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Optimization of Customer Service with Respect to Profitability and Customer Satisfaction: Case study of Hilti

Master thesis

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Declaration of Authenticity

I hereby declare that the Master´s Thesis "Optimization of Customer Service with Respect to Profitability and Customer Satisfaction: Case study of Hilti" is my own work. . I also hereby declare that I have mentioned all the sources and have quoted them correctly.

Prague, 18 December 2013

Signature
Bc. Jindrák Jiří

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Abstract

The Master's thesis focuses on customer satisfaction and its relationship to profitability, which is becoming an increasingly more relevant topic of daily discussion among the managers across all industries. The search for an optimal strategy that would lead to a consequent increase of both could be compared to a search for the "holy grail" or to an invention of the "perpetuum mobile" of business. The overall goal of my thesis is to design a strategy that would have the abovementioned attributes and would lead to an increase of profitability and customer satisfaction for the Hilti Czech republic and its after-market service. The theoretical part reviews the general academic literature connected with the topic. The practical part focuses on the company Hilti AG - a global premium provider of building construction tools and consumables in B2B segment, and examines especially its after-market service department. The first section of the practical part analyses the outcomes of the qualitative expert in-depth interviews with managers across different business units and departments and with real customers. The second part of the practical part proposes concrete steps that will lead to an increase of profitability and customer satisfaction.

Key words:
Customer service in B2B, After Market Service, B2B market, Customer satisfaction, Profitability, Optimization, Hilti, Qualitative research, in-depth interviews

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1. Introduction

Customer satisfaction and its relationship to profitability is nowadays discussed on daily basis among managers not only of international companies. The search for a strategy that would lead to a consequent increase of both could be compared to the search for the “holy grail” or to the invention of the “perpetuum mobile” of business. This is the overall goal of the present master thesis; to propose specific steps for the Hilti company that would lead to an increase of profitability and customer satisfaction.

I have decided to write this Master's thesis about customer satisfaction and profitability management within the company Hilti, when I got in touch with the Hilti company during my CEMS internship at the strategic marketing department in Hilti Russia, where I was working on several projects that were focused on customer satisfaction. I remember I was amazed how the company put customer satisfaction on the first place when doing business and still remains profitable. Furthermore, I found this topic very interesting since I have had my own business in the event management sector where customer satisfaction was in general the main focus and profitability was on the second place.

The whole project was initiated by top management team of Hilti Czech Republic, the local market organization of the Hilti company, on the basis of on-going incremental focus on increasing profitability and professionalism of the core business operations (Profitability enhancement program, 2011). Until now most of the business units within the Hilti company have undergo a restructuring process that had led to an incremental profit. Currently the after-market service department is being analysed The initial research done by local after-market service department has shown that Hilti Czech Republic has profitability issues with some service repairs, due to wrong spare parts pricing and current set up of Top Stop Limit Levels. Therefore the current management asked me to deeply analyse the current status of the company after-market service and to propose specific steps that would lead to an increase of the profitability without any reduction of the level of the customer satisfaction. The main objective of this master thesis is to draw concrete steps that would lead to an increase of the profitability of the Hilti company after-market service and additionally assure such steps should not affect the customer satisfaction. In order to propose a valid recommendation that would be applicable within the business model of the Hilti company, research had to be conducted. The research was conducted via in-depth interviews due to the complexity of the internal processes and the complexity of the industry. The research was divided into internal and external based on the status of the interviewees. The internal in depth interviews were conducted with local and regional process expert and with local and regional manager of the Hilti company across different departments, in order to get initial understanding of the industry and moreover the processes inside the company (in total 15 interviews). The internal in-depth interview has helped me to draw the hypotheses, which were further analysed during the external interviews. The external in-depth interviews were conducted with the real customers, the list of customers was provided with the Hilti company, in order to get better understanding of the customer point of view (in total 60 interviews). The analysis of the outcomes of the interviews has pointed out the main areas that need revision or further improvements. The research has identified three main areas within the Hilti company after-market service system that are causing the low level of profitability (Spare parts pricing, Top Stop Limits and After-market service marketing communication). This was a real time project within the Hilti company and all the solutions outlined in the recommendation part had to be supported with relevant data and potential impact had to be calculated on overall business that would help the top management to make the right decision. In order to make qualified projection of the impacts, complex interactive model was developed. The model simulates the repairs in the year 2012 and immediately shows the incremental profit and change in customer satisfaction.

Since the whole project revolves around customer satisfaction and profitability, the theoretical part of this Master's thesis reviews the academic literature whose topics are influencing customer satisfaction and profitability. In the first section of the theoretical part the focus is aimed at brand perception importance, the alignment of products and additional service brand perception. Furthermore in this section the relationship marketing is stressed since it is specific for the Hilti company and allows a certain type of behaviour towards the customer, compared to transactional marketing which is now used for the Hilti after-market service. The second section of the theoretical part is dedicated to the difference between product and service brand perception. In the third section the theories that track the compatibility of customer satisfaction and profitability are outlined. The theoretical part serves as support and argumentation for the final recommendation.

2. Theoretical Part

The methodology used in this Master's thesis can be divided into three main focus areas. The methodology in general builds solid ground for the concrete proposal in the recommendation part. In the first section of the theoretical part I will outline the importance of the brand perception alignment of the product and its after-market service. Furthermore I will stress the importance of the relationship and its ability to steer the overall customer satisfaction in B2B segment. The second section of the theoretical part is devoted to the difference between product and service brand perception. The third section of the theoretical part is dedicated to the aspects of customer satisfaction and to the overall profitability relationship.

2.1. The Importance of the Brand positioning

Competition for survival among firms has become increasingly fierce in our consumption-based society, where potential supply exceeds the demand. For firms that can survive only by continuously selling new products to consumers who already have enough of, the essence of competition is discrimination: showing that the products one firm produces have something different or better than the competing products (Lee 1989). These differences do not include absolute discrimination, since many companies have the resources to compete, but instead the differences refer to relative discrimination elicited successfully in the mind of the consumer. One of the most important tasks for marketers is to develop a product image that can be discriminated, or discerned, from all others (Song 2003). Promotion, according to Pollay (1983), should express consumer values in order to induce the perception of a product as desirable. In addition to that, the value of the product and its services should be communicated properly in order to align the value perceived and the value received within the customer base. This value should be communicated through the brand communication that can largely vary, depending on how the brand is perceived by the company. Moreover, it is necessary to mention that the product and its service should be communicated in alignment of the overall brand perception.

The four major brand management paradigms, according to Louro and Cunha (2001), are classified along two dimensions: dimension of Brand Centrality or the dimension of Customer Centrality.

The Brand Centrality dimension asks the question of how management perceives the brand in terms of its importance to customer purchasing decisions. On one side of the spectrum, management can perceive their brand as a non-determining factor in the customer’s purchasing decision, as it is the case, for example, in toothpicks manufacturing. In these circumstances, management treats the brand as a legal and visual tool, the brand name is used mainly to appear on legal documents and the visual logo is used to create attractive packaging.

Alternatively, management may think that their brand is the determining factor for the purchase; Ferrari is an example of such an approach. When a person purchases Ferrari, he or she does so not because of the physical car, but because of the prestige that comes with owing a Ferrari. The Customer Centrality dimension asks the question to what extent does the management believes the customer is involved in shaping the product experience. On one hand, a customer may simply be the recipient of the marketing communication; this approach is exercised by the management of such companies as Coca-Cola. In case of Coca-Cola, the company actually tells the consumer beforehand what type of experience he will have with the brand. On the side of the Customer Centrality dimension, the experience is created not only by the management, but by the customer as well. Many fashion magazines follow this approach, since they do not dictate the fashion, but select fashion trends already prominent in the general consumer population.

Based on the two dimensions above a two by two matrix can be constructed:

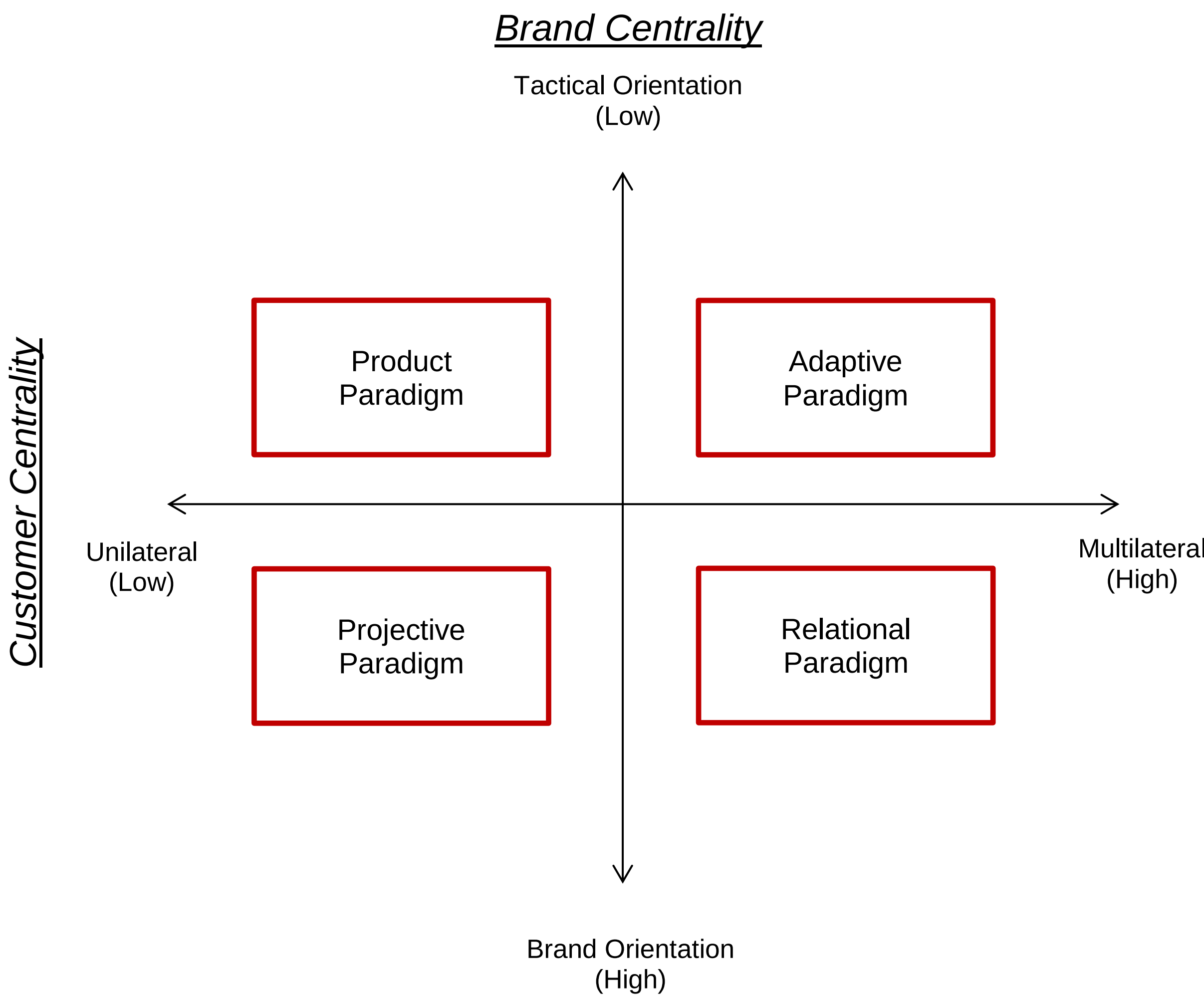

Figure 1. Brand management paradigms (Source: Louro and Cunha 2001)

Each cell in the matrix above represents a different brand management approach. The combination and different levels of management's belief in Brand Centrality and Customer Centrality affect not only the branding techniques used, but run throughout the organization to affect even the performance management criteria. For example if management believes Brand and Customer Centralities are low, it is more likely to focus on hard financial indicators. If it is not the case, the management is more likely to adopt balanced scorecard performance measurements. Each of the four brand management paradigms are described below: The Product Paradigm is low in Brand and Customer Centralities, meaning management believes that its product will not/is not capable of benefiting from brand recognition and consumers do not play a significant role in the creation of the brand experience. In these cases management uses the brand for identification purposes and there is no brand communication between consumers and the company. An example of the toothpick manufacturer conforms to the Product Paradigm, consumers generally do not buy toothpicks based on the brand, and few companies who manufacture toothpicks actively communicate with their consumers for branding purposes. In similar companies the key performance indicators are likely to be financially and product related. Management with the Product Paradigm is likely to be concerned with how many toothpicks they can sell, for what price, and how well do the toothpicks they manufacture conform to product specification.

