second, people tend to rather steer away from losses than to earn gains of same magnitude. Individuals are more sensitive to losses, which is illustrated in the demand curve by a steeper decline in demand as the price increases after the reference point. Customers compare the price they are quoted to the reference price and depending on their perceived loss or gain the rate of decreasing demand changes. Findings of Han et al. (2001, p. 448) support this element of prospect theory. Third, the customers' sensitivity to change is not linear. As the change increases the relative impact of the change diminishes.

From a customer's point of view increasing the price from 10 euros to 11 euros has greater impact than increasing the price from 50 euros to 51 euros. When given multiple options, customers choose the less risky alternative with moderate probability gains. Finally, people overweight probabilities of extreme outcomes. Even when the probability of an outcome is known in advance, studies have shown that people estimate the probability of an extreme outcome to be much higher than it actually is. Barberis (2013, p. 177) remarks that this behaviour is the reason for the popularity of lotteries and insurances – receiving a 0,01 chance for gain of 500 is better than certain gain of 5. Applying the prospect theory to the model distorts the demand curve at reference price. Increasing price past the reference price, reduces demand in a higher rate than the price increases before the reference price do. On the other hand, there is no significant motive for decreasing the price below reference price since the demand increase diminishes.

On the fourth chart the theory of zone of indifference is applied to the demand curve. According to Weber-Fechner's law, small changes to price can be made without the customer noticing or reacting to them. In the immediate proximity of the reference price lower and upper thresholds are found, which represent the boundaries of ZOI. Inside these thresholds the demand is constant even when the price is increased or decreased. Casado & Ferrer (2013, p. 418) elaborate that the price elasticity inside the ZOI is not necessarily zero but it is nevertheless constant, which means that if the price is changed inside the zone there is no significant change in demand. The thresholds are asymmetric, and they vary depending on the product and customer. A company can increase its profits by increasing the price inside the upper threshold, which

Pricing scenarios

To increase profitability through pricing the company has to increase its prices. According to the ZOI theory, there exists an upper threshold or price increase threshold inside which these increases can be made without impacting the

purchasing behaviour of customers. To give context to ZOI price increases, a set of pricing scenarios are presented in Table 2 below.

Table 2. Scenarios of the ZOI

Scenario	Description
Scenario 1	ZOI is likely to exist in segments with high amount of customers, which typically leads to wider price spread
Scenario 2	ZOI is likely to exist with customer that have low purchasing frequency
Scenario 3	If the customer's switching costs are higher than the price increase, customer will buy same amount at higher price
Scenario 4	Price increases that are reasoned with raw material cost increases and this information is available in the market, the price increase will not affect the customer demand
Scenario 5	Customers that receive 10% discount on a frequent basis will not buy more at 5% discount
Scenario 6	If the retailer's price adjustment costs are higher than the price increase, retailer will not change the price and keeps on selling with old price
Scenario 7	If product's price is frequently increased by 5%, a 1% increase will not affect customer demand
Scenario 8	Customers that have strong loyalty programs accept price increases in return for the loyalty programs additional services and benefits
Scenario 9	ZOI is likely to exist when price increases and discount reductions are in line with pre-set pricing structure and based on justifiable customer KPI, such as revenue and growth
Scenario 10	A price increase that did not close the gap to the next higher price product will not affect customer demand

3.3 Analysing pricing data

To understand the market and how to operate in it, companies need to analyse it and based on these analyses define actionable items. Typically, companies' revenues follow the pareto curve, which means that 80% of business comes from 20% of customer. This logic is utilized to identify the most important customers and more often than not, companies focus all their attention to the high revenue customers, leaving the long tail poorly managed (Holden, 2008, pp. 9-10) A more important view for companies that are chasing sales volumes is the "20-225" rule that states

that 20% of business generates 225% of profits. When divided into more detailed units, Holden (2008, pp. 17-18) elaborates that when 20% bring 225% of profits, 70% of customers just break even and 10% of customers actually cause drop of 125% in profits. Simply removing the bottom 10% of customers help companies improve their pricing processes and frees up time for all the functions of the company because these customers are typically the demanding type that cause a lot of extra work (Holden & Burton, 2008, p. 11).

Prices that the customer are willing to pay vary depending on the product and the market conditions. Estimating the demand for a product at certain price can be challenging because like the previous chapter showcased the decisions of customers are influenced by multiple factors. To be able to create and understand the analysis of transactional data, a detailed understanding of price elasticity is needed.
Price elasticity is a descriptive value that represents the change in customer's purchasing behaviour in the case where product price is increased or decreased. If customer continues to purchase product regardless of price change, the demand is inelastic. The price sensitivity of customers depends on the type of the product as well as the type of customer. Price elasticity is continuum from the law of demand, which states that increase in price will decrease demand in linear manner, and vice versa. Therefore, when price of the product increases by 1% and the demand reduces by 1% price elasticity of demand is one. According to Anderson el al. (1997) prices that have elasticity stronger than -1 are thought to be elastic and elasticity between 0 and -1 means that the product has inelastic price elasticity of demand. Product that are used in high amounts and have small number of substitutes typically are inelastic, whereas products that are expensive, are bought seldom and have multiple alternatives, are elastic.

To give context to price elasticity, it is useful to see what the findings of marketing literature are. According to Monroe & Cox (2001, p. 46) price elasticity is asymmetric. When prices are increased the price elasticity is higher than in a situation where the prices are decreased. Typically, the ratio of price increase to price decrease varies between 1,3 and 4,0, which means that it is much easier to

lose sales in a price increase than it is to gain sales in a price decrease. Customers are more sensitive to increased prices than to decreased prices because the notion of perceived loss or gain (Kalyanaram & Little, 1994, pp. 415-416). It is also notable that price elasticity varies between different competitors within the same product. Price levels affect the elasticity as well. The further away from market average the price of the product is, the lower its elasticity will be. This means that significant demand changes at extreme price levels can only be generated by big changes in price. Similarly, product that has close to market average price has high price elasticity, i.e. even minor changes to price have noticeable influence on demand. Baker et al. (2010, p. 7) note that in price decreases the price elasticity of demand commonly reaches maximum of -1,7 or -1,8. In the consumer market, ratios as high as -2,5 might occasionally occur. In their example, a 5% decrease in price would require a 18,5% increase in demand to break-even profit. To acquire this 18,5% increase in demand the market would have to have -3,7 price elasticity, which according to the authors is extremely rare. Baker et al. (2010, pp. 56-57) list the following issues as preventive of straightforward application of price elasticity to price decisions:

- The Zone of Indifference causes minor changes to have no impact in demand
- Nonlinear nature of elasticity means that no singular elasticity can be defined for a product. As the price difference to alternatives grows, the elasticity changes
- Variance by segment highlights the difference in customer price sensitivity, which means that companies can not assume all customers to have same price elasticity
- Variance by occasion reflects the context-reliance of purchasing decisions. The place where the product is purchased from can have significant impact on price elasticity
- Variance over time means that price elasticity is not constant between years. Customer needs and preferences change, which in turn changes price elasticity

- Variance by price communication method highlights the difference created by the way the price is communicated. Annual rate versus usage based rate influences the price elasticity
- Variance by waterfall element describes the customers differentiated sensitivity between the waterfall elements. Even if the end result is the same, customer's purchasing decision can be influence by changing the amounts in different waterfall elements.

3.3.1 Waterfall analysis

One of the most efficient analysis to visualize customer price structure is the waterfall analysis. In the analysis each price element is presented in a bar graph to display starting price, invoice price, pocket price and all the price reducing elements that the customer is receiving. For the sales teams the reductions to price that arise before invoice are considered in the pricing but calculating off invoice reductions to transactional level can be extremely difficult. The sheer number of off-invoice price reductions can be very high, depending on the customer. Without proper information system and tools to analyse each item individually, sales force has no chance of taking into account all the difference price reduction items and their impact on each other and the final result. (Baker, et al., 2010, pp. 26-27) Below in table 3 some of the most typic off-invoice price reduction items are listed.

Different customers have different discounts, which is why it is important to create waterfall analysis for each customer to see which discounts are impacting the pocket price the most, and whether customers in same channel have variance in different price reducing items. Differences in pocket price waterfalls can be utilized in identification of customers who are taking advantage of the company's pricing mechanisms, find the best performing customers and provide guideline for new customer pricing. Identifying all the different on- and off-invoice items can also help reduce the amount and make the pricing structure simpler and more transparent even for customers.

Table 3. Typical off-invoice items (Baker, et al., 2010, pp. 27-28)

Off-invoice item	Description
Annual volume bonus	Bonus paid for the customer at the end of the year for meeting a volume quota.
Cash discount	A price reduction to invoice customer received if the payment is made fast.
Consignment costs	The costs of funds when a supplier provides consigned inventory to a retailer
Cooperative advertising	An allowance that is paid for the retailer for locally advertising suppliers brand
End-user rebate	A rebate given to retailer for selling products to a specific customer at a discount
Freight	Cost of transporting goof to customer paid by supplier
Market-development funds	A discount given to promote sales to a market segment
Off-invoice promotions	A marketing incentive that provides retailers additional discount for sales on specific promotional time period
Online order discount	Given to the customer for ordering online
Performance penalties	A discount agreed to materialize when supplier fails to meet performance target (e.g. on-time delivery or quality)
Receivables carrying cost	the costs of funds from the moment an invoice is sent until payment is received
Slotting allowance	An allowance paid to retailers for a set amount of shelf space and product positioning in brick-and-mortars
Stocking allowance	A discount paid to retailers for large orders into inventory before seasonal increases in demand

Waterfall analysis can also be expanded to include the costs of producing the product. Pocket margin waterfall helps create a clear view on offerings that have high level of customization included in them. Sometimes a mere pocket price is not broad enough view on the pricing situation. Pricing practitioners need to understand their business to be able to analyse it properly.

3.3.2 Price band analysis

Due to the vast amount of different price reduction items that vary between products and customers, it is clear that at any point in time a product generates multiple pocket prices for the customers. The difference between highest paid pocket price and the lowest paid pocket price by customers is called the price band. According to Baker et al. (2010, p. 30) the width of the bad varies and are always tied to their context. In their examples, electrical controls manufacturer had a price band of 65% while a fastener supplier had a price band of 500%. Most companies have not systematically reviewed their price bands, which means that in all industries there are significant profitability gains available for companies that are willing to improve their pricing. While price bands are often a results of mismanaged pricing process, they also indicate opportunity in the market. The wider the band, the more micro-segments are present in the market that can be utilized for price differentiation. (Baker, et al., 2010, p. 31)

Kohli & Suri (2011, p. 571) state that identifying the width of price band should be the first step for a company that wants to gain control over pricing. Baker et al. (2010, p. 37) name two major drivers of wide price bands: variance and slippage. Variance means the difference in prices of customers who are similar in type and purchase equal amount from the company. The difference is caused by individual negotiations that were not supported by clear structure, hence different outcomes were received. Best way to tackle variance is to bring transparency to low price transactions and to coin a incentives system that rewards sales representatives when their customers outperform their peers. Slippage is the situation where customer agrees to conditions and breaks them, but the penalties are not enforced. It is important to enforce agreed-to pricing terms to improve the validity of the process and to prevent customers from learning to not follow the rules accurately.¨

4 PRICING CAPABILITIES

The roots of the theory of pricing capabilities are in the resource-based view (RBV) of the company. RBV represented the critical resources that were the source of competitive advantage and drivers for profitability. However, RBV did not offer any practical implications for practitioners. Capability-based view stems from RBV and is the central theory for pricing capability theory. Initially, company's capabilities were viewed as organizational, but over time pricing capabilities gained traction and finally in the 2000s they separated from marketing capabilities and were qualitatively studied on their own. After successfully proving the pricing capabilities' influence on company performance through quantitative studies, a comprehensive scale could be developed and validated. This scale is presented later in this chapter.