The Projective Paradigm is low in Customer Centrality, but high in Brand Centrality. While similar to the Product Paradigm in this paradigm management believes that customers do not play a role in creating the brand experience, however, they do recognize the importance of the brand image. Management that follows this paradigm creates and articulates a strong brand image to their consumers. Coca-Cola is an example of such a branding paradigm. This organization created a very powerful branding messages such as "Always Coca-Cola" for Czech consumers or "Live on the Coke side of Life" (Prends la vie côté Coca Cola) for French consumers. Nobody told Coca-Cola that there is a "Coke side of Life", this is the concept management developed and communicated to their consumers and it did so in a very unidirectional manner.

The Adaptive Paradigm is high in Customer Centrality, but low in Brand Centrality. Organizations that follow this branding approach know how to listen to customers and deliver the products that customers want, without necessarily attaching value to the brand. The consumer himself actually constructs the brand meaning. Telecoms and e-readers can be example of this approach to branding. In such cases, companies do not tell their consumers how the experience with their products will feel like, nor is it fashionable to use any particular telecom provider (albeit e-readers do have a branding component). However, in both cases the experience of the consumer will depend upon how well the company met or pre-empted consumer needs..

The Relational Paradigm is high in Customer Centrality and Brand Centrality. Management that follows this approach believes that brand image and consumer involvement are equally important. While the organization does its best to create value in its brand, a lot of the brand value comes from the experience that consumer has with the product. An example of such organization is Apple: this company not only projects the image that it is cool and hip, but is equally exposed to consumer criticism and may lose its brand value if its products do not satisfy consumer expectations. On one hand, the company creates higher likelihood of purchase with its marketing campaign, but on the other hand it still has to listen to consumer needs. The product creation process in such companies is an on-going conversation between managers and customers.

The next section will consider the marketing aspect in more details.

According to Grönroos (1994), one of the core tools in the arsenal of a marketing manager for the major part of the 20th century has been the 4Ps of Marketing, namely: product, place, price, and promotion. Perhaps due to its simplicity and catch-on rhyme, this simple concept has dominated the thinking of marketing managers and academia. However this classification of marketing activities among the four categories of price, product, place and promotion is not collectively exhaustive, and does not encompass all of the phenomena present in the marketing environment. Essentially, the 4Ps of Marketing is a product oriented view of marketing, i.e. everything that the marketing manager can do to improve the marketing of the product/service is related to adjusting the product, improving the place of distribution, adjusting the price or promotional strategy. The product oriented view of marketing fails to capture the interactive elements of the marketing strategy and the complexity of such interactions. The transactions that are facilitated by the 4Ps of Marketing are viewed as a onetime economic occurrence, without consideration of the impact of cumulative purchases and the resulting development of the producer and customer relationship.

Alternative approach to 4Ps can be executed via Relationship Marketing. According to Grönroos (1994), the Relationship Marketing approach recognizes the economic and social aspects of the marketing interaction. The goal of the Relationship Marketing is to establish and maintain relationships with customers in light of long term profit maximization. While the 4Ps approach can be conceptualized as company making promises to its customers, the Relationship Marketing includes not only promise creation, but also the promise fulfilment. The emphasis shifts from short term profit maximization problem to a long term relationship management one. As such, transactions with the customers are no longer seen as a set of separated events, but become a continuous relational process. Depending on which of the two philosophies a company follows its organization is affected drastically. With the product oriented approach the primary measurement variable is profit and the marketing department is engaged in practical execution of marketing campaigns with use of directional messages. With the relationship marketing, profit still plays an important role; however it is complemented by relationship and customer satisfaction criteria. The marketing department in this case also becomes responsible for monitoring the quality of the company/customer interaction process. Since clients create their image of the company not only from marketing messages on billboards, but from interactions with delivery services, sales services, customer support services and many other company employees, it is of utmost importance for the marketing department to monitor the quality of those interactions to ensure a favourable perception. Favourable perceptions and the fulfilment of customer trust in turn create long- term enduring relationship. The differences between transaction-oriented and relationship-oriented marketing approaches are illustrated in the table below:

The strategy continuum	Transaction marketing	Relationship marketing
Time perspective	Short-term focus	Long-term focus
Dominating marketing function	Marketing mix	Interactive marketing (supported by marketing mix activities)
Price elasticity	Customers tend to be more sensitive to price	Customers tend to be less sensitive to price
Dominating quality dimension	Quality of output (technical quality dimension) is dominating	Quality of interactions (functional quality dimension) grows in importance and may become dominating
Measurement of customer satisfaction	Monitoring market share (indirect approach)	Managing the customer base (direct approach)
Customer information system	*Ad hoc* customer satisfaction surveys	Real-time customer feedback system
Interdependency between marketing, operations and personnel	Interface of no or limited strategic importance	Interface of substantial strategic importance
The role of internal marketing	Internal marketing of no or limited importance to success	Internal marketing of substantial strategic importance to success
The product continuum	Consumer packaged goods → ← Consumer durables → ← Industrial goods → ← Services	

Figure 2. Transactional vs. Relationship Marketing (Source: Grönroos 1994**)**

According to the total perceived quality model of the Nordic School of Services (Grönroos 2004), the quality that a customer perceives is composed of two dimensions: the achieved result and the quality of the process. The actual technical characteristics of the product do matter, but for some types of products and services, the experience that the customer had during the process of achieving those results matter just as much if not even more. This is very characteristic for the Hilti company which will be analysed further in the practical part.

Grönroos (1994) states that the Transactional Marketing approach pays minimal attention to the experience factor, assuming that all of the value is embedded in the product itself and in the result that it achieves. In the Relationship Marketing, not only the quality of the product is important, but much more attention is paid to the process and to delivering additional value through technical advice, after market-service, social interactions, and additional information. As the result of the difference is the emphasis between Transactional Marketing and Relationship marketing, different ways of performance management and communication are established between the company and its customers. Transactional Marketing uses market share as the primary evaluation criteria and the bulk of the communication between customer and the company is done through the sales representatives. In the Relationship Marketing the number of customers means little without measuring customer satisfaction, and the communication between company and customer is bidirectional, carried out by employees of different departments.

2.2. Good vs. Service in the Context of premium / high end market

As described above, Transactional Marketing took the physical product as the primary carrier of value in the exchange. The Relationship Marketing, on the other hand, focuses on the services, information and knowledge as the primary carriers of value. While one approach to marketing is primarily matter-oriented, the other has a social orientation. Although the choice of a marketing strategy for a company depends on whether the company is manufacturing a product or creating a service, Relationship Marketing is not at all limited to services industry. In fact, the product can be just an initial tool used to establish contact with the consumer and the bigger value can be added by means of additional service. The differences between product based marketing and service based marketing as summarized in the table below:

	Traditional Goods-Centered Dominant Logic	Emerging Service-Centered Dominant Logic
Primary unit of exchange	People exchange for goods. These goods serve primarily as *operand resources.*	People exchange to acquire the benefits of specialized competences (knowledge and skills), or services. Knowledge and skills are *operant resources.*
Role of goods	Goods are *operand resources* and end products. Marketers take matter and change its form, place, time, and possession.	Goods are transmitters of *operant resources* (embedded knowledge); they are intermediate "products" that are used by other operant resources (customers) as appliances in value-creation processes.
Role of customer	The customer is the recipient of goods. Marketers do things to customers; they segment them, penetrate them, distribute to them, and promote to them. The customer is an *operand resource.*	The customer is a coproducer of service. Marketing is a process of doing things in interaction with the customer. The customer is primarily an *operant resource*, only functioning occasionally as an operand resource.
Determination and meaning of value	Value is determined by the producer. It is embedded in the *operand resource (goods) and is defined in terms of* "exchange-value."	Value is perceived and determined by the consumer on the basis of "value in use." Value results from the beneficial application of *operant resources sometimes* transmitted through *operand resources.* Firms can only make value propositions.
Firm–customer interaction	The customer is an *operand resource.* Customers are acted on to create transactions with resources.	The customer is primarily an *operant resource.* Customers are active participants in relational exchanges and coproduction.
Source of economic growth	Wealth is obtained from surplus tangible resources and goods. Wealth consists of owning, controlling, and producing *operand resources.*	Wealth is obtained through the application and exchange of specialized knowledge and skills. It represents the right to the future use of *operant resources.*

Figure 3. Product vs Service Marketing (Source: Grönroos 1994**)**

Alignment of the brand perception within the company products and services with its real position on the market is extremely important in the case of premium segment when the price for the product is higher than that of the competitors: consumers expect a higher value added for the money they pay. If the company starts building the value communication strategy from the consumer´s perspective and see what they are looking for in premium, the concept of premium itself has two main categories of reasons for premium goods consumption: on the one hand, external motivations, social and interpersonal; and, on the other hand, internal motivations, subjective and reserved. External motivations concern those cases where the goal is essentially that of publicly displaying luxury so as to affirm the consumer´s status (O´Cass and Frost 2002) while internal motivations (self-reward) relate to premium consumption based on emotions, state of mind and subjective sensations related to an individual´s self-perception (Vigneron and Johnson 1999, 2004). It is therefore possible to distinguish between "interpersonal effects" and "personal effects" of premium consumption, two different approaches in terms of perceptions, motivations and behaviour.

Communication of a brand image to a target segment, that is driven by internal or external motivations, has been regarded as an important marketing activity. It became widely used in consumer behaviour research from the 1980s (Dobni and Zinkhan, 1990). Brand image is important because it contributes to the consumer´s deciding whether or not the brand is the one for him/her and it influences consumer´s subsequent buying behaviour, and, therefore, brand equity as well. A well-communicated brand image should help to establish a brand´s position, insulate the brand from competition, enhance the brand´s market performance, and therefore plays an integral role in building long-term brand equity (Park and Srinivasan, 1994).

Three key components of the brand that should be communicated to the consumer are (Plummer, 2000):

1. the product attributes (Unique key selling points)
2. the benefits/consequences of using a brand (Services);
3. brand personality;

The product attributes are referring to the essential characteristics of the product – the core value it brings to the consumer in terms of production quality, contents and package. The brand personality factor enables a consumer to express his/her own self (Hem and Iversen 2002). It serves as a symbolic function and helps consumers differ from or integrate themselves with others. It also projects the brand´s values and creates an image of the brand´s typical user, which might be the ideal image of the consumer. This brand information may actually encourage the use of a specific brand as a tool to express oneself or associate oneself with a certain group of people, which is the case of conspicuous consumption in case of premium goods and services. Perceived benefit is what consumers think the product can do for them; it is associated with perception of product attributes and brand personality. Benefits are what consumers seek when purchasing a product/brand. These benefits lead to certain end states or values that consumers wish to achieve (Kotler 1999). Numerous previous studies have demonstrated a positive relationship between the perceived benefit and consumer decision making (e.g. Cho et al. 2002; Bove and Johnson 2000).

Since customer satisfaction nowadays is mainly built on the relationship between the company and the customer, any strategy in communication has to be executed along the lines of existing or potential relationship between the company and the customer. Relationship was defined as "one or more exchanges between a consumer and a retailer that are perceived by the consumer as being interrelated to potential past and future exchanges with the retailer" (Webster 1992). Barnes (1997) postulated that no relationship exists unless the customer feels so, so our theoretical assumptions will largely be stemming from the consumer´s perspective when talking about communication. Prior studies successfully observed crucial differences between the types of relationships across the industries. The first divide to be made is between product-delivering and service-delivering industries. The latter is marked by high intangibility, which even increases when talking about construction tool industry, as „experience attribute services" (Patterson 1998). The behaviour of the personnel is especially important to the client´s understanding of the services and products offered. Typically, customers form interpersonal relationships with personnel because they desire certain benefits, such as customized personal services (Gwinner et al. 1998). Research shows that strong relationships between the company and customers allow for greater customer knowledge because of their repeated interactions with the customers. In case of dissatisfaction and complaints those relationships help retain the customer because of the personalized treatment. Dissatisfaction does not necessarily result in switching or cancelling the relationship. However, the sales and furthermore profit are found to be linked to the effect of dissatisfaction/satisfaction on customer loyalty (Mittal and Kamakura 2001).

Academics suggest that the relationship depends not only on successful communication tactics, but also on customer personality. Different tactics of relationships have been proposed depending on the length of the relationship, sociodemographics, location, etc. Despite the seeming difference in tactical approaches to all the groups, they are united by the universal elements of the relationship that, if treated properly, culminate in long-lasting brand loyalty There are three paradigms that conceptualize relationship components referring to brand communications (Pei-Tsai, 2011):

1. Relationship quality paradigm unites the cognitive, supportive, emotional and behavioral dimensions into one factor within the whole consumer-brand relationship – this essentially means that relationship should be build in a systematic, integrated way from the beginning;
2. Relationship commitment paradigm represents the effects of relationship satisfaction and relationship trust – requires a more slow-paced approach in a relationship;
3. Brand love paradigm refers to passionate love for the brand the consumer feels that is directly linked to customer loyalty– implies stronger attachment to the brand and recommends paying attention to this emotional bond.

This variety of paradigms presents a managerial challenge when it comes to the specific choice of repeated communication tactics. It is not clear whether the brand marketer should deal with the multiple relationship components aggregately as a single factor (the brand relationship quality paradigm), or focus more on the mediation effect of the relationship commitment (the relationship commitment paradigm), or pay particular attention to the passionate love for the brand (the brand love paradigm). It would be riskier to rely solely on the love for the brand, since the customers constantly revaluate their experience associated with the brand and the company through repeated use of the products/services. Therefore, a combination of relationship quality and relationship commitment paradigm can serve best for the purpose of the companies whose brand faces decreasing brand loyalty.

The Relationship Commitment, which is even more applicable in the case of Hilti company and construction tool industry since it is characterized by „experience attributes" as mentioned above, makes the relationship dependent on and evolving from the repeated use of the product or service. This paradigm can be further subdivided into two branches: the commitment-trust model and the relationship investment model. The commitment-trust model is based on the commitment-trust theory of relationship marketing. The model´s framework theorizes relationship-building process with a dual-mediator (relationship commitment and relationship trust) model structure. Originally, it applies to the context of business-to-business relationship management. Then researchers provide evidence that the commitment-trust model also applies to service brand marketing. Relationship commitment refers to the persistent state of mind to maintain a worthwhile relationship and relationship trust is conceptualized as confidence in the relational partner's reliability and integrity. The two constructs mediate the effects of the relationship termination cost (monetary and psychological cost incurred by terminating the relationship), relationship benefits (functional and affective benefits provided by the relationship), shared values (personal values shared by the relational partner) and opportunistic behaviour (violation of behavioural norms for responsibilities and obligations of the relational partner) on the formation of brand loyalty. Briefly, commitment and trust are central to successful relationship-building which leads to higher customer satisfaction because they:

1. Preserve the relationship by cooperating with exchange partners,
2. Resist attractive short-term alternatives in favor of the expected long-term benefits of staying with existing partners,
3. View potentially high-risk actions as being prudent with the belief that their partners will not act opportunistically.

The relationship investment model, another branch of the RC paradigm, is more applicable to the real-life cases. It has three core elements:

1. Relationship satisfaction - refers to the sum of positive versus negative evaluations about the relationship partner;
2. Relationship investment - describes the financial resources, efforts and time invested into a relationship;
3. Relationship commitment – is about the judgment derived from comparing a partner with other alternative partners.

Researchers use the relationship investment model for studying a variety of physical-product and service brands and in general confirm its predictability of brand loyalty.

Business-to-business context also makes customer retention orientation in relationship investment much more strategically important. Dedication of resources, efforts, and attention aimed at maintaining or enhancing relationships that do not have outside value and cannot be recovered if these relationships are terminate gives an opportunity to have stable sales even in the crisis times, because of customer loyalty that is created through a long-term relationship. Customer orientation focus goes beyond salespeople´s effort in personalized selling. It is more about long-term dedication through regular preferential treatment. In prior academic literature there was a strict distinction between the treatment of B2B and B2C in context of marketing activities. However, a new stream of research argues for strong interdependency between those types of relationships. Suppliers can profit from helping their customers´, customers can enjoy more benefits from their suppliers and almost all companies serve both organizational customers (resellers) and directly consumers. A theory called „network theory" has grown from relationship marketing and describes analyses and utilizes the network properties of marketing (Gummesson 2007). It recognizes that both suppliers and customers operate in a complex network context and states that all marketing strategies should take into account and benefit from this interdependence. In marketing, networks are built and defined for a purpose, which requires control and gives rise to limited and planned networks. Partners, suppliers, shareholders, and other stakeholders offer access to external resources as an alternative to a company acquiring its own resources. However, a potential network member must also offer benefits to the network and there is a cost for building or finding a network and for maintaining network membership. A member of a network based on cooperation cannot solely maximize its own benefits at all times but – within reasonable limits – has to invest into the relationship.

The concept is in an early stage of development and the potential of network theory has not yet been extensively tapped in academic literature. The advantage of the network theory is that although it recognizes complexity and context, it can be used on both a simple, everyday level and on a highly sophisticated scientific level. Networks can be analysed verbally, through interviews and communication with stakeholders, which is done in business and among consumers and citizens. The most prevalent aim is to build up a practical network understanding through experience and without documentation. It is also worth mentioning that the major technology enablers for relationship marketing have been the Internet and enterprise-wide management information systems. The former allowed businesses, for the first time, to get low cost interactions with customers. The second allowed a firm to generate a single view of a customer across all functional areas of a firm. Both of these systems together allowed for customized communication with a single customer for very large firms.

When it comes to dealing with specific markets and the peculiarity of networks created there, it is important to bear in mind that in emerging economies traditional methods of planning and building relationships are sometimes incapable of coping with cultural specificity of the environment, volume and unpredictability of changes (Edgar and Nisbet 1996). Some offer adopting the best practice of established players to obtain fresh insights.

A review of relevant literature shows that culture plays an important role in relationship formation and network creation and adaptation in the international domain. Thomas and Ford (1995) argue that culture impacts the actors in the network by promoting implicit norms for acceptable behaviour. It is therefore important to make a deep, multidimensional assessment of the present culture the company is in and adjust its marketing and communication strategy accordingly. While both marketing communications and relationship marketing are largely focused on customer´s perspective and reaching full satisfaction of the audience, another essential element in this relationship is the sell-side. Motivated and committed sales people could become long-term success and competitive advantage that can be counted on even during a life-threatening crisis for the firm. Salesperson turnover is one of the key factors negatively influencing productivity, sales, profitability, customer loyalty, customer satisfaction and unpredicted expenses. The opinion prevails that sales people are motivated mainly by financial rewards. Thus it is crucial to find other effective motivational factors as well as link the financial rewards with the results. Sales people working in B2B area motivation and retention is crucial for organizations since they manage a very important financial, product and customer information, which could easily be transferred from one company to another. Therefore, sales people motivation and commitment to the organization are critical factors in the long-term success of organizations. Moreover, empirical studies (Payne et al., 2001) indicate that salespersons' retention leads to increased service value and thus increased sales and higher profitability.

2.3. Customer satisfaction vs. profitability

According to Anderssen, Fornell, and T. Trust (1997), there is common belief that companies should focus on both customer satisfaction and productivity altogether when talking about increasing the profitability of long-term business. It is necessary to mention that this issue may not be important today, but certainly will become more important as competition increases. However, some people believe that these two goals are inconsistent or not always feasible to achieve. Lately, firms have been trying to improve their productivity by "downsizing," whose result can lead to an increase in productivity in the short-run, but on the other hand, it can harm future sustainability of the business and profitability, especially if incremental customer satisfaction is highly dependent on the people factor. Such a compromise between customer satisfaction and profitability is not recommended for industries which are very diverse and people driven like: banking, airlines and hotels. The management of such companies as well as all goods producing companies (such as Hilti), in which the service component is the core of the business, have to find another solution for improvement of customer satisfaction and profitability. In case they decide for downsizing they should double check the impact on customer satisfaction. Such further research on how customer satisfaction and productivity relate to one another will be executed by the companies more and more, since continued growth in services sector throughout the world economy is expected.

A review of academic literature reveals two opposing theories. There is a theory which says, that improvement of customer satisfaction and productivity at the same time is possible, since an increase in satisfaction leads to a decrease in the number of complaints length of sales process and moreover decreases the time and effort devoted to handling all processes that have a direct impact on customers' satisfaction. Moreover, it leads to a decrease in the cost of future transactions arrangements. The second theory says that the process of increasing customer satisfaction should logically increase the costs. Such an increase often requires an improvement of product aspects, overall product design, large marketing campaign or melioration of services.

According to Anderssen, Fornell, and T. Trust's conceptual theoretical framework, the consequent customer satisfaction and productivity increase is less likely to be adaptable when:

1. *"Customer satisfaction is relatively more dependent on customization—the degree to which the firm's offering is customized to meet heterogeneous customers' needs—as opposed to standardization—the degree to which the firm's offering is reliable, standardized, and free from deficiencies; and*
2. *when it is difficult (costly) to provide high levels of both customization and standardization simultaneously.. (Anderssen, Fornell, T. Trust, 1997)*

Based on abovementioned characteristics, services are more relevant for the trade-offs between customer satisfaction and profitability than for goods.

However there, is a clear association between changes in customer satisfaction and changes in productivity for both goods and services. The interaction between the two is positive for goods but significantly less so for services. On the other hand improvement of communication or appropriate implementation of information technology leads in general to an improvement of customer satisfaction, productivity and further profitability simultaneously. As was already mentioned, the tracking of customer satisfaction and profitability are becoming more and more important and as Zahorik and Rust (1992) suggests that in order to make any decision within that area it is necessary to conduct quantitative empirical research. Therefore it is recommended for companies to trace customer satisfaction continuously with exemplary measurement system. Moreover, the marketing directors face increasing pressure to demonstrate the financial impacts of their actions. The reason behind the pressure is the need for optimal allocation of resources. The connection of specific steps and final impact is often very difficult to demonstrate empirically due to the intermediate effects and the time scale. For instance, the advertising might not lead to incremental sales but can have influence on consumer purchase process that might change in upcoming years. Connecting action to performance is especially difficult in the context of services (further case study of Hilti) where the quality and overall impact is derived from the company's interaction with customers. The overall analysis generally requires linking or relating independently collected data related to the business. Therefore, most of the analyses that analyse customer satisfaction and company performance use descriptive models on aggregate level using regression based techniques.

However useful these models might be they do not offer sufficient guidance for actions a company should take to improve their position on the market. Additionally, customer satisfaction is built through a variety of aspects and these models may not be applicable or efficient. Therefore, the steps that lead to an increase in customer satisfaction are evaluated as strategic.

Since the practical part of this master thesis focuses on one particular business unit within the company (after-market service), it is necessary to mention that according to Alsemgeest, Liezel; Smit, A. v. A. (2013) there is a defined link between profitability and customer satisfaction in the business unit. Moreover the business units with relatively low level of customer satisfaction have bigger impact on overall company customer satisfaction level. Therefore in order to improve the customer satisfaction level it is recommended to start with business units that have relatively the lowest level of customer satisfaction. In general, customers who are more satisfied with the service/product generate higher sales, and moreover the business is more profitable (Foster, Gupta, 1997).