Among companies there are differences in how available resources and capabilities are distributed in the organization. This heterogeneity creates differences in operational efficiency and profitability. In order to outperform their competitors in the market, companies should invest in their pricing capabilities. Multiple quantitative and qualitative studies link the pricing capabilities positively to company performance. O'cass & Ngo describe pricing as a part of marketing capability. A company can utilize its good marketing capabilities to develop and maintain better value to customer, and hence improve its performance (O'Cass & Ngo, 2012, p. 126). According to O'Cass & Ngo marketing capabilities have direct relation to value creation in B2B companies (O'Cass & Ngo, 2012, p. 132). In their study, Liozu & Hinterhuber (2013, pp. 606-607) also validate that there is a strong relationship between pricing capabilities and performance and that the anecdotal evidence suggesting that large investments into pricing capabilities lead to larger profits is supported by quantitative data as well. Holden & Burton (2008, p. 22) state that in order to win in the pricing game, companies have to generate quantifiably value propositions and sales tools that can be used to generate value at customer-level. In their investigation into championing behaviours impact on pricing and firm performance, Liozu & Hinterhuber (2013, p. 639) validate that

pricing capabilities significantly influence firm performance is a competitive context. These capabilities are also significantly influenced by the championing behaviour, decision-making rationality, collective mindfulness and overall pricing orientation.

In order to better understand what are the actual competences needed by a company to perform better in pricing, Liozu & Hinterhuber (2014, pp. 148-150) expanded the existing assessment scale found in marketing literature to better support the complexity of pricing capabilities and to incorporate the currently dominant views of pricing literature, such as customers reference price and significance of customer segmentation and price differentiation. Liozu & Hinterhuber (2014, p. 153) produced an extensive qualitative and quantitative study, in which they were able to generate a reliability and validity tested ten-item scale, PRICECAP, that can be utilized in companies to analyse and develop pricing capabilities in the organization. The full scale of pricing capabilities is presented in the table 4 below.

Table 4. Pricing capabilities, 10-item scale (Liozu & Hinterhuber, 2014)

Items	**Pricing Capabilities (PC)**
PC1	Using pricing skills and systems to respond quickly to market changes
PC2	Knowledge of competitors' pricing tactics
PC3	Doing an effective job of pricing products/services
PC4	Quantifying customers' willingness to pay
PC5	Measuring and quantifying differential economic value versus competition
PC6	Measuring and estimating price elasticity for products/services
PC7	Designing proprietary tools to support pricing decisions
PC8	Conducting value-in-use analysis or Total Cost of Ownership
PC9	Designing and conducting specific pricing training programs
PC10	Developing proprietary internal price management process

This scale was suggested to be used as a checklist for companies to benchmark their capabilities between intra-organizational business units or against competitors (Liozu & Hinterhuber, 2014, pp. 153-154). For this study, the items on the scale are divided into general themes to support a closer literature review into the theme.

These themes are then utilized in the formation of the frame for the interviews conducted in the case company. Themes are illustrated in figure 9 below.

Figure 9. Pricing capabilities themes

First general theme of the scale are the tools, systems and processes in place in a company that support the measurement, evaluation and setting of prices. PC1 can be added to this theme since its core essence is the measurement and identification of change in pricing conditions and reacting to it accordingly. While many companies still rely on their sales teams' competence to identify and react to changes, a strategic approach to pricing should have market change reporting included in the pricing process. PC6 is an internal process where historical transactional data can be utilized to measure and forecast price elasticity for products. There are also multiple other dimensions that can be added to the analysis than just product dimensions, such as customer dimension or different segmentations. PC7 and PC10 are similar in nature, where the former focuses on supporting the pricing on the demand side and the latter on the supply side. Also, in the PC10 there is a nuance of legal obligation. Many large and international companies have to follow multiple overlapping regulations. In order to verify the legitimacy and uniformity of sales processes across different business units, strictly defined internal management processes are a necessity.

Second theme focuses on the customer. PC4 relates to quantifying the customer value and identifying the reference price. PC5 is analogous but expands the capability to involve the assessment and quantification of competitive offering as well. Similar to these is the PC8 where value quantification is expressed as set of analytical models that are typically used to illustrate benefits to customer. Overall this theme revolves around the topic of customer value quantification.

Third theme is the knowledge on pricing both within the company and in the market. PC2 enables the company to understand the pricing structure and methods of competitors and how they have to adjust their own offering to better fit the needs of the customer. Understanding the pricing tactics of competitors also helps estimating the reaction by competitors to different signal in the market. For example, if the demand of a product stagnates, depending on their strategy and tactic, the competitors can either increase or decrease prices. PC3 relates to the company's understanding of its own pricing strategy and processes. In order to be able to measure pricing efficiency, clear pricing structure needs to be created. This capability has strong relationship to the pricing tools, systems and processes. PC9 is an accurate measurement into what is the current pricing knowledge status of the workforce. Improving this capability is one of the core aspects of improving pricing capabilities overall. Depending on the strategy of the company, this capability can be improved through formal training or just by clearly communicating the processes and objectives of the company.

Customer value quantification

One of the most challenging duties of sales is to identify, create, quantify and communicate customer value. In order to better understand the requirements of value quantification for the organization and the individual, a deeper dive into literature on the topic is made.

Quantifying the value of offering to customer in its essence means transforming the benefits of the solution into financial impacts that helps customers assess the feasibility of competitive offerings. Successful value quantification translates company's competitive advantage into monetary benefits for the customer (Hinterhuber, 2017, p. 164). In his study Hinterhuber (2017, p. 172) concluded that value quantification capabilities always have a positive impact on a company's performance. Even though prior literature suggests that value quantification capabilities are especially needed for qualitative benefit quantification, no relationship to support this claim was found. Therefore, a counter-claim can be made that even in situations where there are little or no qualitative benefits to be quantified, should companies invest in value quantification capabilities to improve their performance. Hinterhuber elaborates that value quantification is highly beneficial in less-dynamic markets. Even in dynamic markets, benefits can be gained but the amount is completely dependant on the characteristics of the market.

To assess, quantify and communicate value to customer, Töytäri & Rajala (2015, p. 110) suggest five steps. First, there is a need to identify the most relevant KPIs of the customer and to establish economic performance measures that help identify the value creating components in sales for that particular customer. Second, the relationship between the value creating components and the economic performance measures need to be determined and the relative importance of each component has to be quantified. Third, competitive offerings and their value propositions have to be analysed, Fourth, the realized value have to calculated and compared to competitive offerings. Finally, each components' value impact, based on their leverage, differentiation and projection, have to be communicated to the customer.

Keränen & Jalkala (2013, p. 1313) have similar approach except the framework they provide focuses purely on customer value assessment, quantification and communication, i.e. no competitive realm is added to the process. In their framework for customer value assessment the framework is divided into pre-delivery and post-delivery phases. The framework is presented in figure 10. In the pre-delivery phase value potential is identified and baseline of customer

performance assessed. These processes are similar to Töytäri & Rajala (2015) first steps where the initial aim is to understand the customer's business model thoroughly and to identify the explicit needs of the customer that become the value creating components. Also, status quo needs to be estimated so that the value creation can actually be measured and communicated. It is also crucial to understand how the value created will benefit customer and create mutual goals. In the post-delivery phase performance is evaluated and long-term value realization verified (Keränen & Jalkala, 2013). This differs from Töytäri & Rajala (2015) whose findings suggest benchmarking against competition, whereas Keränen & Jalkala (2013) framework ties around customer cooperation. The last process of customer value assessment is the verification and documentation of realized customer value. It is important to be able to monitor and report value improvements over extended periods because most of the time, the initial results are not the at the optimal level. Success stories and case studies act as a reference for future offerings, especially if the monetary benefits are clearly indicated in the case. Successful handling of pre-delivery phase supports the post-delivery phase and acts as a foundation for customer value assessment. The framework also highlights the importance of systematic data management, which is described as a fifth process in the process. Data management relates to all the different steps in the framework and consists of collecting and sharing of relevant customer data. What type of data is needed depends on the industry and customers of a company. However, it can be said that the amount of data collected is generally large and it has to be collected and shared among all the different functions in the organization, not only sales.

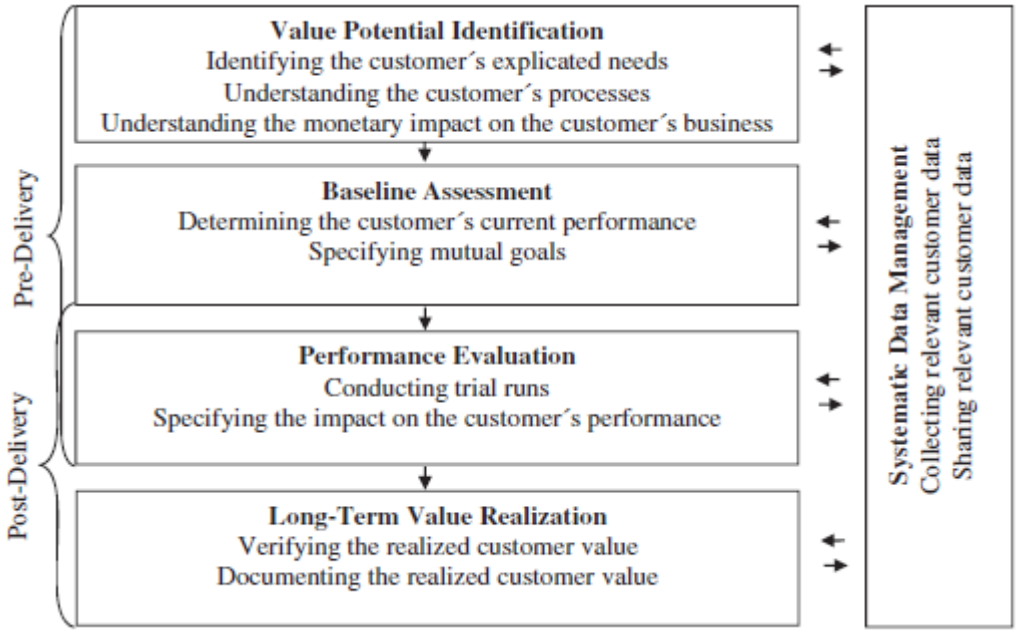

Figure 10. Customer value quantification framework (Keränen & Jalkala, 2013)

The information for the pre-delivery phase is gathered from the customer by contacting the customer and communicating not only with the sales department but also vertically to truly understand the financial drivers of the customer (Keränen & Jalkala, 2013, p. 1311). The communication however, is always an interaction between two individuals. It is therefore reasonable to include assessment of beneficial traits on value quantification capabilities. At the individual-level the most positively impacting traits for value quantification capabilities are risk taking and creativity, sales manager questioning style, customer-oriented sales, and cross-functional collaboration (Hinterhuber, 2017, p. 173). In his study Hinterhuber proved the correlation between the individual traits and company's value quantification capability. The final structural model is presented in figure 11 below.

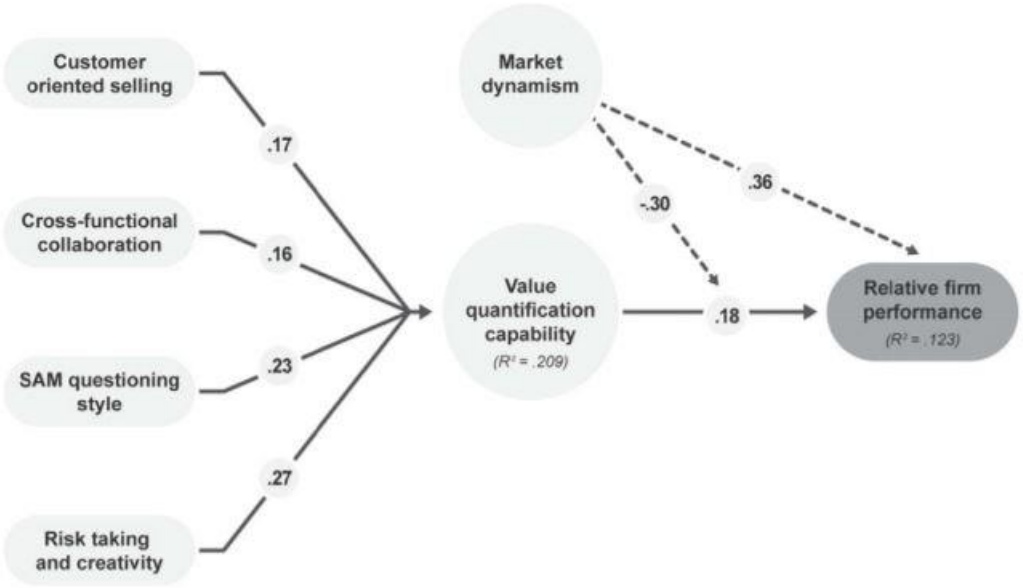

Figure 11. Customer value quantifying capabilities (Hinterhuber, 2017)

The biggest indicators of these capabilities are risk taking and creativity and questioning style. Creativity and entrepreunial spirit are significantly associated with quantification capabilities. In questioning style, the highest significance was measured for questions on the payoff of a solution followed by questions about customer's consequences and questions about customer's problems and difficulties. On customer oriented selling the statements about painting a too rosy picture, about stretching the truth and about trying to oversell products had most influence on capabilities. These traits were reverse coded, so respondents gave low scores on them. On cross-functional collaboration sharing client information and communication with sales manager about sales opportunities influenced most the quantification capabilities.