3. Practical Part

The practical part of this Master's thesis will apply the findings from the theoretical part on a real time case study of Hilti Czech republic, a local market organization of Hilti company, which is a multinational premium provider of building construction tools and consumables operating on B2B market. Firstly, I will describe the Hilti company and its background, historical development, company values an core aspects of the business model. Then I will also briefly characterize the basics of the internal operations within the departments examined by the case study. The second section of the practical part will focus on the research, which was conducted via in depth interviews with real customers, local process experts and local and regional top managers across different company departments. After the description of the research method, the basic objectives and the hypothesis of the research, I will outline the outcomes of the research with some concrete examples. The third section of the practical part will interpret and transform the conclusion of the research into recommendations for different areas within several departments and its processes. These outlined areas have to be addressed in order to increase the performance of the whole company. Further in this section I will also define the different sets of strategies and their effect on the company performance and customer acceptance.

3.1. Hilti company profile

The Hilti Corporation (Hilti Aktiengesellschaft or Hilti AG) develops, manufactures, and markets products for the construction and building maintenance industries. The company is primarily focusing on B2B professional end-users. The Hilti company is well known for its cartridge activated tools, hammer drills and fire stop & installation systems among others.

Hilti celebrated its 70th birthday two year ago. The company went through a significant change since the company began in Martin Hilti’s mechanical workshop in the small country of Liechtenstein. In the beginning in 1941, there were only 5 employees. Since then, the company has grown significantly and nowadays employs more than 22,000 people and it is based in more than 120 countries worldwide and generates annual sales of more than CHF 4,2 billion in 2012. Besides that, the Hilti Group is continuously improving its operating result (+45% in 2012) and net income (+101% in 2012). Last year's growth was mainly due to the implementation of the profitability enhancement program, which was launched in 2011. Even today in 2013 the Hilti company has still the headquarter office in Lichtenstein, in Schaan, where the company has around 2,000 employees. Hilti has production all around the world, but most of its production comes from continental Europe. Today, the Hilti company is considered as a leader in technology of the global construction industry. Core of the success are innovative solutions and outstanding added value to systems and services, which are offered by Hilti company. Hilti is valued as a premium brand with a strong brand image dedicated to outperform and outlast its competitors.

In the first 20 years, the company was manufacturing components for the Swiss textile industry and operated also as a supplier for the German automotive industry. This allowed Hilti company to create its own product line and grow up to 100 employees. During that time, exactly in January 1952 Hilti launched its first tool. It was a hand drive tool used for placing threaded studs. In the same year, the Hilti company established the company’s first foreign representation in Italy. In the upcoming years the company grew and rolled into other countries and created international sales network via independent sales organizations or local partners. In 1957 the company launched the revolutionary DX 100, which has positively changed the technological processes in the construction industry.

In 1964 the Hilti company came up with drilling and anchoring as an additional system to its product portfolio. The Hilti family trust which is the only shareholder today was founded in 1980. It was founded to ensure the company's independence, continuity and stability for the future. In the same year the sales exceeded 1 Billion Swiss Francs. In 1982 Hilti entered the diamond coring and breaker business and in 1991 it added the screw fastening technology, chemicals construction and installation systems to its product portfolio.

The first corporate strategy was launched in 1996 and is known as “Champion 3C” (See figure 4.) and is valid until now. As the name suggests the champion 3 strategy is based on three Cs – customer, competency and concentration. The customer is considered as the most valid partner for Hilti’s actions and innovation. Hilti is committed to excellence in innovation, the best quality, direct customer relationships and effective marketing. At that time Hilti launched its policy for introducing new products, which claims that Hilti company focuses only on products and markets where Hilti can achieve and sustain leadership positions.

Customer
We want to be our customers' best partner.
Their needs drive our actions.

Competency
We are committed to excellence in innovation, total quality, direct customer relationships and effective marketing.

Concentration
We concentrate on products and markets where we can achieve and sustain leadership positions.

Figure 4. Champion 3C strategy. (Source: Annual Report 2011)

Later in 1998, laser measuring systems and cutting and grinding systems were added to the already extensive product portfolio. The innovation of the first electric rock drilling system for mining opened up a whole new business opportunity in the year 2000. In 2003 the Martin Hilti Foundation became the sole shareholder by purchasing the publicly held certificates. In 2006 the company launched The “Hilti lifetime service” optimal service package which includes a two year free no cost as well as lifetime repair cost limit and manufacturer’s warranty. In 2007 the current CEO Bo Risberg was appointed.

Hilti has a very strong corporate culture and it works hard to uphold it. At the core of the company are the company values of integrity, courage, teamwork and commitment. The aim is to create a company climate in which every team member is valued and able to grow. The core purpose states that `we build a better future`. This stands for the traditional high sense of responsibility towards the team members, customers, partners and suppliers, society and the environment.

In spite of the company's strong growth in sales since the crisis, it has suffered from a massive appreciation of the Swiss franc and rising material and transport costs. This is characterized by the significant drop in net income (-32%) and the operating result (-23%) in 2011 (Hilti, 2011). However, Hilti is still committed to its research and development of new tools and services with an increase in investment between 2010 and 2012.

During the financial crisis the company has followed the industry trend in optimization of operational costs and shifted some of its production volume to its plants in Mexico, China and Hungary, as well as into other countries within the euro zone. Hilti, compared to the trends within the industry, is still trying to keep as many key employees as possible at its headquarters in Liechtenstein, but due to the increasing expenses it is in the process of transferring some department into non-European countries, for instance IT department was shifted to Malaysia and two manufacturing plants out of 9 were placed in China.

The paragraphs above already stated that the only shareholder of the Hilti company is the Hilti family trust. The founder’s sons, Michael Hilti together with six other people sit in the Board of Directors. The board of directors has advisory status and rights. The main - duty is to name and also call off the executive board of the Hilti company. The current CEO Bo Risberg along with five other members sits on this board. Each member is in charge of either a business area or market region and together they focus on long term company strategy. The main business areas of Hilti company are fastening and protection, electrical tools and accessories, energy and industry. Each business area can be further categorized into business units. These business units are separate and fully operational departments.

There are 7 regions throughout the world, four out of which are European. Nowadays, the management of the company is trying to group them according to market and operational similarities. Separate countries are then governed by regional head offices, called hubs. The regional hubs report to the headquarters. Each hub is in charge of the business within its region. Each country has its own finance, marketing, human resources and sales department. Each market organization is supported by a group of field engineers who provide technical guidance and training for products. Hilti company has a unique business model, where the main part of the sales is generated via direct sales force. The tool demonstration to the customer is considered as extremely necessary to highlight all the aspects and advantages of the products. This approach to business also helps build the relationships with the customers and drive their loyalty. The company has more than 200,000 direct customer contacts daily. (Hilti, Hilti Corporate Website, 2013).

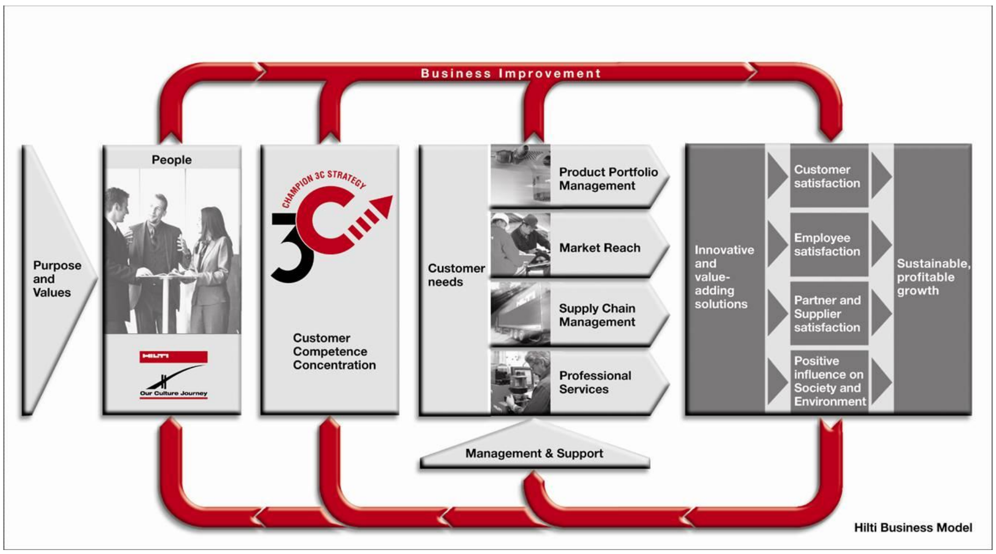

Figure 5. Hilti business model (Source: Hilti Corporate Website, 2013)

Recently, the new energy and mining business areas have become one of the key drivers of the growth of the company. These relatively new business areas (2003) are seen as the biggest business opportunity as they have not been penetrated by Hilti. Sales within energy and industry business areas recorded largest growth in the last two years, especially mining and solar, more than 70%, and show high potential for further growth.

It is more than visible that the management strategic priorities for the company which should bring sustainability are growth, differentiation, productivity and the professional development of the workforce. This refers to the champion 3C policy, which was described in the paragraph above. The development of new business fields and areas is continual and it is one of the key elements for the further growth of the company. In order to continually improve the sales execution, the company management sees the necessity in building the customer engagement through the targeted direct marketing. Products differentiation, professional services, accessibility and customer relations drive the brand image. Hilti in general keeps the strategy of focusing on business areas where the market leadership can be achieved. This allows the Hilti company to keep premium pricing.

The management of the Hilti company is successfully improving the operations of the company via increasing the productivity and setting clear priorities. One of the company core values is the engaged and competent workforce as the most important resource for the future development and success of the company.

Hilti Life Time Service – Case study focus area

In 2006 Hilti company launched The "Hilti lifetime service" optimal service package which includes a two year free no cost as well as lifetime repair cost limit and manufacturer's warranty, in order to differentiate from the competitors on the market and enhance the added value of the tools. This unique worldwide service package provides excellent transparency and maximum cost control of the repairs to the customer. It also serves as a unique selling point when it comes to sales.

Figure 6. Hilti Life Time Service - AMS logo (Source: Hilti Corporate Website, 2013)

Up to 2 years NO COST
Hilti company is the only producer on the market, who as a standard does not charge for repairs and services within the first 2 years from the purchase of the tool. Once the tool is send to the Hilti company repairs center, the company takes responsibility for the tool's functional check, adjustment or calibration and the safety check all free of charge.

Lifetime Repair Cost Limit – Top Stop Limit
After elapsing 2 years of no cost period, the Hilti company provides the cost control via Top Stop Limit, which automatically installs the price ceiling of the repair. The Top Stop Limit differs from the tool and it corresponds to a certain percentage of a list price of a new tool. Moreover, the Hilti company ensures the repairs quality with 6 months no cost period after such a repair. Lifetime Repair Cost limit of the so called Top Stop Limit is valid over the entire life of the tool.

Lifetime Manufacturer's Warranty

Besides No Cost period and Lifetime Repair Cost Limit, Hilti company repairs or replaces all tools' material defects free of charge over the entire lifetime of the tool.

The Hilti company Life Time Service stands up to competitors' warranty programs and is of utmost importance for this Master's thesis due to its focus on after-market service (AMS). The whole system was created in favour of customer satisfaction. Besides the service described above, Hilti company offers the so called “Trade-in,” which is eligible when the tool is beyond economical repair. Hilti company as a standard offers replacement incentives in order to enable customers to keep up to date with the new products. The general idea behind the AMS system is that the customers have to overcome higher initial investment into the new tool in order to save financial resources on additional future costs for damaged tools.

The head office in Schaan, Lichtenstein, governs this unique worldwide service package and it is binding for all official market organization within the Hilti company world. The pricing and the level of the Top stop limit is in process ownership of local market organization and can be changed during this time. Usually the prices of spare parts and Top Stop Limits are installed automatically when the new product is launched. The Hilti company does after-market services only via official repair service centres and does not sell the spare parts of the tools to the customers in order to ensure the right usage of the tool. The Hilti company service centres repair only Hilti products.

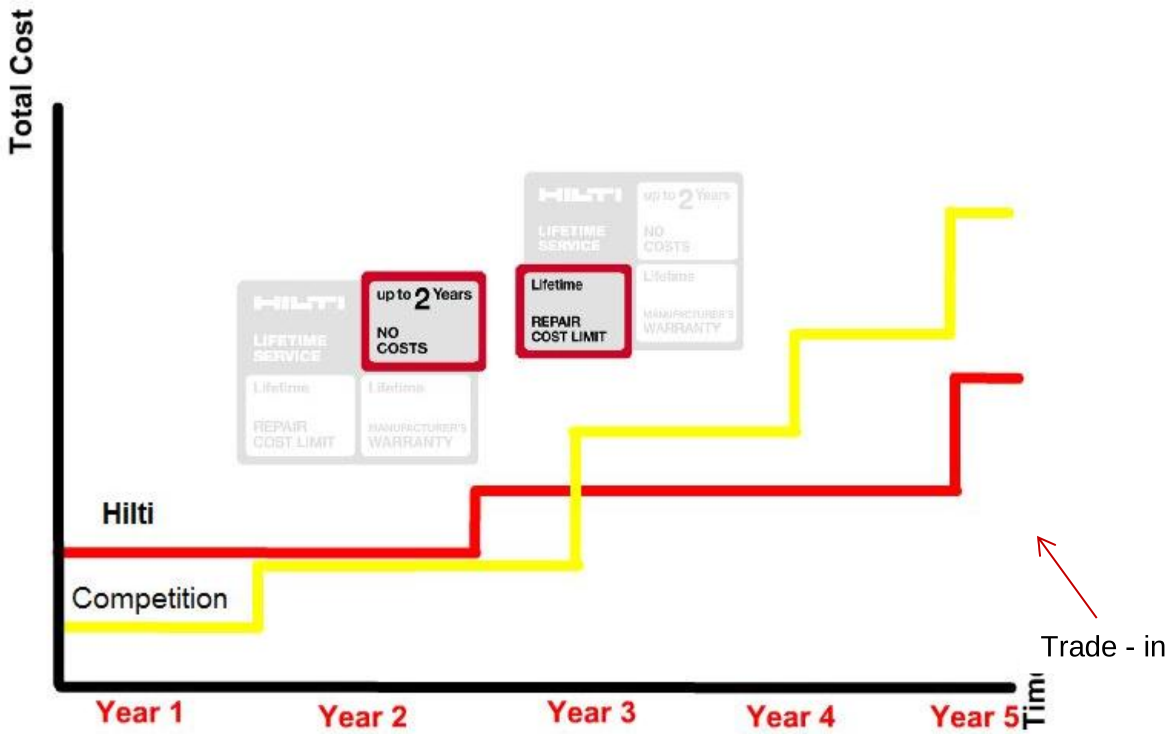

Figure 7. The general idea behind the AMS system of Hilti company

(Source: Author)

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3.2. Research methodology

As was stated in the introduction of this Master's thesis, the whole project was initiated by top management team of Hilti Czech Republic, the local market organization of the Hilti company, on a basis of on-going incremental focus on increasing the profitability and professionalism of the core business operations (Profitability enhancement program, 2011). The initial research done by the local after-market service department has shown that Hilti Czech Republic has profitability issues with some service repairs, due to wrong spare parts pricing and current set up of Top Stop Limit Levels. But for further recommendations for improvement a deeper analysis and research of the current portfolio and business processes was necessary. One of the key stages of the project was the research, which was conducted from June 2013 to September 2013 with several local and worldwide experts and dozens of customers.

The research had to be executed In order to test the assumptions and the hypothesis. Since the company is operating mainly on a B2B basis, the type and methodology of the research had to be precisely chosen. There are two types of research used in the B2B environment, qualitative and quantitative. Due to the nature of the construction tool business and complexity of the internal processes within the company, the primary research conducted had to be largely qualitative, executed with various stakeholders inside and outside the Company in order to get a better understanding of the market and inside processes of the company. There are various methods used for the purpose of qualitative research in the B2B environment, focus groups, creative brainstorming and expert in-depth interviews. For the purpose of primary research of this Master's thesis in-depth interviews of the customers and experts were chosen and for the purpose of further recommendation and strategy development the creative brainstorming with process owners was used. There are two major techniques used in execution of expert interviews in the B2B segment, projective techniques and direct questioning. Both are very effective in the B2B environment and are specially designed for different situations and demand various skills from the interviewer. The first one, the projective technique was a method widely used in history and it is based on psychoanalytic psychology. In general, this method helps with the transformation of concealed emotion and internal conflicts into words. Nowadays, the most used technique while doing the in-depth interview in business-to-business environment is direct questioning. Direct questioning techniques are used when interviewing knowledgeable and experienced people within the researched area. It allows the interviewer to ask direct questions to get a valuable and cogent answer. Since the projective techniques are usually time-consuming and process experts are usually very busy, the direct questioning method for the in-depth interviews within primary research was chosen (McNeil, 2005). The main constrains of direct questioning and open-ended questioning are the encoding of the experts' answers, connecting them further to the discussed topic, finding the similarities and patterns of the answers and the complex understanding of researched field (Turner, 2010).

As was stated in the paragraph above, the qualitative method (in-depth expert interviews) was selected as the most appropriate for the research part of this Master's thesis and for the whole project. The research was conducted through individual one to one conversations with real customers and experts from the researched area. One of the advantages of one to one interview is that the one to one interview enhances the openness of the interviewed person by establishing confidentiality and trust between the interviewer and the interviewee. On the other hand, interviewing two people may create inspirational conversation and lead to more creative answers and ideas. Since the interviewed customers usually had only one person dedicated to dealing with the target area the one-to one interviews were the only feasible. The same pattern was established by the expert interviews inside the Hilti company.

Due to the complexity of the researched area the research process was on purpose divided into two areas, external and internal, based on the status of the participant of the interviews from the Hilti company's point of view. External expert interviews were conducted with real companies who do business with Hilti company in the Czech Republic. The interviews were done with different stakeholders who have some interest in the researched area. For the purpose of collecting the data and obtaining a wide range of information, the interviews were held primarily with owners of the companies, technicians, accountants and in general with people who dealt with repairs and servicing of the tools. External interviews were drafted in order to provide the information about customer’s satisfaction and market comparison. The Hilti company has provided a list of 60 different customers. The sample of customers varied in the level of their engagement with the Hilti company, size, location and focus of the business or the so called “trade.” All the clients interviewed were situated in Prague and the Central Bohemia region. Internal expert interviews were conducted with process experts and managers across various business departments (Marketing, Service, Sales and Finance) of the Hilti company. In order to obtain a diversified set of data and information, the level of seniority by the internal interviews was respected. However, it turned out that the experienced managers and process experts had broad overview of business and market, whereas junior managers and junior process experts could provide operational knowledge and detailed information. Internal interviews were drafted in order to get information about the processes within the researched area, the ease of those procedures and profitability.

As was already mentioned, the format of the interviews was one to one conversation with open-end questions, which on one hand allowed the interviewees to express themselves more easily and on the other hand enabled the interviewer to ask additionally follow up questions and dig more into the detail of the topic of the conversation. Both internal and external in-depth interviews were held and based on in advance prepared interviewers' guidelines. All interviews were executed in person and took 30 – 60 minutes. Due to the above mentioned time constrains the direct questions were inquired by the interviewer in order to reach the goal set up in advance. In order to get the expected results and save the time, all interviewees got familiar with the objectives and process of the interview in the beginning of the interview. All interviews were recorded for the purpose of minimal loss of information. The record and the personal notes of the interviewer were re-read and rewritten. The process of rewriting was done immediately after the interview in order to save all necessary detailed information. The written format was stored and studied later on in order to draw the conclusion. However, the transcript is not provided in the appendix of this Master's thesis. In general, the Hilti company does not allow publishing sensitive information and assuring the interviewees that their answers will not be published had a positive impact on their openness and creativity in the answers.

The interview process has respected all the key components, aspects and activities within in-depth interviewing. In the beginning there was the necessity to clarify the goals and objectives of the research, in order to get all the parties involved. One of the key aspects of the research was the right selection of the sample group, respecting the necessity of group diversification based on their level of expertise, geographic location, and level of seniority. Apart from that the willingness of the interviewees to engage with the research was also considered (Turner, 2010). After the sample group was prepared and approved, the interviewees profile and background were studied, in order to react properly during the interview. After assembling all the necessary information, the people from the sample group were contacted and the interview date and time was set up. The location and time were precisely chosen according to the level of distractions possible. A pre-interview contact with the interviewees was necessary for their sufficient preparation and familiarization with the discussed topic. A few days before the interview, the interviewees were contacted and the interviews were confirmed. Right at the beginning of the interview, the interviewer described briefly the process of interviewing, the expected length, method and the overall intentions and also pointed out the confidentiality and trust that was to be respected during the research process. The structure of both external and internal expert interviews was constructed with respect to McNamara's (2009) suggestions and tips. The open-ended questions were carefully constructed, especially from the wording point of view. The interviewer avoided the questions that were beginning with "why". In the next step the questions were precisely selected in order to avoid the need of asking further leading questions. Apart from that, open ended questioning gave the space for variety of individual answers which has allowed the interviewer to ask additional follow-up questions. However, the follow-up questioning required decent preparation of the interviewer, quite complex understanding and a high level of expertise in the researched area. The follow-up questions served firstly as tools that helped to dig into details and complete the overall picture of the discussed topic. Secondly, the follow-up questions helped the interviewer to direct the respondents back to the discussed topic and thirdly, the follow-up questions provided respondents with an additional question if they had not been willing or obliged to answer the previous question (Turner, 2010). After going through all the prepared questions and topics there was always a time left for the general discussion at the end about the topic in order to give the interviewee a chance to express the thoughts and ideas or cover the topics, which were not tackled during the interview, yet are connected with the researched field. At the very end of the interview, the interviewer offered the participant a follow up contact, had there been an interest in the final outcome or a certain business connection. The interviewer's experience and academic literature were combined and used to develop the interview guidelines and the whole research.

The sample of interviewed people was chosen very carefully with respect to the requirements of the research and the capabilities of the researcher. In total there were 60 external interviews with the current Hilti company customers who do regular business in the Czech Republic. The sample of customers varied by the level of engagement of the business with the Hilti company, its size, location and focus of the business, the so called “trade”. For the purpose of collecting the data and obtaining a wide range of information, the interviews were held primarily with the owners of the companies, technicians, accountants and in general with people who dealt with repairs and services of tools. In total, 19 internal interviews were conducted with the current Hilti company employees, with respect to all levels of seniority, department and location. The mixture of different professional background, experience, gender and nationality of the interviewees provided solid base for the complexity of the research. Out of 19 interviewed employees of the Hilti company, 2 were regional after – market service managers, 2 were regionally responsible for marketing departments, 2 local process experts in the Czech Republic, 2 regional process experts, 5 regional product managers, 2 experienced sales team leaders and 4 account managers. The internal interviews were mostly executed in the Prague Hilti company office. The managers varied in unique foreign experience and exposure to markets in other countries, so they could give relevant answers, tips and ideas about the best practices within the Hilti company world. During the research the aspect of gender was taken into account as well, but since the construction industry is in general very male orientated, only 2 women were interviewed.

Department / Position	# interviews
Regional Marketing Manager	2
Regional AMS Manager	2
Local process expert - AMS	2
Regional process expert – AMS	2
Regional Product Manager	5
Area Sales Manager	2
Account Managers	4

Figure 8. Internal interviews – Sample (Source: Author)

Department / Position	# interviews
Owner of the company / CEO	28

Buyer	16
Technician	9
Accountant	4
Other	3

Figure 9. External interviews – Sample (Source: Author)

The initial research, which was done by the local after-market service department, pointed out several topics which had to be taken into consideration before starting the research process. These topics were transformed into basic hypotheses. The following research has confirmed or disconfirmed some of them and some of the hypotheses were left out for further study due to the complexity of the researched area and its need for expertise. The hypotheses of the research were raised from the current Hilti company business and its internal processes. Already from the start, the research has revolved around three broad categories, which were related to the study area and already given description of an issue. The questions were semi-divided into groups based on the context. The main topics within the groups of questions were: pricing of the after-market service, after-market service communication and the satisfaction with the after-market service from the customer point of view. As such, each interview was aimed at capturing information about the improvement of the after-market service functionality and capturing the trends on the market from the professional perspective of the interviewee's position. The distribution of those three areas of interest across the questions varied depending on the development and the type of the in-depth interview. As was already mentioned, the initial research has shown that the Hilti company and more specifically, its market organization in the Czech Republic have a profitability issue with some repairs due to a wrong spare parts pricing and the current Top Stop Level. After the discussion about possible causes of unprofitability with the members of the local top management of the Hilti company, several basic hypotheses have evolved from that statement and from the initial research. Due to the nature and complexity of researched area the internal interview were conducted in the first stage in order to get better understanding of the processes. The outcomes from the internal interviews were analysed and the hypothesis were drawn easily. The hypotheses were then tested during the external interviews with the customers.