5 RESEARCH METHODOLOGY

In this chapter the chosen research method for the thesis and the primary data sources are presented. First the approach for research and the method used to analyse the data are discussed after which a closer look into the data collection and analysis is made. Finally, the validity and reliability of the thesis is assessed.

5.1 Qualitative research

Case study research is one of the most commonly used methods in marketing literature. Its biggest strengths are displayed especially in situations where holistic, in-depth investigation is needed. (Zainal, 2007) Case studies are always context-specific. Zainal (2007, pp. 1-2) gives the following definition to case studies: "[Case studies]… explore and case study as a research method investigate contemporary real-life phenomenon through detailed contextual analysis of a limited number of events or conditions, and their relationships." Case studies can have two designs - single-case design or multiple-case design. Single-case study is a rational approach when it represents a rare or unique case. (Yin, 2003) Because the focus of the study is on a single LBU and the phenomena under investigation is one process (pricing), which the case company aims to unify across sales teams, a holistic design is well justified (Yin, 2003). For the study a holistic single-case design is applied.

To support the holistic design of the study, the researcher adopts a observer as participant role (Kawulich, 2005, p. 9). Participant observation is a useful method to combine with holistic design to deepen the understanding of studied phenomena by learning about the activities of the people being studied in natural setting and participating in those activities. (Kawulich, 2005, p. 2) It is also a way to increase the validity of the study (Kawulich, 2005, p. 4). The reliability and validity of the study is discussed further in chapter 5.3.

5.2 Data collection and analysis

For the qualitative analysis method semi-structures interviews and a follow-up survey were conducted to collect primary data from the sales teams in the Case Company. This study focuses on component business in B2B markets, so two sales teams were excluded from the interviews because their sales offering includes solutions and services, and do not therefore have same perspective to sales than the sales teams purely offering a selection of components to the market. One sales team's focus is purely on one large industry segment and their pricing method basically consists of case by case offers to large projects. Most of their customer-contacts can be seen as non-buying accounts, which is why the team as a whole was excluded from this study. The remaining two teams represent the core teams for component sales and their experience on industrial business combined exceeds 300 years. For this study seven interviews were conducted in April 2018. Below in figure 12 all the interviewees, their positions and responsibility areas, geographical and customer channel, are presented.

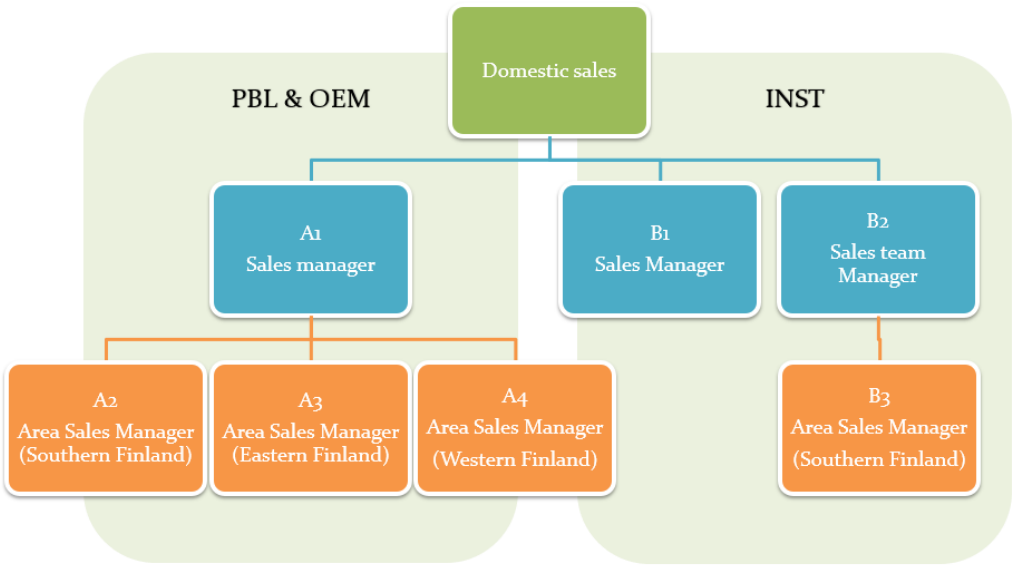

Figure 12. Interviewee hierarchy

The interviewees were chosen by two different sampling methods: expert sampling and small random sampling. For the first method there are two steps that need to be

done. First, definition of an expert needs to be made. Second, all the units that fulfil the criterion needs to be considered as an expert. (Kitayama & Cohen, 2010, p. 212) Since the focus of this study is on pricing components to industrial customers and the focus group is the sales teams of the division, it was easy to identify the expert to be the leader of the sales team. In the scope of the study, the product marketing directors could also have been selected as the expert but since the study's key goal is to focus on the demand side of pricing, the line was drawn strictly only to include people from a sales team. From expert sampling three interviewees were identified:

- A1: Sales manager. Manager of the sales team A responsible for PBL & OEM customer channel sales
- B1: Sales manager. Responsible for the sales team B's DIS customer sales.
- B2: Manager of the sales team B responsible for INST customer channel sales.

For the second method Gravetter & Frozano (2018, pp. 116-117) describe the process to have three steps. First, the definition of population used for sampling needs to be clearly made. Second, all the members of this population have to be listed. Finally, a random process needs to be used to select individuals form the list. Also, the researcher needs to decide whether the selected units are returned to the population before next selection or not. These principals are called sampling with replacement and sampling without replacement. For this study the population used for sampling are all the area sales managers that belong to either team A or team B. All the area sales managers were listed on Excel spreadsheet on two columns: one for team A and one for team B. The random process used for this study was simply the RANDOM function with variables from 1 to 10. Whenever an area sales manager received 1 as a value and there was no other sales manager with value 1, the sales manager was selected and removed from the population. In the end three sales managers were chosen from team A and two from team B to reach final number of eight interviewees. One of the interviewees from team B was removed from the selection due to mismatching schedules.

The selection of interviewees represents well the population with diversity in sales experience, history of working in other companies both on the competitive and customer side, age and education background. The interviews were conducted as phone interviews through Skype and recorded. The interviews lasted between 44 and 93 minutes. The recordings were transcribed for a more detailed analysis to be done. The interview data was coded utilizing the open coding method. The identified categories were similar to the themes that were used to generate the questions: Tools and processes, customer added value, training and information. The interview questions are presented in appendix 1.

In addition to the semi-structured interviews, the interviewees were also asked to fill out a short survey on customer value quantification capabilities after the interview. The surveys were sent by e-mail right after the interview and they had a 100% response rate. The purpose was to generate better understanding on the value quantifying capabilities in the case company by utilizing identical measures than in previous study by Hinterhuber (2017). This helps identify the key gaps in the value quantification capabilities at the individual level. The survey is presented in appendix 2.

For the benefits analysis quantitative data was collected from the case company's information systems and ERP. The main sources of data were the transactional data, the customer agreements database and distributor specific credit note request database. The data collected followed the same scope as presented in chapter 1.2 with the addition of time scope, which was data from beginning of 2016 to the end of 2017. Some additional restrictions to analysis were made due to data quality, i.e. not all analysis could be conducted to all customers and products.

5.3 Validity and reliability

Qualitative research is sensitive to differentiating interpretations, which is why careful validity and reliability assessment is needed. In the study interviewees are the main source of information. Combined with researchers previous experience

with the case company and the internal material provided by the company, the sources of evidence can be considered to be good. The study also establishes a chain of evidence from interview questions to the conclusions. This also acts as a reliability generating factor since all the data used to create the conclusions, each step on the way, is clearly presented in the study.

Participant observation method increases validity of the study by the following means (Kawulich, 2005, p. 5):

- Enables collection of different types of data through having access to sensitive activities because of extended participation in the organization
- Reduces the gap between the researcher and the interviewee due to familiarity, which lowers the reactivity of people, i.e. acting in a certain way when knowing that they are observed
- Helps researcher speak the correct language and to adjust questions to match the cultural context of interviewees
- Enables the researcher to collect both quantitative and qualitative data through surveys and interviews

Based on these facts, the validity and reliability of the study can be considered to be at a good level.

6 PRICING COMPONENT PRODUCTS IN B2B MARKETS

This chapter provides insight into the Case Company, which is designed to help create context for the findings of the study. First, a short introduction to the case company's organization is made and the target functions of this study presented. After that the pricing function in the Case Company is presented in detail. Interviews are utilized to drill-down on each theme and to provide valuable insight into the actual pricing processes in place in the sales teams.

6.1 Introduction to the Case Company

The Case Company is the finnish subsdiary of a large international company, which is a global technology pioneering company with over 130 000 employees across over 100 countries selling product, services and solutions worth over 35 billion dollars in revenues for all the different industries. The company has divided its offering into four divisions Each division is currently #1 or #2 market-leader and the company is investing heavily on all business areas to be in the frontline of the fourth industrial revolution and energy revolution. The division studied in this thesis provides technological solutions across the full value chain. With 48 000 employees in over 100 countries and revenues surpassing 9 billion dollars it is one of the largest divisions of the company. Its products are also well-known globally and also in Finland

The Case Company is located across Finland with factories in key locations and smaller offices spread across the country. Below in figure 13 all the different locations of Case Company offices and factories are presented.

Figure 13. Case company's offices in Finland.

The organization has the same four divisions each equipped with sales and marketing function and service function. All divisions also have supporting functions such as finance, IS, HR, communications, legal and integrity, and HSE and security. Altogether the Case Companu employs over 5000 people and its total revenues annually exceed 2 billion euros. Below in figure 14 the structure of the organization on the scope of this study are presented.

This study focuses on sales and marketing function of the studied division. It is responsible for the development of and sales to Finnish market. It is a Local Business Unit (LBU) that reports to regional management and aligns its goals and actions according to the division strategy. In 2015, The Case Company revealed its five-year strategy where three key driving forces were established: growth, execution and collaboration. The strategy lasts until 2020 and one of the most visible changes is the investments into IT to drive productivity. For the past 1,5 years one key focus areas in the Case Company has been prices to the market.

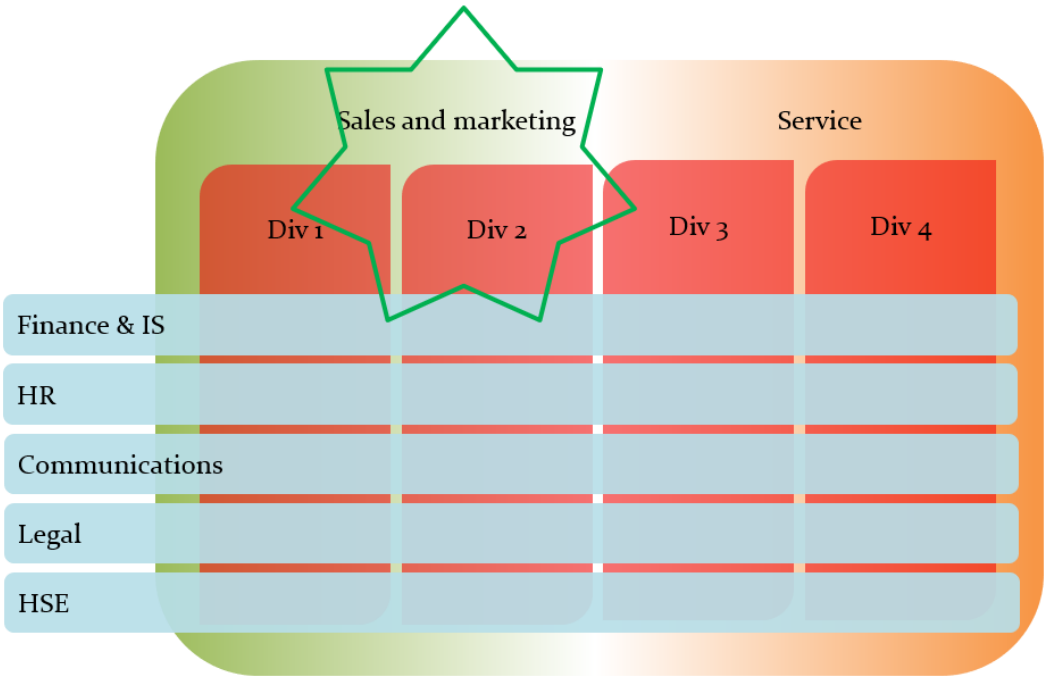

Figure 14. Organizational structure of the case company

The division is divided into five business units (BU). This study focuses on products in three of them since they represent pure component sales to Finnish market. The sales teams chosen for this study serve multiple customer channels but to restrict the amount of analysed data only three of the biggest channels are included in the study: Distributors (DIS), Panel Builders (PBL) and Original Equipment Manufacturers (OEM). Installers (INST) are classified as their own channel even though majority of sales to this channel is funnelled through Distributors. Installers are therefore also included in the study as non-buying customers.

Both sales teams can sell any BU's products. However, due to historical organizational structures, products in different BUs are polarized between channels. There are also major differences in the pricing culture, structure and methods between the two sales teams. These differences are discussed further in the following sub-chapters. The data from interviews is utilized to highlight main differences between the sales teams and to create a general overview of the current situation in the Case Company.

6.2 Pricing in the Case Company

Pricing responsibility in the Case Company is divided to two function: product management and sales. Product management is responsible for the pricing structure, while sales teams handle customer negotiations, and in the end define the final price level. In BUs 1 and 2 all product have list prices and the products are divided into large product groups which have a discount assigned to them. In BU 3, some of the products have list price, while other are only directly net priced to customers. The difference originates from the time when the two units were apart.

All direct customers have their prices negotiated annually in an agreement, but they are also issued special project prices during the year if they cannot compete with the annual offer. DIS channel operate almost completely on the annual agreements.

Both pricing teams have established boundaries over which the sales representatives are not supposed to go. However, these boundaries are not forced in any way.

The prices are updated to ERP and also a copy of agreements and project quotes are stored in a Sharepoint site. Customers order the product through Business OnLine (BOL) or EDI connection. Some customers also manually order the product through Order Handling email address.

6.2.1 Strategies

Sales team A has a short price strategy presentation for 2018 that lists the strategic actions planned for implementation during 2018. The strategy slide defines monitoring tool for price changes and defines the target for 2018. According to the strategy, multiple large initiatives with high priority are going to be implemented and, in the presentation, different strategic and tactical actions are assigned to responsible persons in organization. 3 out of 11 initiatives are assigned to sales

manager of team A, the rest are assigned to different product managers. The highest priority is given to initiatives related to discount policy adjustments, increasing focus on project discount thresholds, price re-positionings against competitor benchmark, increasing price on less "price critical" products and increasing price to less "price critical" customers. It is clear from the analysis of the strategy that there is a lack of control over pricing development. Multiple different highly prioritized initiatives that are assigned to mostly product marketing team is in contradiction with the answers received from interviews on the topic of who makes the pricing decisions and how clear the responsibilities related to pricing are. Sales representatives inform that they are responsible for pricing. One of the respondents of sales team A said that the responsibilities are fuzzy, while others stated that the responsibilities related to pricing are clear. This would lead to the conclusion that in the end, sales team has the final say on customer prices, which means that strategic initiatives should include at least some people from the sales team to be efficient and meaningful. One of the respondents also raised the issue of lack of cooperation between sales team and product management when creating pricing structures.

When asked about pricing strategies, all interviewees of team A mention either margin or profitability. All the interviewees use mainly cost-plus pricing strategy to set prices. Depending on the customer and the product portfolio different minimum margins are used to calculate direct net price from transfer price. But as the sales manager of team A clarifies, the strategy is not actually a cost-plus strategy but instead a competition-based one:

> *"You need to remember that the transfer prices are not new, sometimes they have been adjusted for tens of years, which means that they have slowly found their place … and they now make somewhat sense and prevent us from selling the products too cheap… The transfer prices have nothing to do with cost"*

One motivation to using “cost-plus” approach is the rapidness of expanding the selection for the customer and still managing to give reasonable and profitable prices. Overall, the sales representatives seem to have multiple goal in their sales process. On one hand, the sales team wants to be sure that they don’t make negative margin sales unless it is actually purposeful. On the other hand they claim to always aim to get the best price from the customer while actively measuring the revenue growth of the customer.

Sales team B has a dedicated pricing strategy for 2018 that outlines the development of prices in 2017 and sets targets for 2018. According to the strategy product group level pricing decisions are done in cooperation with the sales team and product management team. The interviews support this claim. The strategy also defines the same main monitoring tool for price changes as for team A. The pricing strategy mostly defines the tactical actions that are going to be made in 2018. It does not contain any indication of how the markets are expected to develop in 2018 nor does it offer any view on the customer perspective of pricing. Raw material increases are mentioned as the main influencer of price increases. Sales team B also has a similar short price strategy presentation for 2018 that lists the strategic and tactical actions. Highest priority is given to initiatives related to price re-positionings against competitor benchmark, focusing on value propositions, managing product mix for improved price results and increasing price on less “price critical” products.

According to the sales manager of the team B the most important aspect of pricing is that it is as simple as possible and that there is a sufficient level of transparency in the pricing structure to avoid negative influence in case the customers become accidentally aware of each other’s prices. When asked about the main driver of price setting the sales manager of team B highlighted the influence of competitor prices, while sales representative talked about market price. Sales team leader mentioned that especially in project sales, inquiries about market price level need to be made. The interviewees of sales team B stated that competition-based strategy is the starting point of pricing. Sales manager also continued that the problem with competition-based strategy is that there might be room for higher prices. Also, sales

team B looks after the margins and according to the sales manager, if a product has to be priced with negative margin to match competitor prices, the sales representative needs to say no to the sales opportunity.

6.2.2 Structures and processes

Respondents of sales team A all reported that their main pricing structure is direct net price that is given case by case to customer. While list price structure exists for all products, it is not used because sales team feels it can not be trusted:

> *"The problem is that the transfer prices, gross prices and market prices are not aligned at all, which means I can't be sure whether I will make profitable sales if I give a discount for a product group"*

One respondent stated that the sales has been driven to the situation where direct net prices have to be given to customer in order to have any sales. Another interviewee said that the customer are by now accustomed to the direct net prices and any attempt to force list price structure would just create negative atmosphere.

For the sales team B the pricing structure is clear for all interviewees. Baseline is set for the three biggest Distributors and other customers are aligned according to that level. Installer sales are funnelled through Distributors and the price setting for Installers follow a pre-defined structure that is implemented with a Excel-based quotation tool. The discount level for Installer is defined by annual revenue. In project business, inquiries are made about the customer size and the final project to define what size discount can be given.

In new product pricing sales manager of team B stated that involvement of product management is crucial, because the profitability of the product has to be assessed thoroughly and in the long run.

6.2.3 Information systems

All the interviewees from both teams agreed that the current information systems do not properly support price related decision-making. They are seen more as repositories for prices and price related information. Information sharing is done through the system but it is limited to merely giving information about specific prices to customer. The biggest defect of the information systems is the lack of reporting and visualization of data. Many of the respondent of sales team A highlight the importance of having easy access to clear reports that are dynamic. With proper views into the data, pricing decisions could be based on actual facts rather than semi-accurate feelings.

6.3 Pricing capabilities of the Case Company

This study utilized Liozu & Hinterhuber's (2014) 10-items pricing capability scale to produce general themes for qualitative research on case company's pricing capabilities. The themes identified were pricing tools, systems and processes, customer value quantification and knowledge on pricing. Next, the results of the interviews will be analysed by comparing the emerging themes from the interviews with the original 10-item pricing capability scale. This helps generate a quick view on the state of pricing capabilities in the case company and identify the biggest gaps by theme and also by the pricing capability scale

Pricing tools, systems and processes were discussed in the interviews with direct questions about the existing tools used for pricing as well as with questions that left room for the interviewee to describe information systems and processes freely.

As discussed earlier the sales team A reported major responsibility over pricing on the sales representatives while the role of the sales manager is to act more as a communication vessel between different sales teams and the product management team. The interviewees of sales team A all agreed that the information from the market mainly comes from the customers. One sales representative also told that he

utilizes different kinds of media outlets to gather information from customers and the market. When asked about the efficiency of the pricing process, answers were polarized. Some interviewees felt that the process was quick as long as the sales representative was able to make the decision on their own. However, especially in the large projects the involvement of product management team and feeder factories made the process slow down significantly. The interviewees also reported that project sales share is continuously growing, which means that the pricing process' efficiency is continuously decreasing. Information about market changes was shared inside the sales team but between teams and with product management the sharing was not as systematic. Quick reaction to market changes requires every sales representative to have their ears open and to understand to whom the information needs to be shared. No systematic process was in place for gathering information from the market. The sales team A also pointed out that due to globalisation the pricing needs to become more transparent and price levels have to be adjusted at a cross-national level. According to the sales manager, many of the competitors have a unified list price for Europe, which creates reasonable price variation between countries. In Finland the problem is that:

> *"For example, some of our customers have operations also in Poland… and they are completely aware of the price difference between Finland and Poland… If they buy the product in Poland they purchase it for a lower price than our transfer price"*

One of the biggest issues for both sales teams was the lack of quotation tool. The only available tool for any pricing analytics is Excel, which according to some sales representatives is not the tool that should be used in 2018. When asked to describe a suitable tool, the sales team A interviewees stated that an appropriate tool would for example indicate average price levels for different channels, display previous sales to same customer, display the price levels of large projects and the possibility to estimate margin development. The interviewees mention an ERP-based quotation tool that was developed but is not being used because it does not fit the needs of the sales team. As said earlier, the process of project pricing is slow and

inefficient. Implementing a tool that fulfils the requirements of the sales team would help in developing the pricing process. This was throughout the interviews seen as number one area of development, and one sales representative raised the concern about the future:

> *"If we are not able to match the aggressive pricing of our competitors in PBL channel right now, we will also lose our high margin MRO [replacement product] business in the future"*

When asked about the measurement of their customers, all interviewees of sales team A stated that they measure the revenue of their customers. Some interviewees also mentioned margin as a measure. When the topic was elaborated to measuring demand changes in price change situations only one sales representative commented the topic directly. According to the sales representative price development can only be viewed in the long run and even if demand changes it does not necessarily mean it was because of the price. There needs to be an investigation if the volume has transferred to another product or competitor. Overall, the notion was that assessing price elasticity is behind hard work and when the information is gathered it is already out-dated.

Quantification of customer value was addressed with completely open-ended questions, except for the total cost of ownership topic, where the basic principle of theory was explained to ensure that the interviewee understands what the context of the question is.

First the interviewees were asked to name the most important additional value that the Case Company provides. The sales team A answers revolved around values such as quality of the products, technical support and global availability. Also, broad selection of products, reliable supplier and local warehousing operations were mentioned. When asked about the understanding of customer's business model all interviewees of sales team A confirmed that they are well-aware of how their customers operate. However, when Key Performance Indicators (KPI) of customer

operations were askes, sales representatives answered on time delivery (OTD). The sales manager implied that big customers monitor similar KPIs as the Case Company.