Hypothesis no. 1

Hilti Czech Republic has a historically constant low level of Top Stop Limit and its increase would not negatively affect customer satisfaction.

Hypothesis no. 2

There is a certain group of spare parts which are overpriced compared to the regular market price. This specific group of spare parts cause a high number of customer complaints.

Hypothesis no. 3

There is a high number of spare parts which are below the market price and customers would accept to pay a higher price.

Hypothesis no. 4

The customers do not clearly understand the whole Lifetime Service and the AMS concept.

Unfortunately there are several research limitations as in any other research conducted, which should be considered when analyzing the methodology, outcomes, interpretations and recommendations. The lack of necessary resources needed did not allow conducting complex research study that would stand up to a complex industry pattern analysis. Bellow mentioned factors might have influenced the result of the research. These factors are listed in order of possible magnitude:

1. Self-selection bias and reporting bias

   In multiple instances, self-selection and reporting bias could have had an impact on the results of the research. Firstly, the selection of external interviews was not randomized, as such a bigger proportion of the customers were from Prague, where in general the epicenter of the business is. Secondly, interviews were conducted with already existing customers with historical business connections with the Hilti company and may already have a specific opinion of the Hilti company. Thirdly, in order to increase the likelihood of the customers to agree with the interview, the preceding contact had to be carried out in the name of the Hilti company. The knowledge of the interviewer's association might have contributed to the reporting bias. Lastly, the outcome of the interviews might be slightly biased due to deceitful answers of respondents and their unwillingness to disclose profit-driven nature of their decision making process.

2. Limited sample size and its characteristic

   There are limitations which can also be found in sample size and its characteristics. By surveying the 60 existing customers of the Hilti company out of potential thousands, the research could not have the necessarily needed sample size in order to make generalized conclusions and identify the trends on the market. The research was conducted with people with different background, experience, areas of expertise, their job location and country of origin in order to get more accurate and authentic outcomes that could be applied at least within the management of the regional business of Hilti company. However, despite the fact that the sample tried to respect all the aspects, it was technically and source-wise impossible to conduct the interviews in every single market within the region. The proportion of the interviewed department within internal expert interview process was also asymmetric. Some of the departments were taken into the process of research just to assure the complexity of the results since they have an indifferent attitude towards the researched area.

3. Interviewer expertise, prior market knowledge
   Unfortunately, the interviewer was not a professionally trained interviewer, so the way that interviews were conducted, i.e. the body language, the intonation, guiding questions and intensity of the follow up question might have influenced the results of the research. Nevertheless, the interviewer gained more experience during the progress of the research and the interviews became more focused on the relationship, the communication issues with the increasing knowledge and understanding of the researched topic.

4. Questionnaire structure
   The questionnaires were created to serve as a general guide for the interview, since the interviewer was not an expert within the field. Nevertheless, with the growing number of internal expert interviews the interviewer captured many tips and tricks on how to enhance the general understanding of the market and process patterns. The major part of the information received was tacit and the small portion recorded usually represents opinions of our interviewees and is not readily quantifiable.

3.3. Research findings and Process of Data Interpretation

Process of data interpretation

The hypotheses were successfully evaluated and analysed after conducting all the expert interviews. The interpretation of findings was done with respect to C.N. Sontakki (2011), who claims that *"it is necessary to search for broader meaning of the research findings"* (C.N. Sontakki 2011). Apart from that, he defines two main aspects of the findings interpretation process: *„1) the effort to establish continuity in research through linking the results of a given study with those of another" and „2) the establishment of some explanatory concepts."*(Sontakki, 2010). According to Sontakki, the process of interpretation of the outcomes has four complementary steps.

"1. Explain the Relations; 2. Consider Extraneous Information; 3. Consult the Dependable; 4. Avoid False Generalisation." Sontakki (2011)

1. Explain the relations – Reasonable explanation of the relations and processes was done via already obtained general understanding of the industry together with the information gained during the internal and external interviews.

2. Consider Extraneous Information – Due to a relatively small sample of interviewees it was necessary to go again through the obtained information and search for any extraneous information that could give explanation to vague data.

3. Consult the Dependable – In order to check the validity of the outcomes all the obtained information was always consulted with two or more other people, who have deeper knowledge and broader understanding of the industry or of a certain researched area. In order to gain more meaningful data it was necessary to consult the outcomes with people who do not come from the same environment or have the same background.

4. Avoid False Generalization – All inputted data was double checked in order to avoid unfounded generalization.

Further, some of the information which came from the interviews was analysed and verified using simple secondary data analysis in order to avoid false generalization and to keep the level of objectivity of the research high.

The research has identified several important aspects about the Hilti company after-market service. Since the research was highly qualitative due to the nature and complexity of the industry, the outcomes cannot be generalized and shown in the statistical format. Already from the start of the research the main discussed topics have been evolving around five above mentioned hypotheses which are related to the three main areas: the pricing of the spare parts, the top stop limits (limit for repair) and the AMS marketing communication. The interviewer guideline and the research itself were constructed in order to get as much information and insights as possible about the current status, possible internal process improvement of the researched area and customer satisfaction with the Hilti company AMS system. The AMS system includes, among others, also “no cost period”, but since it is not directly connected with the topic of this Master's thesis; it was left out from the research.

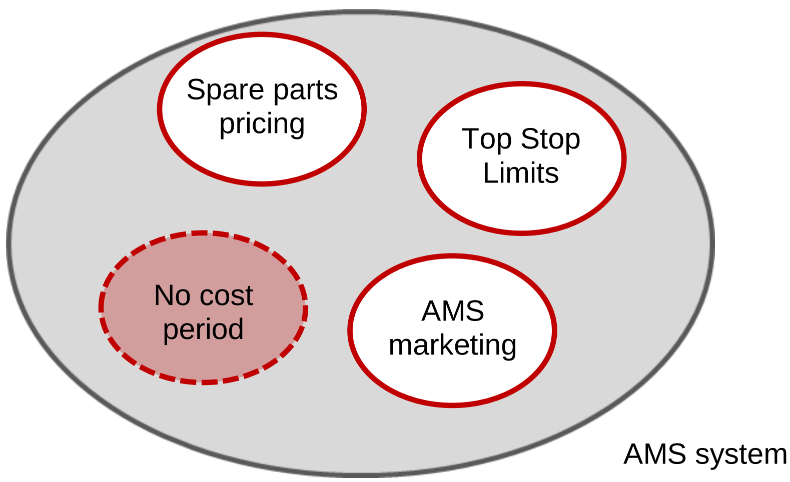

Figure 10. Research areas (Source: Author)

3.3.1. Spare Parts Pricing

The initial research conducted by the AMS department has identified the spare parts pricing as one of the main causes of the repairs profitability issues. Therefore, it was necessary to conduct the research among the customers and internal experts and find out whether the price increase or price decrease would affect customer satisfaction. When talking about the spare parts pricing and the AMS pricing it should correlate with high end or premium positioning of the brand on the local market. Therefore, it was necessary to find out how the Hilti brand is perceived by customers within the product portfolio and analyze the AMS system separately.

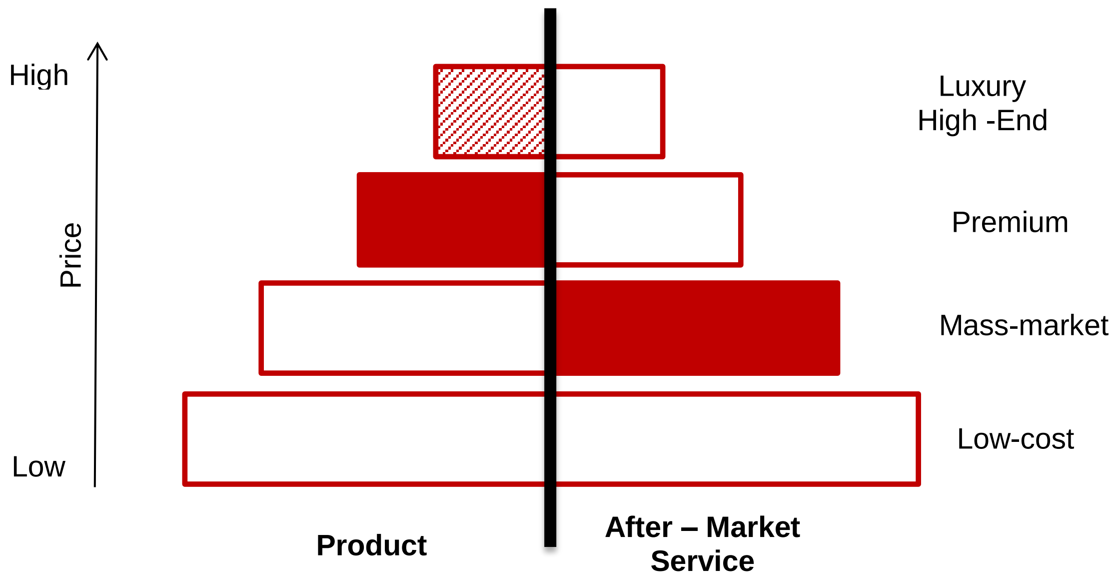

Figure 11. Product pricing versus AMS pricing perception (Source: Author)

The findings have shown that there is a discrepancy in the brand perception of the product and the AMS system (See figure 11.). The value-for-money aspect was also taken into account in this analysis. During the interviews, the customers expressed the view that in general they do not see any difference between the Hilti AMS system and the competitors' warranty programs. Furthermore, a vast majority of interviewed customers have pointed out that they pay in total more or the same amount of money for the repairs of competitors' comparable tools. Furthermore, after a proper, clear and professional explanation of the AMS system, 95% of the respondents of external in-depth interviews have acknowledged the benefits of the AMS system and rated the AMS system as a premium service. (See figure 11.). Here are some of the customer reactions:

"Wow, this is something I did not know; now I understand the reason for the initial higher price of the tools." (Customer, position: Buyer)

"I still cannot believe that Hilti is offering such a service, it cannot be profitable for your company. " (Customer, position: CEO)

The analysis of the external interviews' outcomes has shown that the customers perceive the Hiti brand within the product portfolio as premium and high end or even luxury. The official marketing communication of the Hilti company positions the brand into the premium segment. The discrepancy in the product positioning results might be caused either by the fact that the customers do not distinguish premium from luxury or high end in construction building industry or by the fact that the Hilti company and its market organization in the Czech

Republic had 3 or 4 times higher prices than the competitors still 5 or 6 years ago. The Hilti company has significantly lowered the prices in the recent years in order to boost the sales volume. Nowadays, the Hilti company is charging premium prices slightly above the competitor’s price.

Pricing is generally recommended by the headquarter office in Schaan, Lichtenstein but each market organization and its marketing team sets up prices in order to balance the profit, local market pricing and the value proposition. The spare parts price sensitivity test was rejected already in the beginning of the research, since the prices of the spare parts are not considered when the customers are buying a new tool in the first place. However, it might sound like the customers are not sensitive to the spare parts price increase or decrease, the research has discovered that the AMS pricing, and more specifically, the prices of the spare parts are consequently affecting the brand selection and decision making process of a future investment into a portfolio upgrade by 74% of the interviewed customers. The current price of each spare part is set as the multiplication of the transfer price and the coefficient Z. The transfer prices of the spare parts are set by the headquarter office in Schaan Lichtenstein and the absolute value of the coefficient Z is only recommend by the headquarter office. The transfer prices are binding and are equal for all market organization within the Hilti company world. The transfer price generally represents the costs of the spare parts for the organization. The final decision about the absolute value of the coefficient Z falls within the competence of the local market organizations after-market service and marketing teams.

$$LSP = TP \times coef.Z$$

LSP - List Sales Price
TP – Transfer price
coef. Z - Multiplication

Figure 12. Spare part price calculation (Source: Author)

As was mentioned above in the text, the absolute value of the coefficient Z is recommended by the headquarter office in Schaan, Lichtenstein and the absolute value should be *(Hidden due to confidentiality agreement)* The absolute value of the coefficient Z should generally correspond with the overall market organization profitability and have inverse character to the product price premium level. Based on the conducted internal interviews, the only way how to increase or decrease the price of a given spare part would be by changing the Z coefficient. The internal in-depth interviews with the AMS department managers pointed out that the spare parts prices, or more specifically the Z coefficients, have not been revised since the implementation of the internal system SAP in the year 2010. In order to identify the current level of Z coefficients, it was necessary to conduct an analysis of the internal secondary data and, moreover, to get the complex picture of the spare parts pricing system. (See figure 13.)

Hidden due to confidentiality agreement

Figure 13. Spare parts pricing – current distribution of coef. Z

(Source: Author, Internal data 2012)

For the purpose of the research the data from 2012 AMS sales were taken into account. In the year 2012 Hilti Czech Republic repaired around nineteen thousands tools and changed more than *(Hidden due to confidentiality agreement)* different spare parts in the tools. These *(Hidden due to confidentiality agreement)* spare parts generated more than *(Hidden due to confidentiality agreement)* CZK (AMS Sales). Figure 13 shows the distribution of the Z coefficients for these 2200 spare parts and its share on the AMS Sales. From figure 13 it is visible that the absolute values of Z coefficients vary from *(Hidden due to confidentiality agreement)* which does not correspond with the headquarter office recommendation. *(Hidden due to confidentiality agreement)* of the total spare part units had been selling for the price (*(Hidden due to confidentiality agreement)* % of total amount of sold pieces) which does not correspond with the headquarter recommendation which designates coefficient *(Hidden due to confidentiality agreement)*. From the financial point of view, these *(Hidden due to confidentiality agreement)* % of spare part (*(Hidden due to confidentiality agreement)* of total amount of sold pieces) generated only *(Hidden due to confidentiality agreement)* % of total

AMS sales. Additionally *(Hidden due to confidentiality agreement)* % and more exactly *(Hidden due to confidentiality agreement)* single spare part units which were changed in the year 2012 (*(Hidden due to confidentiality agreement)* sold pieces) had the coefficient Z lower than 1, which means that these spare parts had been sold under the level of their transfer prices and therefore their profitability was negative. The scissors effect is more visible on figure 14. The source of this discrepancy and variability of coefficients was identified as a system failure. The transfer prices are in general defined in Euros or Swiss francs and some of the spare parts were not recalculated into local currency during the abovementioned implementation of the internal system SAP.

Hidden due to confidentiality agreement

Figure 14. Spare parts pricing – scissors effect (Source: Author, Data 2012)

In the real time, the spare parts price sensitivity could be measured only by the absolute change in the number of complaints related to the AMS pricing. But as one of the interviewed employees of the Hilti company has said:

“This “let’s wait and see what the customer will say about it” approach would not probably be acceptable in a professional company like Hilti.” (Employee, position: AMS Manager)

Therefore, it was necessary to conduct interviews with internal experts at the customer service department who deal with customer complaints. Both interviewed internal process experts have confirmed that there is a very low number of complaints regarding the pricing of the spare parts. Such specific complaints are handled individually and the spare parts prices on the billing document are usually modified in order to keep the level of customer satisfaction high. While the outcomes of the internal expert interviews have shown that the customers do not significantly and explicitly complain about the price of specific spare parts via the customer service department, the research conducted among the account managers pointed out several specific spare parts that have a higher rate of complaints about the price. Since the account managers are in daily contact with the customers and moreover have long-term personal and business relationships with them, they usually handle these types of customer complaints. The account managers named three key groups of spare parts that have “unacceptable” price compared to the competitors or to the general market price. These spare part groups have one general attribute in common. In the case of these three groups of spare parts the customers are able to identify the cause of the damage by themselves and therefore have the tendency to change the spare parts on their own. These spare parts were specially questioned during the in-depth interviews with the customers and 85% of them have confirmed and specified these overpriced spare parts as chucks, cables and switches, further only as strategic spare parts. For the purpose of this research, the chuck has been omitted from the study since it is considered a consumable, not a spare part within the Hilti product portfolio.

Price in CZK	Hilti	Makita	Bosh	Milwaukee	DeWalt	Local corner shop
Cable	490	145	160	190	210	80
Switcher	1400	740	680	785	690	Not available

Figure 15. Strategic spare parts pricing –competitor’s analysis (Source: Secondary market data - Author)

The secondary market data analysis has justified the customer complaints regarding these abovementioned spare parts. The figure 15 displays the competitors’ prices of the strategic spare parts. Simple analysis proved that Hilti strategic spare parts are 3 or 4 times more expensive than the competitors’. On the other hand deeper analysis of the spare parts market has shown that most of the competitors, unlike the Hilti company, sell their spare parts directly to the customers, so that they can change them at their construction sites or in their workrooms. 80% of the interviewed customers have expressed themselves that they regularly buy unoriginal spare parts on the secondary market (local corner shop) in order to spare the costs and change the spare parts on their own. However, the Hilti company does not sell the spare parts directly to the customers due to a safety reasons and quality preservation of the Hilti products. Besides, the research has shown that nearly half of the customers do buy these types of spare parts on the secondary market and leave their technicians repair the tools on their own. Despite the fact that majority of the interviewed customers admitted that they occasionally exploited the secondary market with strategic spare parts, 75 % of them conceded lower quality and supplementary costs connected with a spare part installation. These costs are mostly associated with the additional adjustment of the spare part and wage of a technician who handles the repair. There are more than *(Hidden due to confidentiality agreement)* spare parts which meet the strategic spare parts characteristics within the current Hilti company spare parts portfolio. In the year 2012 these *(Hidden due to confidentiality agreement)* strategic spare parts generated more than *(Hidden due to confidentiality agreement)* CZK with more than *(Hidden due to confidentiality agreement)* sold pieces. The Z coefficients do not vary significantly and are in the interval between *(Hidden due to confidentiality agreement)*.

Besides, 70 % of interviewed customers have remarked that they have a “feeling” that vast majority of their repairs are charged for the repair limit (Top Stop Limit). Such a charged repair is called “cap repair”. These cap repairs were clarified as a main source of complaints regarding the pricing of the AMS system.

“Regardless of the damage extent of the tool, the Hilti company charges us the repair limit” (Customer, position: Accountant)

For the completion of the overall picture of the spare parts pricing system, it is necessary to mention that the ASM system is not fully dedicated to making profit as some other business units within the Hilti company business model. Moreover, since the Hilti company offers first two years at zero costs, the basic financial indicator ROI is only *(Hidden due to confidentiality agreement)* %.

“The goal of the whole AMS system is NOT to make profit on the place. It is one of many other additional services that Hilti company offers to the customer.” (Employee, position: Marketing Manager)

Summary of the findings on spare parts pricing:

1. The vast majority of the interviewed customers find the Hilti company spare parts pricing comparable to the competitors. The AMS perception is equal to mass-market, which does not correlate with the general brand perception target.
2. There is a significant amount of spare parts which are sold under the recommended profitability level.
3. The customers are sensitive to strategic spare parts pricing.

Consequence:

On one hand, the Hilti company is donating some of the repairs and has therefore profitability problems with those repairs. On the other hand, the customers rather buy available unoriginal spare parts and change them on their own, due to a high price of some Hilti spare parts.

3.3.2. Top Stop Limits

The initial research conducted by the Hilti company AMS department has indicated the historically constant level of repair cost limits or top stop limits, further only TSL as a one possible causes of the unprofitability of some repairs. According to the AMS department manager, the initial research was based on a very simple calculation and therefore deeper data analysis and research among the product managers, who have the TSL adjustment process in their hands. The in-depth interviews were conducted with all 5 out of 8 product managers that have products with TSL in their portfolio separately, in order to find out the current status of the TSL and further draw recommendations that would lead to the increase of profitability.

The TSL is in general explained to the customers as a cost ceiling for future possible repairs. Each tool has its own TSL expressed in the local currency and the current TSLs are available online on the local Hilti company websites. After the purchase of every brand new Hilti tool, each customer has 2 years with no costs and after the second year the TSL comes in place. With the TSL the Hilti company ensures the customers that any other repair will not cost more than the TSL of that particular tool. Since all the repairs after 2 years are paid, the potential movement up or down with the level of TSL or “ceiling” will immediately affect the total AMS sales. According to the product managers, the TSL values are inserted into the internal system SAP during the launch of every new tool. The TSL values are recommended by the headquarter office in Schaan, Lichtenstein and it should be at the level of *(Hidden due to confidentiality agreement)* of the list price of a new identical tool. The absolute percent value of TSL is only recommended and should inversely correspond with the level of the price premium. According to the outcomes of the in depth interviews with the top managers in the Hilti company Czech Republic, the local market is already saturated and therefore the Hilti company and its market organization in the Czech republic cannot charge high price premium.

$$Level\ of\ TSL = certain\ \%\ of\ current\ list\ price\ of\ the\ tool$$

Figure 16. Level of TSL (Source: Author)

Vast majority of product managers have expressed themselves that they have not done any complex revision in the last 5 years since the AMS in general is only additional service that is in place to foster customer satisfaction. The TSLs are established in the product launch phase and derived from the launching price which has naturally a higher price premium. The research has shown that as time went on the price of the tool shifted up or down but the TSL usually remained at the same level. Further, the research has pointed out that the product managers, who are responsible for the overall profitability of each tool, have only little knowledge about the current level of TSLs within their product portfolio and moreover have a “blurred” picture of the AMS profitability of the tools. The secondary internal data analysis showed that in the year 2012 there were more than *(Hidden due to confidentiality agreement)* paid repairs (*(Hidden due to confidentiality agreement)* thousand in total including the repairs in the 2-year no cost period). More than *(Hidden due to confidentiality agreement)* % of the total amount of paid repairs was under the recommended profitability level and even more than *(Hidden due to confidentiality agreement)* % of all paid repairs were donated from the Hilti company side.

Hidden due to confidentiality agreement

Figure 17. Representative sample of repaired tools – profitability and TSL level 2012 data (Source: Internal data analysis – Author)

Figure 17 shows that due to the historical changes in prices of the tools the current ratio of the tool price and the absolute value of the TSL vary significantly. The spread of current TSL/Price ratios is between *(Hidden due to confidentiality agreement)* % with the median at the level of *(Hidden due to confidentiality agreement)* % which is under the recommended level. The average marginality and the amount of repairs for each tool are complete the overall picture. A deeper analysis of internal data has pointed out that there is a certain group of products called "light tools" that have a relatively low profitability level, due to base prices and relatively high prices of spare parts for products. These light tools are:

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Since the unofficial guideline for the TSL communication to the customers says that the TSLs are approximately at the level of "one third" of the new tool, further clarification of this practice among the account managers, who are considered as the main carrier of the information to the customer and vice versa, was necessary. All interviewed account managers have confirmed the usage of the expression "one third of a price of a new tool" when explaining the AMS system and convincing the customers to purchase the tool. Since there is quite a significant discrepancy between what is communicated to the customer and the reality, there are complaints from the customers from time to time. However, these complaints are handled individually in order to keep the customers' satisfaction high, but it has a negative effect on the company brand and on further sales. Only a small amount of customers double-check the level of TSL on the company websites, they rather believe the account manager. Additionally, the research has shown that a vast majority of customers evaluate the level of AMS pricing more favourable for them or comparable to the competitors. Therefore, the potential increase of TSL would not have a significant impact on customer satisfaction.

Summary of the findings on Top Stop Limits:

1. The Hilti Czech Republic has historically constant Top Stop limits
2. Majority of Top Stop Limits is under the recommended level
3. There is a discrepancy between the communication towards the customers and the reality.

Consequence:
Some of the paid repairs are unprofitable and the discrepancy in the communication is harming the Hilti brand.