Interviewees of sales team B added to values the close cooperation and support for the customer. One interviewee also mentioned the Finnish origin of the products as an additional value. Also the sales team B confirmed that they know how their customers operate. One sales representative was not completely sure. The sales team leader mentioned that many of the sales representatives have background in Installer companies, which helps understanding the business model of customers. When asked to elaborate on KPI measurements, the sales team leader mentioned KPIs such as profit, sickness absences, recorded work hours on a site and lead times. Sales team B have different approach to sales depending on who they are communicating with.

> *"We adjust our message depending on who we are talking to… the guy installing the product wants to know about how easy and safe the product is to use… the manager wants to know how to make money with our products"*

Sales team B have also conducted extensive research on their stakeholders to pin point what matters most for each stakeholder. They also measure it systematically to identify where they are performing better than the competitors. The sales team leader points out that the additional value created by different suppliers is more or less the same. The difference and competitive advantage is created by outperforming competition in delivering the value to customer

The interviewees of sales team A state that they actively steer conversation away from price in order to create a more favourable sales negotiation.

> *"Price is the last thing you want to discuss with the customer… First you find the technical solution for the customer … create an image*

that customer can't manage without … Eventually you have to discuss about the price"

The sales team B have good capabilities of linking additional value to customer's targets. However, no quantification process exists where the customer value would be transformed into monetary terms. According to the sales team leader of team B, it is more about creating an image for the customer than actually putting benefits down on paper in euros. The key additional value that the sales team B provides is the reachability and professionalism of its sales representatives.

Customer value quantification capabilities at an individual level was assessed by Hinterhuber (2017). In his study four distinct traits were identified as beneficial to increasing the value quantification capabilities of the organization. In this study each interviewee was asked to fill out a short survey, which was identical to the structure of Hinterhuber's original research. By comparing the result of the surveys to the conceptual model presented in chapter 4.2 estimations of each sales teams value quantification capabilities can be made.

Risk taking and creativity is the most influencing trait. Sales team A scored high on willingness to try new ideas and low on creativity. Sales team B scored on average higher in creativity than sales team A.

Questioning style had single highest value in the original study for the questions about pay-off. Sales team A scored slightly better than sales team B in the questioning style mainly due to questions about pay-off

Customer-oriented selling had two sets of questions, out of which the second set was reverse coded. Sales team B scored higher than A. The reverse-coded questions gave team A worse results, which raises concern about the validity of the survey.

Cross-functional collaboration had the most variation in results inside the sales teams. Sales team A score a little bit higher than B.

Knowledge on pricing is difficult to assess in a qualitative study. Interviewees' subjective view on knowledge often leaves room for interpretation. Some significant gaps were however identified. One of the most prominent deficiency in the case company's pricing is the lack of training. None of the interviewees on either team recalled receiving any training related to pricing. Sales representatives from team A said that there had been training on sales techniques, but even their agenda was a mis-match with the business they are in. The sales manager of team A also recalled training on added value sales. One of the issues related to training is that everyone receives the same training modules even if the starting skills and knowledge differ. When asked to name a few pricing topics, which would be beneficial to be included in the training both team A and team B replied with a request of focusing first on the basics of pricing such as how much more do you have to sell if you give 10% discount or how much does 1% price increase add to profits.

Both sales teams report that the biggest competitors use very similar pricing tactics in the market. The sales manager of team B also mentioned that there are some operators in the market who use very questionable tactics to gain market share such as offering to buy competitor stock from customer or offer hard cold cash for each order. Sales manager for team A adds that biggest competitor is able to be more aggressive with price and react faster with leaner organization. Also, in the OEM channel, some of the pricing structures are so old that there is no chance of getting in between those customers and competitors. Sales representative from team A also point out that one competitor uses its unmatched high-quality product group to get market share on other product groups as well.

> *"Our biggest competitor has extremely low prices because they are trying to gain market share from a low-value provider"*

> *"Our main competitor has aggressive pricing strategy on almost all product groups… We have to defend hard just to keep our existing*

customers… Without special pricing we have no chance of getting new customer in the current market situation"

When asked to estimate whether their pricing process is effective, the answers are generally positive. The sales representatives of sales team A state that for small customers no negotiations are even necessarily needed as long as the price increases are moderate. Sales manager of team A on the other hand says that the process is inefficient because of lack of pricing tools and because the information needed for pricing decisions is not readily available. Sales manager for team B thinks that the basic pricing process is efficient and operates smoothly but the project pricing is causing problems because no proper pricing tool is in place. Sales team leader for team B thinks the process is efficient but the problem is gathering all the needed information.

To gather the results of the qualitative research, the same pricing capabilities scale is utilized. The results are summarized in table 5 below.

Table 5. Pricing capabilities in the case company

Items	**Pricing Capabilities (PC)**	**Sales team A**	**Sales team B**
PC1	Using pricing skills and systems to respond quickly to market changes	Some reports on use of SalesForce as the system to share information, most reported that no single process is in place for storing information. Communication mostly inside the team via phone and email	No single process for storing information about the markets. Communication mostly inside the team via phone and email.
PC2	Knowledge of competitors' pricing tactics	While almost all reported to have knowledge on competitor tactics, certain level of doubt exists whether this information is correct or not	Managers have deep understanding of competitors and customers, some sales representatives reported to have good understanding on

			competitors but customers need to be investigated more
PC3	Doing an effective job of pricing products/services	Reported to have effective pricing process when no special prices are required. When product management is required to contact feeder factories, process slows down significantly	All interviewees reported that the process is effective. Some difficulties were reported on specific product range where support from feeder factory was continuously needed.
PC4	Quantifying customers' willingness to pay	Reported on good level of knowledge on market price levels	Reported accurate knowledge on market price levels.
PC5	Measuring and quantifying differential economic value versus competition	Reported that utilization only possible for accessories business, no indication of systematic use in the team	Managers reported on systematic approach to adjusting the value message depending on customer. No monetary quantification in place, value discussed with customer in abstract manner.
PC6	Measuring and estimating price elasticity for products/services	No systematic approach to evaluate price change influence on demand.	No systematic approach to analysing prices after changing the prices.
PC7	Designing proprietary tools to support pricing decisions	Only tools used for pricing are Excel-related, reported a clear need for quotation tool	Only tools used for pricing are Excel-related, reported a clear need for a quotation and reporting tool
PC8	Conducting value-in-use analysis or Total Cost of Ownership	No indication of use from the team	Some level of analysis was reported
PC9	Designing and conducting specific pricing training programs	Reported sales skills trainings, but no specified pricing training	No reports of pricing related training
PC10	Developing proprietary internal	Sales representatives have high responsibility in	Systematic approach to pricing which is clearly communicated

	price management process	pricing. Reported multiple approaches to pricing.	throughout the team and reviewed with product management regularly

As the table indicates, many gaps in the pricing capabilities of the case company were identified. These are discussed further in the chapter 8.

7 PRICING ANALYTICS IN THE CASE COMPANY

The Case Company can utilize transactional data created from invoices to analyse the purchasing behaviour of its customers. By segmenting customers and products into smaller groups it is possible to identify inconsistencies in pricing and implement targeted and well-justified corrections to pricing structure. In this chapter a few of the analysis are presented as examples of pricing analytics applied to the data generated by the case company.

The data was analysed with Tableau, a business intelligence tool well-suited for interactive visualizations. The Case Company has invested in piloting new tools in selected countries to initiate new approaches to price analysis conducted in sales teams. Tableau is a powerful analytics tool that can be connected to virtually any source of data ranging from Excel worksheets to SalesForce database. (Tableau, 2018)

7.1 Boundaries for the data analysis

The total number of customers in the transactional data set is 174. The percentage of individual customer, number of orders and the sales revenue per channel are presented in table 6.

Table 6. The number of customer, number of orders and sales revenue per channel [%]

Channel	number of customers	number of orders	sales revenue
DIS	13%	61%	78%
PBL	34%	31%	18%
OEM	32%	7%	3%
INST	21%	1%	1%

DIS channel is the biggest channel both by amount of individual orders and sales revenue. PBL is the second biggest channel by the amount of sales revenue, but largest by the number of customer and individual orders. OEM channel has almost

as many customers as PBL but its order amount and sales revenue fall far behind. INST practically has no sales, but it is due to the data set. In order to better understand the sales revenue of INST channel, funnelling data set needs to be analysed. Because only sales team B is selling to INST channel, the funnelling data set is filtered based on sales representatives who belong to sales team B.

According to the combined data sets, approximately 31% of sales revenue to DIS was generated by funnelling to INST. Also, approximately 13% of DIS was generated by funnelling to PBL or OEM. However, because no exact separation can be made, only the INST sales revenue is adjusted for the table 7 below. It is important to mention that the amount of funnelling to PBL and OEM is significant, and the number presented in the table are merely to give general understanding of the channel division in the case company.

Table 7. Sales revenue adjusted for INST

Channel	number of customers	number of orders	sales revenue
DIS	13%	61%	**(55,5%)**
PBL	34%	31%	18%
OEM	32%	7%	3%
INST	21%	1%	**(24,5%)**

For the most of analyses created it is important to keep in mind that while the results apply for PBL channel directly, data corrections need to be made to count INST and OEM shares in DIS channel sales data. Going forward all the analyses are separately done for BU1, BU 2 and BU 3 to increase granularity and the applicability of the results. Below in table 8 the segmentation for the analysis and the created analysis for each segment is presented.

Table 8. Segmentation for analysis and conducted analysis per segment.

Channel / BU	DIS	PBL	OEM	INST
BU 1	-	Customer-pareto, "20-225", price band, price percentiles	Scatter plot revenue vs. number of orders	-
BU 2	-	-	-	-
BU 3	Pocket price waterfall	-	-	-

7.2 Pareto and "20-225" analysis for the Case Company

For the customer-pareto, all the customers were listed from largest to smallest and their revenues displayed as percentage of total. For BU 1, 8% of customers brought in 80% of the revenues. Because the channel data is mixed, the pareto is drilled down to look into PBL channel only. For BU 1 in PBL, 17% of customer brought in 80% of revenue. The customer pareto is illustrated in figure 15.

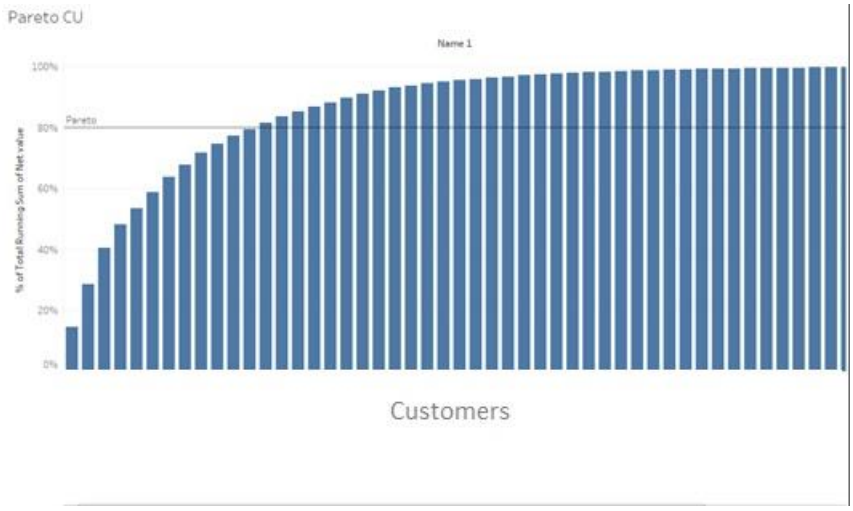

Figure 15. Customer pareto, BU1, PBL

The case company has effectively 10 customers in BU1-PBL segment whose pricing need to be planned carefully. For the rest some level of automation and

structure need to be created to make the pricing process more agile and accurate. For BU3 in PBL, 27% of customers brought in 80% of revenues, which is quite similar spread for revenues. There are also same customers at the top in both BUs, so it is safe to assume that for PBL channel the most significant customers are the top 12 revenue providers.

When looking at the margin generation of each customer, the "20-225" rule somewhat applies. The overall margin level is higher than what figure 16 illustrates. In the existing pricing structure most of the PBL customers have a special transfer price in place. The values for the chart were calculated with normal transfer price. Interestingly, not all of the top revenue customers landed close to each other in the middle of the chart. The biggest revenue customers are located at the opposing ends of the margin chart. This highlight the unbalance of the pricing structure in the case company, where depending on the product mix customers can be highly profitable or drop down below zero margin. The sales manager stated that roughly estimating a customer is profitable if their margin exceeds 12%. In PBL, roughly 20% of customers fall below this limit.

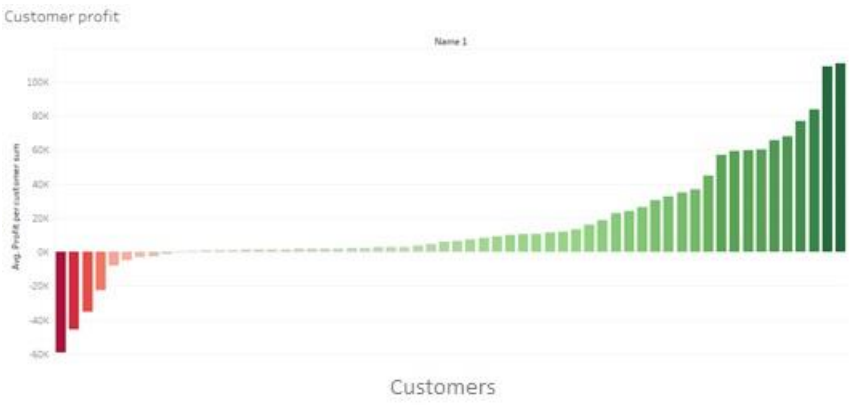

Figure 16. Margin per customer, PBL

The case company should utilize "20-225" rule in combination with the pocket margin waterfalls to investigate the least profitable customers' impact on business

as a whole. Getting rid of negatively profiting customers will increase profits, it will send a signal to customers that the case company has set limits to the behaviour accepted from customers and it will free up resources of sales force to pursue new customers and take better care of existing customers.

7.3 Pocket price analysis for the Case Company

The case company has multiple off-invoice discounts in place for different customer with the largest amount typically being incorporated to agreements with the DIS channel. The data set for analysis of all the discounts, rebates and bonuses is incomplete, which is why creating customer-level analysis is hard. With some hard-coding the funnelling data set could be combined with the transactional data to create a product-level view on pocket price waterfall for one customer. Figure 17 presents the results of waterfall analysis of one product.

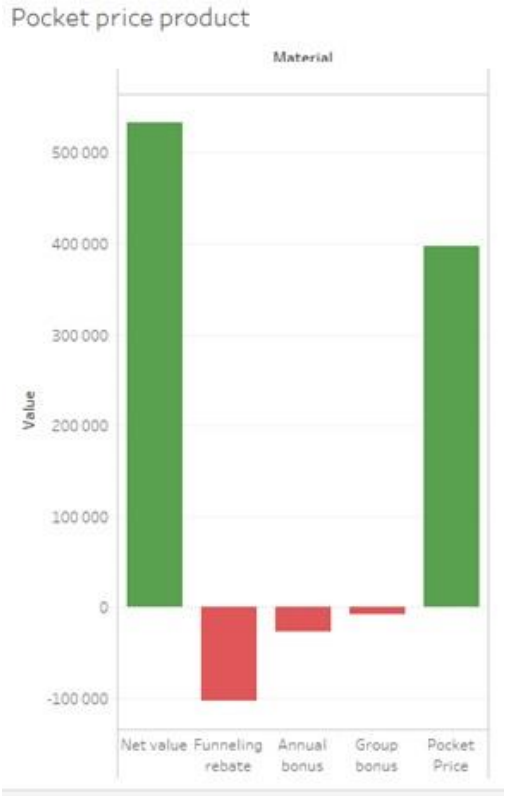

Figure 17. Pocket price waterfall, BU3 DIS no list price

As can be seen from the figure, funnelling rebates are almost 20% of the invoiced price, while annual bonus is 5% and group bonus 1,3% of invoiced price. After the items were invoiced, over 25% was paid back to customer in form of some rebate or bonus. This particular product did not have a list price since it was directly priced for the customer.

In another product for the same customer the waterfall differs significantly. In figure 18 the results of waterfall analysis are presented.

Figure 18. Pocket price waterfall, BU3 DIS list priced

For the second analysed product the customer is first given 73% discount on the product on-invoice. After that a 30% funnelling rebate, 5% annual bonus and 1,3% group bonus are issued from the invoiced price.

By just looking at these two example products that are sold to one DIS customer, it is obvious that there are multiple different approaches to pricing in the case company. In order to capture full benefits of waterfall analysis, the case company

needs to improve its data quality especially on the off-invoice rebates and bonuses. Pocket price calculations require data to be in the same granular level as the transactional data. To be able to include funnelling data into transactional data the case company needs to develop its funnelling process.

7.4 Price band analysis for the Case Company

The case company relies heavily on direct net pricing products for customers. This easily creates a situation where the company is issuing multiple different prices for customers with no real knowledge on how wide the price band of their products is. To address this issue a price band analysis was conducted to one of the core products of the case company. The results of the analysis are illustrated in figure 19 below. To make the chart easier to read the unit price bins were fixed to 2€, which resulted in 9 unit price bins with 20€ spread. This means that the width of the band is 480%.

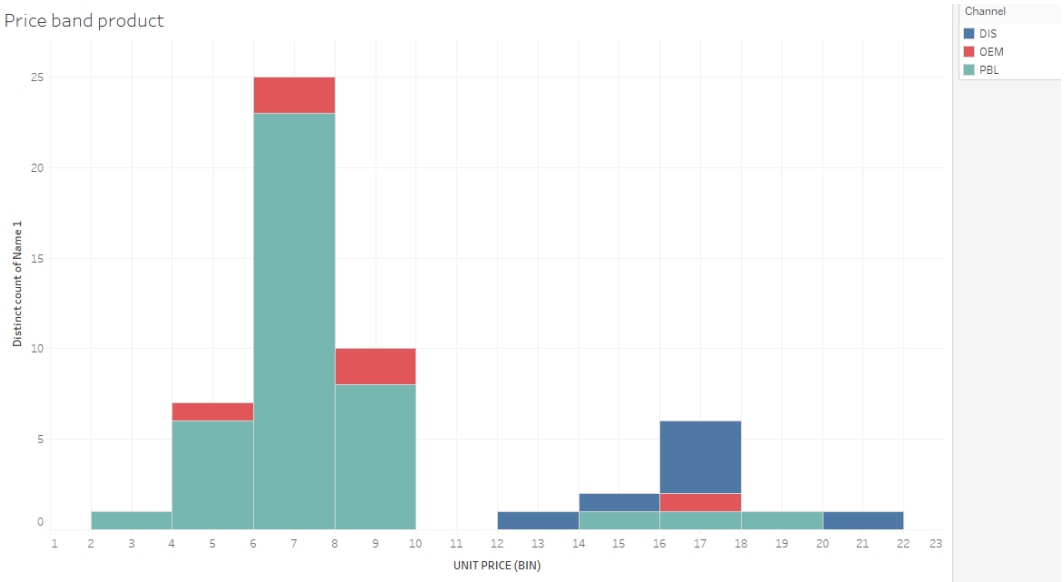

Figure 19. Price band, BU1

As can be seen, the Case Company has issued multiple prices for one of its core products. This isn't necessarily a bad thing, because price variation creates

opportunity for differentiating the customers by price. Interestingly there is a clear gap in the price levels with DIS channel and small parts of PBL and OEM channels on the higher side and most of the PBL and OEM on the lower sides of the price band. This is explained by the pricing structure of the case company. The list price structure, which is mainly used by DIS customers, has reached such a high level that the actual industry market price level is over 50% smaller. When the price band is drilled down to PBL and the bin sizes are reduced to 0,1€, the price band narrows further. In figure 20 below, a closer look into the same product can be made.

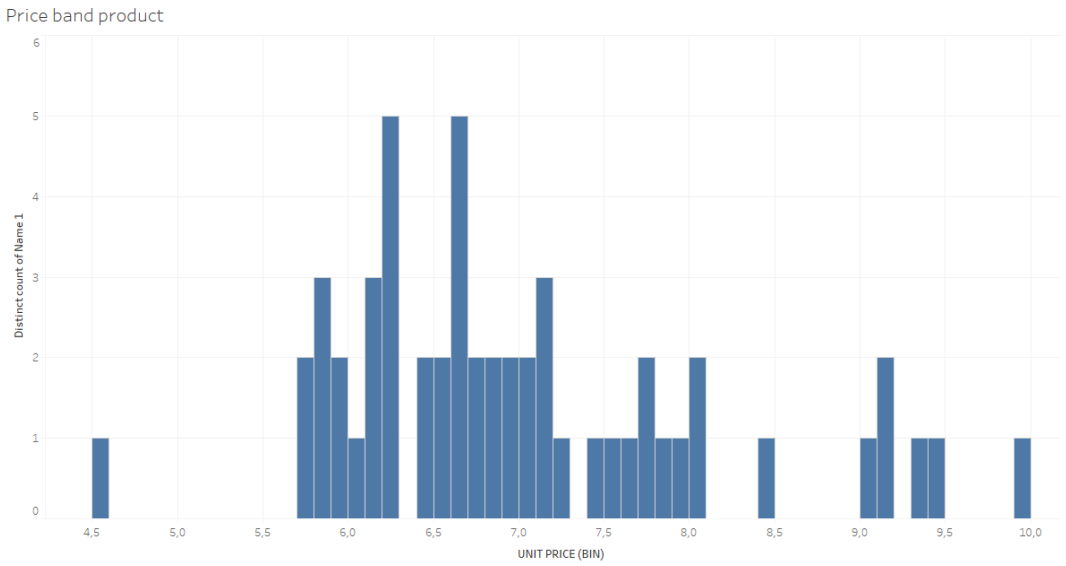

Figure 20. Priceband, BU1 PBL

At the PBL level the width of the price band is still 220%. Most of the sales are made inside three distinct groups near 6€, between 6,5-7,0€ and between 7,5-8,0€. Combining singular product views together the case company could map similarities between product price bands inside the same product groups and generate discount groups for customers in the PBL channel. Harmonized discounts make pricing structures easier to understand and enables the sales team to price products with confidence.

Another view on the distribution of price in different segments is the percentile distribution. In this analysis a simple percentile calculation was applied to a product group that had a high amount of distinct customer. Every product in that product

group is listed, highest revenue generating product at the top, and 8 price points are calculated. The results are presented in figure 21 below.

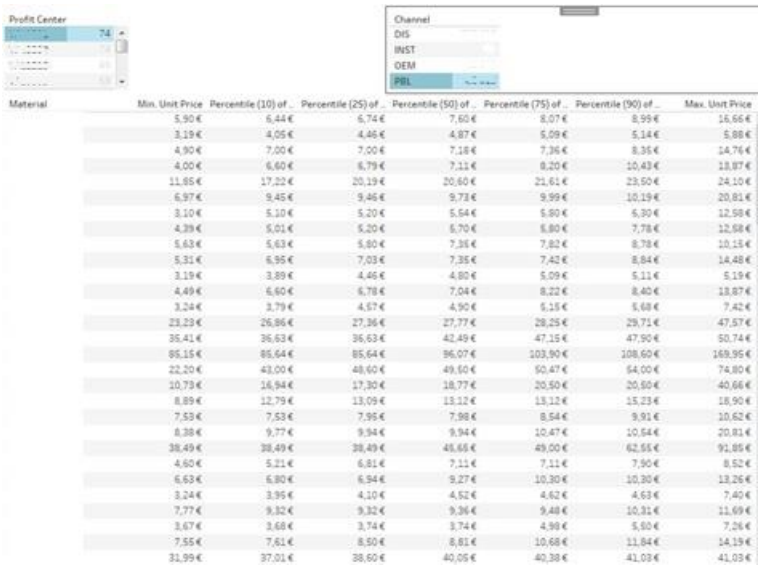

Figure 21. Price percentiles for multiple products, BU1 PBL

As a result, these percentiles can be utilized as a basis for price differentiation. Moving all the customers, whose prices fall in between two percentiles, up to the next percentile will generate more profit for the product.

7.5 Other visualizations for the Case Company

In a more broader level, analysis focusing on comparing customer revenue against the discount they have received or against their order size can generate valuable insight into how the current pricing structure is segmenting the customers. As suggested before, the case company should focus on collecting "the low hanging fruits" first. This means conducting analysis on broad level, identifying outliers and investigating why each outlier exists. For example, in figure 22 the customers of PBL are presented on a scatter plot with revenue on a logarithmic scale and average discount as the axis.

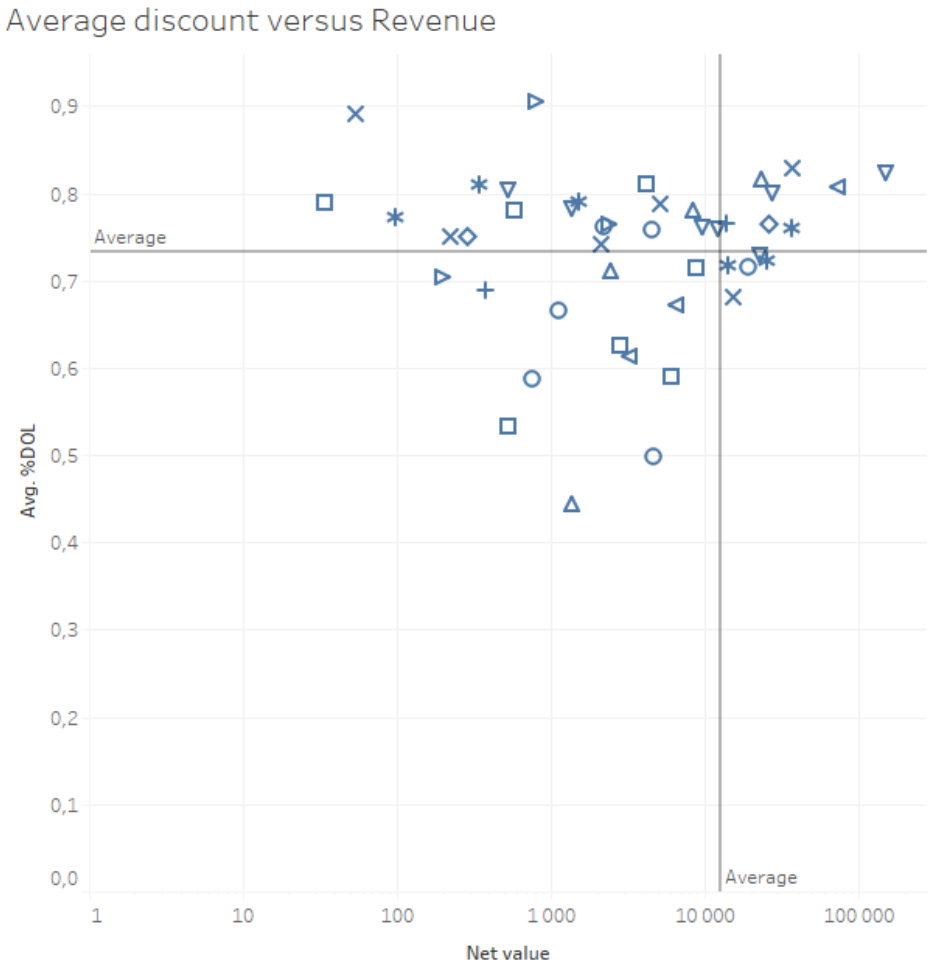

Figure 22. Scatter plots revenue vs. average discount, PBL

The case company should investigate why customers in the upper right quadrant are receiving higher discounts than the customers with 1000 times better revenue in upper right quadrant.

Another view is the scatter plot with revenue and number of orders presented in figure 23. Here two avenues of investigation can be initiated. First, the case company could interpret that since OEM customers in the lower left quadrant are purchasing low amounts only a few times in a year, they could be more accepting of a price increase. Second, should customers with high frequency purchases be addressed? At least the case company should turn this behaviour into value by informing the customer how uniquely they are behaving and that the case company is ready to continue this service, but it is going to cost more in the future.

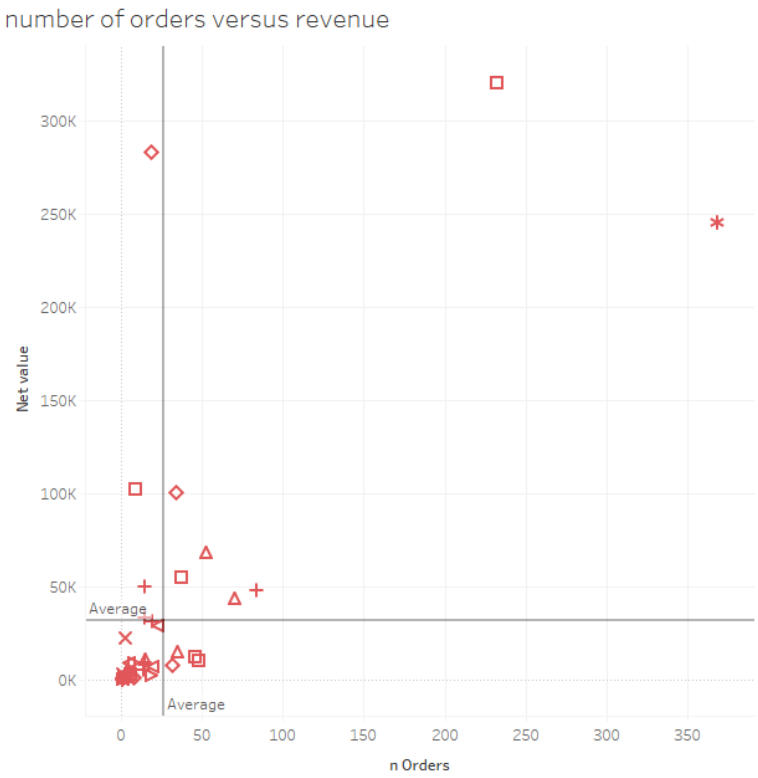

Figure 23. Amount of orders vs revenue of customer.

In practice there is an unlimited amount of ways to analyse data created in companies with every transaction. The biggest challenge is to understand what the results are saying, and also to be able to ask questions that lead to discovery.

8 DISCUSSION

In this chapter the findings of the qualitative and quantitative research are summarized, and theoretical and managerial implications provided. Limitations of the study are discussed. The purpose of this chapter is to give a clear picture of the findings of this study and to answer the research questions.

8.1 Fulfilment of the objectives and answers to research questions

The objective of this study was to investigate the current state of pricing in the case company and to create a baseline for future development of pricing processes. The outcome of the study was to define current pricing strategy in the case company, to identify gaps in pricing capabilities and to give initial examples of the pricing analytics and benefits. The study set out to answer the following three research questions:

- *What type of pricing strategies are used in the case company?*
- *At what level are the pricing capabilities of the sales function?*
- *What benefits can case company derive from adjusting its pricing?*

For the first research question an extensive literature research was conducted to create understanding on pricing strategy and to validate the best practices for pricing in industrial companies. The literature review concluded that value-based pricing strategy is the dominant strategy despite its present low implementation rate. In order to better understand the difficulty of implementing value-based pricing strategy, the literature review was expanded to investigate pricing capabilities generally proven to be beneficial to companies wishing to improve their pricing function. The pricing strategy used by the Case Company is competition-based. Depending on the sales team, the strategy either shares similarities with cost-based pricing strategy or value-based pricing strategy. In new product pricing scenarios, the Case Company utilizes price skimming strategy. The difference between the two sales teams' pricing strategies is mainly in the price management side. In sales

team B, the strategy is kept simple in order to facilitate fast and accurate pricing, whereas in sales team A high priority is given to the independency of the sales representatives. Sales team B has also expanded the concept of price management to contain people from product management, whereas in sales team A there seems to be a communication issue between the sales team and product management.

For the second research question, a theoretical assessment scale for pricing capabilities was adopted as the basis for the qualitative study. The 10-item pricing capability scale by Liozu & Hinterhuber (2014) was utilized to analyse each sales teams' current pricing capabilities by interviewing the sales managers and sales representatives. The scale was divided into three themes to accommodate open questions in the interviews. The themes were pricing systems, tools and processes, customer value quantification capabilities, and pricing knowledge. In the Case Company, the tools are a scarce resource. All of the interviewees highlighted the necessity of a functional quotation and reporting tool. Currently most of the pricing analysis and decisions are done with Excel. The increased requirement to analyse customers and products at a more detailed level needs to be met with professional tools. Pricing processes towards the customers were generally considered to be effective, albeit sometimes time-consuming. Both sales teams stated that problems occur when feeder factories are included in the process. Value quantification capabilities were more present in the sales team B. Neither of the teams however, actually quantified customer value, but it was reported to be an important factor in customer purchase decisions and therefore actively utilized by sales. The sales team B displayed extremely deep understanding of customer business models. Knowledge on pricing has cumulated over the years. Both sales team reported to receive no training on pricing related topics. The level of understanding competitor pricing tactics was considered to be on good level. This can however, be misleading since it is not likely that all the competitors would be using similar approach to pricing as the case company, like the sales teams stated. In fact, some literature sources imply that some of the case company's biggest competitors have already begun the journey to pricing excellence. It is therefore important to state that

improving the state of pricing knowledge in the sales team has to be among the top priorities for the case company.

For the third research question, the literature review was expanded to contain customer perceived value, especially the theory about reference prices. As many sources in literature have stated, implementing a major shift from cost- or competition-based pricing to value-based pricing is challenging to any company and usually takes a long period of time. In order to facilitate the company with tools to identify and benefit form quick-wins, a short investigation into pricing analytics was made. The information on zone of indifference relied heavily on the internal presentations of Dr. Zaki, who also provided one of the main theoretical implications of this study, the model of zone of indifference (presented in chapter 3.2). In addition to the benefits identified from literature this study provided some examples on the types of analyses that can be utilized to identify easy-to-implement pricing actions that increase profitability.

8.2 Managerial implications

The signs of change are already visible in the Finnish market. It is therefore outmost important for the case company to react quickly to these changes. According to the findings of this study, the most important focus area is the pricing knowledge of sales teams. In order to facilitate improvements, following steps could be considered:

- Training on Value-based Selling, which is already available in the case company
- Organizing a workshop for the two sales teams where general pricing fundamentals would be covered and pricing strategies currently in use freely discussed and shared
- Requesting specific online training from division management
- Purchasing few copies of high-quality literature on pricing to promote the importance of pricing with physical evidence

Another crucial development area are the systems, tools and processes, where the following improvements would fit the overall strategy of the case company

- Implement a Quotation tool
- Re-define the pricing structure and unify the approach to pricing between the two sales teams
- Re-work the incentives to focus on profitability instead of volume
- Promote price Champions and reward sales representatives whose customers are outperforming their peers

8.3 Limitations of the study and future topics of research

This study was conducted as a single case study and its results can not therefore be generalized. The study was restricted to include only component business in a Finnish context and therefore these results can not be generalized to other markets or to service business. Qualitative research has its limitations because it is completely dependent on the researcher's subjective perceptions of the data. Alternative interpretations of the same data could result in different conclusions.

As stated in the beginning the topic of B2B pricing is heavily under-represented in current marketing and pricing literature which is why further research on the topic is needed. A good future avenue of research would be a quantitative analysis on the pricing capabilities of publicly traded Finnish companies. The research could try to validate the findings of Liozu and Hinterhuber (2014) in the Finnish context.

9 CONCLUSIONS

The objective of this study was to give an extensive outlook on the current literature on pricing in industrial context as well as identify they key pricing capabilities expected from a company to be able to successfully implement value-based pricing strategy. The study also gave a thorough explanation on customer perceived value and reference price. In addition to that this study managed to bundle together historical development of zone of indifference and provide a clear illustration of the theory. To provide context to theoretical setting and to reach the objectives of this study, a qualitative research was conducted in the form of a single-case study.

The first theoretical structure was an investigation into different types of strategies in industrial markets and their current, validated status. Pricing strategy research development was described, and the challenges of industrial pricing widely discussed. The outcome of first theoretical review was the dominance of value-based pricing over other pricing strategies. To further increase to level influencing value-based pricing, theoretical investigation was continued with the topic of pricing capabilities. There, one of the latest frameworks on the topic was utilized to generate themes for the qualitative research. The third avenue of theoretical investigation in this study was the theory on customer perceived value, especially customer reference prices. This topic was drilled down to reach the theory base for zone of indifference. From this investigation a model for zone of indifference was created to give input to theoretical foundation of pricing analytics.

To summarize, the theoretical context of the study the three theory topic are presented in table 9 below, each provided with reasons to include in the study, key inputs to thesis as well as the implications to the case.

Table 9. Theoretical context of the thesis

Theory	B2B pricing	RP & ZOI	Pricing capabilities
Reason for inclusion in thesis	Investigate the development of pricing in B2B, Identify key strategies for pricing, Create benchmarks of successful pricing in B2B	Expand the value approach to measurable context, Investigate the factors influencing customer purchasing decision, Describe the justification of minor price changes that have no influence in demand	Identify the key capabilities of a company related to pricing, Divide the capabilities into themes for easier analysis, Describe the method for value quantification
Key input to thesis	Value-based pricing is ”the best” approach while cost-based pricing is the most common one, Mapping of typical challenges in B2B pricing and the most common manager and customer rational thinking biases	Detailed description of how customers create reference prices, Formulation of Zone of Indifference model which justifies the existence of the price thresholds, Investigation into different ZOI scenarios and overall pricing analytics	The theoretical development of pricing capabilities, The 10-item scale for benchmarking company pricing capabilities, Investigation into value quantification capabilities to clarify the know-how required to utilize value-based pricing
How was it used in case study	Together with the interviews a clear picture of current pricing strategy in case company was created. Also, the pricing structure of the case company was assessed. The researcher also utilized the rational thinking biases when analysing the findings.	With the transactional data different analysis was created with the aim of finding opportunities to increase prices without affecting the purchasing behaviour of the customer	Each pricing capability theme was identified from the interviews. The 10-item scale was used to analyse the pricing function of the case company. Major gaps in pricing were identified and preliminary action suggestions made based on the findings of the interviews and literature review

The qualitative research for this study was accomplished with 7 semi-structured interviews. The purpose of the interviews was to get a clear picture of the pricing strategies and structure in place in the Case Company. Interviews also provided good foundation to the current state analysis of pricing capabilities in the Case Company. The key result of the interviews was the identification of largest gaps in pricing capabilities. Based on the analysis of the interviews development suggestions on pricing knowledge as well as systems, tools and processes were given.

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APPENDICES

Appendix 1. Interview questions divided into preliminary themes. 4 pages. In Finnish.

Qualitative study

Background questions:

- Kauanko ollut töissä Case-yrityksessä?
- Kauanko ollut yhteensä töissä myyntiyksikössä?
- Vastuualue myynnissä?

Knowledge on pricing inside the company and in the market [PC2, PC3 & PC9]

Inside

- Millaisella tasolla koet tietosi hinnoittelusta yritysten välisessä kaupassa olevan?
    - Mikä on ollut tärkein lähde hankkimallesi tiedolle? (kokemus vai joku muu?)
- Mikä on tärkein käyttämäsi hinnoittelustrategia?
    - Mitkä ovat mielestäsi ko strategian vahvimmat puolet ja heikoimmat puolet?
- Käytätkö erilaisille asiakkaille eri lähestymistapoja/strategioita vai onko kaikkien kohdalla enemmän tai vähemmän kyse samanlaisesta lähestymistavasta?
- Millainen on tyypillinen hinnoitteluprosessi kohdallasi?
- Miten arvioisit sinun tärkeimpien asiakkaiden hintojen kehittyneen vuonna 2017?
- Miten kuvailisit hinnoitteluun liittyvän tiedon jakoa myyntitiimin ja asiakaspalvelun välillä?

- Entä myyntitiimin ja tuotehallinnan välillä?
- Millaista koulutusta hinnoitteluun liittyen olet saanut Case-yrityksessä?
- Millaiselle hinnoitteluun liittyvälle koulutukselle olisi eniten tarvetta?

Outside

- Kuinka tehokasta koet hinnoittelusi olevan?
    - Kun hinta annetaan asiakkaalle, saadaanko se pysymään?
    - Montako kertaa neuvotteluissa joudutaan tarkentamaan hintaa vai osuuko ensimmäisellä oikein?
    - Hinnoittelu ei vähennnä asiakkaan halua ostaa (eli volyymi vähene hinnoittelun takia)
- Osaatko sanoa, millaisia hinnoitelukeinoja kilpailijat käyttävät?
    - Mikä hinnoitteluperuste on mielestäsi suurimmalla kilpailijalla käytössä?
- Mitä mieltä olet, tunnistavatko asiakkaat toimittajien väliset erot hinnoittelussa?
- Millaisena pidät Case-yrityksen kyvykkyyttä hinnoittelussa verrattuna kilpailijoihin?
    - Annetaanko tarkempia hintoja?
    - Annetaanko hinnat nopeammin?

Pricing tools, systems and processes [PC1, PC6, PC7 & PC10]

- Millainen on roolisi hinnoittelussa Case-yrityksessä?
- Kuinka selkeänä pidät hinnoitteluprosessin vastuujakoa Case-yrityksessä?
    - kuka tekee mitä?
- Kuka tekee päätöksen hinnasta?
- Tukevatko nykyiset tietojärjestelmät hinnoitelupäätösten tekoa?
    - Mitä hyviä puolia on?
    - Mitkä ovat suurimmat puutteet?
- Onko nykyinen päätöksentekoprosessi mielestäsi tehokas?

    - Mikä olisi tärkein kehityskohde hinnoittelupäätösten tekoprosessissa?
- Millaisia työkaluja sinulla on käytössä hinnoittelussa?
- Millaisien työkalujen uskoisit edistävän omaa kykyäsi hinnoitella?
- Millaisia analyyseja tarvitset hinnoittelupäätöksen tekemiseksi?
    - Eli mitä analyyseja teet päättääksesi tuotteen hinnan
- Tukevatko nykyiset työkalut asiakkaiden segmentointia?
- Millaisilla mittareilla seuraat asiakkaitasi?
    - Seuraatko asiakkaiden ostokäyttäytymisen muutosta hiannankorotuksissa?
- Millä tavoin saat tietoa muutoksista markkinoilla?
- Missä muodossa talletat tämän tiedon?
- Onko Case-yrityksellä yhtenäistä prosessia, jolla tietoa kerätään ja talletetaan?
- Miten tieto muutoksista jaetaan organisaatiossa?
- Kenelle kaikille sinun mielestäsi tätä tietoa tulisi jakaa organisaatiossa?

Customer value quantification [PC4, PC5 & PC8]

- Millaista lisäarvoa koet Case-yrityksen tuottavan asiakkailleen?
    - Mitkä lisäarvot ovat kaikkein tärkeimmät?
- Kuinka hyvin koet tuntevasi asiakkaidesi liiketoimintamallin?
    - Millaisilla keinoilla olet kerryttänyt tietoa asiakkaiden toimintamalleista?
- Osaatko sanoa millaisia KPI mittareita asiakkaasi käyttävät oman toimintansa seuraamiseen?
    - Esimerkki vaikka yhdestä isoimmasta asiakkaastasi
    - Miten tarjoamamme lisäarvo linkittyy näihin mittareihin?
- Miten vertailisit Case-yrityksen ja kilpailijan tuottamaa lisäarvoa asiakkaalle?

    - Onko Case-yrityksellä (tai sinulla) käytössä työkalua/prosessia, jolla voidaan mitata tuotettu lisäarvo asiakkaalle?
- Mitä asiakkaat yleisimmin vertailevat Case-yrityksen tarjooman ja kipailijan tarjooman välillä?
    - Miksi asiakas vertaa näitä?
    - Mikä olisi mielestäsi paras vertailukohta?
- Käytätkö kokonaiskustannusajattelua (Total cost of ownership) kommunikoidessasi tarjoamaa asiakkaalle?
    - Lyhyesti: Hankintaa edeltävät kustannukset, Hankintakustannukset & Hankinnan jälkeiset kustannukset
    - Millaisia kustannuksia käyt läpi asiakkaan kanssa?
- Miten laajasti arvioisit asiakkaiden ottavan huomioon muitakin seikkoja kuin hinnan ostopäätöksissään?
- Asiakkaalla on aina ostopäätöstä tehdessä jonkinlainen referenssihinta mielessään. Millaiset kyvyt Case-yrityksellä on tunnistaa tämä referenssihinta?
    - Millaiset koet Case-yrityksen vaikuttamismahdollisuudet asiakkaan referenssihintaan olevan?

Appendix 2. Survey on value quantification capabilities sent to interviewees after the interview. 3 pages. In English.

Survey on customer value quantification

Topic: Risk taking and creativity

Mark x to the most fitting box for each statement

	Strongly disagree	Disagree	Agree	Strongly Agree
I am willing to take risks				
I am willing to try new projects and ideas				
I have a rich entrepreneurial spirit				
I am creative				

Topic: questioning style

Mark x to the most fitting box for each statement

	Does not apply	Some-what applies	Mostly applies	Fully applies
I spend a lot of time asking questions about the customer's current situation (e.g. “Who are your main competitors?” “From whom else to you buy similar products to our own products?”)				
I spend a lot of time asking questions about the customer's problems, difficulties, or dissatisfactions (e.g. “What prevents you from achieving higher quality?”)				

I spend a lot of time asking questions about the consequences of the customer's problems on her/his operations (e.g. “What effect does this problem have on output?”)				
I spend a lot of time asking questions about the payoff of a possible solution on the customer's operations (e.g. “If we did XXX, how much would you save?”)				

Topic: Customer-oriented selling

Please mark x to number between 1-9.

1- True for NONE of your customers (NEVER)
2- True for ALMOST NONE…
3- True for A FEW…
4- True for SOMEWHAT LESS THAN HALF…
5- True for ABOUT HALF…
6- True for SOMEWHAT MORE THAN HALF…
7- True for a LARGE MAJORITY…
8- True for ALMOST ALL…
9- True for ALL of your customers (ALWAYS)

	NEVER			…			ALWAYS		
	1	2	3	4	5	6	7	8	9
I try to figure out what customer needs are. (Helping customers assess their needs)									
A good employee has to have the customer's best interest in mind									
I try to bring a customer with a problem together with a product/service that helps solve that problem. (a desire to help customers make satisfactory purchase decision)									
I offer the product/service that is best suited to the customer's problem. (offering products that will satisfy those needs)									
I try to find out what kind of products/services will be most helpful to a customer									

I try to sell as much as I can rather than to satisfy a customer. (avoiding the use of high pressure)									
It is necessary to stretch the truth in describing a product to a customer. (describing products accurately)									
I try to sell a customer all I can convince them to buy, even if I think it is more than a wise customer would buy. (avoiding deceptive or manipulative influence tactics)									
I paint too rosy a picture of my product/service to make them sound as good as possible.									
I decide what product/service to offer on the basis of what I can convince customers to accept, not on the basis of what will satisfy them in the long run.									

Topic: Cross-functional collaboration

Please mark x to number between 1-7

1=Strongly disagree … 7=Strongly agree

	Strongly disagree			…	Strongly agree		
	1	2	3	4	5	6	7
I rely on my peers from other departments in order to meet my customers' needs.							
I communicate with my colleagues on proposed solutions for my clients.							
I consistently share client information with others in the company.							
Communicating client needs is important in winning business.							
Communicating client needs is important for client retention.							
Communicating client needs is important in achieving customer satisfaction.							
I communicate with my sales manager regarding potential sales opportunities							