3.3.3. AMS marketing communication

Based on the conducted interviews, the majority of customers consider the after-market service as one of the key decision making element during the process of choosing and buying of a new tool for their business. (See figure 18.)

Drivers of the purchase -	Importance from the customer point of view
Product quality	35%
After-market service	30%
Availability	10%
Relationship	10%
Brand	15%

Figure 18. Drivers of the purchase (Source: Author)

The customers are usually profit-cost driven when they are purchasing a new tool. The after-market service is in general negatively accepted since we are talking about additional transactional repair costs for the customer. Besides, the owners of companies also reflect hidden costs as they usually have to rent out or buy additional tools when their damaged tools are in the repair centre. One of the key outcomes of the research is the fact that the majority of customers do not understand the after-market service system of Hilti company and more specifically, do not realize its benefit. Further, majority of interviewed customers could not identify the difference between the Hilti company after-market service and after - market service systems of the competitors. Despite the fact that all interviewees have identified the Hilti company as a high end or at least a premium market player, there was a variety of answers on the reasons that formed their judgment on the Hilti company's market position. Exactly one half of the respondents consider the Hilti company products as premium or high end due to the products quality, after-market service or innovation. According to both the marketing managers interviewed such a brand image is desired. The second half of the respondents evaluate the company market positioning based on its products' high price level. Further study of the data obtained during the research has shown that there is a clear link between the group of respondents who do understand the system of after-market services and correspondents who consider the Hilti company product as premium or high end and their judgement is based on products' quality, services, and innovation. These two groups are almost identical. Besides, this group of customers consider the Hilti company after-market services beneficial and one of the key factors when deciding to purchase a Hilti tool instead of a competitor's product. On the other hand, the group of respondents, who do not realize the benefits and do not understand clearly the Hilti company after-market service system, talk about Hilti products as highly overpriced and buy Hilti products very rarely. During the interview, the customers were asked to explain the Hilti company after-market service system with their own words and state its main differentiation drivers. Even those respondents, who were previously evaluated as highly educated about the Hilti company after-market system and its benefits, could not clearly explain the whole system. Only 5% of respondents were able to explain correctly the Hilti company after-market system and identify all its aspects and benefits. Even after a qualified explanation with the help of an official leaflet and the AMS logo, 75% respondents identified the communication of AMS system as confusing and 65% of respondents had additional questions regarding the AMS system during the qualified explanation. On the other hand, 95% of the respondents identified the AMS system as intelligent and beneficial after a competent explanation of the AMS system. These results have confirmed the validity of the hypothesis no. 5 that "the customers do not clearly understand the whole Lifetime Service and the AMS concept." Besides, the same test was done with 6 Hilti company sales employees and the results were comparable. The abovementioned results also declared that AMS marketing communication is not effectively transferring the core message and the main idea behind the AMS towards the customers. The core Hilti AMS marketing communication tool is the AMS logo (see figure 6.) and the main medium of information to the customer is the direct sales force. As stated above, the research has pointed out the low level of general ability of the direct sales force to explain the AMS system to the customer. On top of that, the research has studied how the current customers of Hilti company perceive the AMS logo and how they compare the AMS system to the competitors on the market. Here are some comments which could be identified as a representative sample of answers throughout all interviews conducted, including both, external and internal interviews.

"What does Lifetime repair cost limit and Repair No cost mean. (Customer 3, position: Technician)

"I do not understand this logo. The logo is overloaded with information" (Customer 1, position: CEO)

"Wording Lifetime is not understandable and clear, it is just another marketing trick." (Customer 2, position: Buyer)

"Our logo does not indicate that Hilti products outperform but emphasizes a fast repair turnaround." (Hilti employee, position: Sales)

"Competitors have clear, simple and logical message which leads to a situation that our Customers are comparing Hilti's "2 years No-Cost" with 3 years of manufacturer's warranty of competitors. That is like comparing apples and pears! That is nonsense!" (Hilti employee, position: After- market service)

Figure 19. AMS logo – reactions (Source: Hilti Corporate Website, 2013 / Author)

Beside this research which was conducted for the purpose of this master thesis, there is an on-going research, called ICOS (Integrated Customer Opinion Survey), which is separately studying customer satisfaction throughout different business areas. Every year thousands of independent phone interviews are conducted by external suppliers and the results are collated. Only customers, who have placed an order in the past two months and had a meeting with the Hilti account manager, qualify for inclusion into the survey. Interviews take no longer than 5 minutes and ask 3 customer satisfaction questions, 3 customer bonding questions, 11 dimension questions and 2 or 3 local questions based on the current Hilti company priorities. There are also questions which analyse satisfaction with the after-market service. However, the research analyses the overall satisfaction with the after-market services, it does not explicitly analyse the communication of the AMS system and the general customer acceptance and understanding.

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Figure 20. Overall ICOS results (Source: Hilti Company internal source, 2012)

Nevertheless, this research has been in place for many years already and simple analysis of ICOS historical data has shown that the AMS is considered as one of the weakest elements from the customer's satisfaction point of view. (See figure 7.) The results of the ICOS, more specifically the AMS ICOS results, were discussed during the internal expert interviews and 75% of the respondents believe that the relatively low results are mainly due to the incomplete understanding of the benefits of the whole AMS system.

Hidden due to confidentiality agreement

Figure 21. ICOS results Czech Republic (Source: Hilti Comapny internal source, 2012)

"Before any judgement can be done it is necessary to mention that Hilti company is always scoring higher in AMS ICOS results than any other competitor on the market. The term "low satisfaction results" can be only used when the results are compared to the ICOS result of other Hilti company services. Since the after-market service and we talk mostly about the repairs is in general negatively accepted by the customers, the only way how to increase their satisfaction and ICOS results is to educate them properly and effectively about the whole system of the AMS and acquaint them with its benefits. The customers have to get the message that the AMS system is constructed in their favour and that it is not a fraud or a marketing trick with some hidden conditions they might have experienced with other agents on the market." (Hilti employee, position: Marketing manager)

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Figure 22. Tool service ICOS historical results (Source: Hilti Comapny internal source, 2012)

Based on the conducted interviews and their outcomes, majority of customers, exactly 60% of the respondents, do not realize the positive differentiation of Hilti company AMS system from the competitors' warranty programs. Only 25 % of the interviewed customers have identified Hilti company AMS system as more beneficial than the competitors' warranty programs. However, the secondary research has shown that the competitors' warranty marketing communication seems very similar to the Lifetime Service offered by the Hilti company (See figure 5.), but a deeper research into warranty conditions conducted showed a relatively high level of differentiation (See the table 3.). Moreover, none of the analyzed competitors scored higher in any assessed area. The competitors' misleading marketing communication or unclear marketing communication of the Hilti AMS system might be the reason behind the external interview results.

"Bosch has 3 years of warranty for all the tools and Hilti offers only two and beside that Hilti carges almost 50% more for a new tool. Why should I buy this?" (Customer, position: Buyer)

But on the other hand there are customers saying:

"There are no relevant competitors, who would be able to deliver similar AMS in a comparable quality and consistency." (Customer, position: CEO)

Figure 5. The competitors AMS marketing communication tools (Source: official websites of Makita, DeWalt, Milwaukee)

The AMS system – Competitor's analysis

	HILTI	BOSCH	DEWALT	Milwaukee	Makita
Manufacturer's Warranty	**Lifetime**	**3 years**	**1 year**	**3 years**	**1 year**
No-Cost Period	**1 or 2 years**	**-**	**1 y- service**	**1 year**	**-**
Labour, defective parts included	**Yes**	no	Yes	yes	No
Wear & tear parts included	**Yes**	no	No	yes	no
Required maintenance	**Yes**	no	Yes	yes	no
Free pick-up & delivery included	**Yes**	no	No	no	no
Cost Limit for repairs	**Lifetime**	no	no	no	no
No-cost period after repairs	**6 months**	*no	*no	*no	*no
Other features	**++**	+	0	0	0
Repair time (incl. delivery)	**4 to 5 days**	5 days	**?**	**?**	**?**
Proof of purchase required	**no**	Receipt / warr. card	Receipt / warr. card	Receipt / warr. card	Receipt / warr. card
Other			30 d. satisf guar		

*Only cover the first 2 months of the changed modules or spare parts

Table 23. The competitors AMS system analysis

(Source: Author)

The Life Time service, supported by its important backbone, the AMS, is unique in the industry and a clear benchmark. It is important to note that in order to obtain some of the competitors' warranty conditions stated in the table 3. it is obligatory for the customers to execute extra activity such as: register at the website or send an email with the serial number of the tool to the producer. The notification about the necessity of this extra activity is not specified on the competitors' warranty marketing communication tools. (See figure 5.)

Summary of the findings on LTS & AMS marketing communication:

1. There are no competitors on the market that could offer the same AMS system or the same warranty conditions
2. The vast majority of the customers do not differentiate the LTS&AMS system from the competitors' warranty programs
3. Only a small percentage of the direct sales force has the ability to clearly explain the whole AMS system

Consequence:

Due to a low efficiency of AMS marketing communication, the customer does not value the beneficial aspect of the Hilti company AMS system in the full extent.

3.4. Recommendation part

Since the research had been evolving around three areas of the AMS system, spare parts pricing, Top Stop Limits and AMS marketing communication, the next recommendation part will maintain the structure of the structure of the research findings interpretation part, each area of the research will be analysed and concrete recommendations will be outlined. In order to ensure the correctness and validity of the recommendations, all proposed strategies were tested in the interactive statistical model, which was created for the purpose of this Master's thesis. This complex interactive model combines all the potential scenarios and simulates the year 2012 (AMS sales) and immediately recalculates the changes in sales and customers' satisfaction. The initiators of this project have expressed themselves; the main attributes of the recommendations should be the increasing profitability and increasing or at least the remaining level of customer satisfaction.

3.4.1. Spare Parts Pricing

Based on the conducted internal and external in-depth interviews and further analysis of the outcomes, it was uncovered that the Hilti company is selling some spare parts under their actual costs and therefore has problems with profitability on those repairs. On the other hand the customers prefer buying available unoriginal spare parts and change them on their own, due to the high price of some original Hilti spare parts.

The analysis of secondary data has pointed out that Hilti company and its marketing organization in the Czech Republic have significant variability within the spare parts price creation process, especially in assignment of the Z coefficients. The consequence of this variability is lower profitability on some repairs of the Hilti products. One of the incremental objectives of this master thesis is to develop a strategy and, moreover, propose concrete steps that would lead to an increase in profitability of the whole AMS system. The strategy development process was conducted with the top management of the Hilti company, since any changes may have a large impact on the overall business sustainability and moreover on the customer satisfaction. During the final strategy designing process, several possible scenarios were taken into consideration. These scenarios have respected the best practices from other market organization within the Hilti company world. All the considered scenarios with descriptions are outlined in the table below.

Strategy	Short name	Description / Action	Mark
Scenario X	**"Current state"**	**Leave the current situation = NO Z coef. ADJUSTMENTS**	**≈**
Scenario A	**„Flat coef. Z"**	**Flat adjustments of coefficients (Hidden due to confidentiality agreement) for all spare parts**	**↗ Z ↙**
Scenario B	**"Bottom Up"**	**Adjustment of coefficients Z up to (Hidden due to confidentiality agreement for all spare parts that have coefficient (Hidden due to**	**↗ Z ≈**
Scenario C	**"Remove Extremes"**	**Adjustment of extreme values of coefficients Z All spare parts with coeficients (Hidden due to confidentiality agreement**	**↗ Z≈Z↙**

Figure 24. Spare parts pricing – scenario set (Source: Author)

All the above mentioned scenarios were studied from both the financial and customer satisfaction point of view (See figure 24). For the purpose of the right strategy selection, an interactive model, which allows the user to change the variable input data (Z coefficients), had been developed. This complex model simulates the changes on the AMS 2012 sales data of Hilti Czech Republic and immediately shows the incremental AMS sales figure and the change in customer satisfaction. Since the research has shown that the customers reflect only the total amount of cap repairs, the change in number of cap repairs was taken as a most representative measurer of customer satisfaction. Therefore figure 25 does not only contain the incremental changes in AMS sales in CZK but also the percentage change in number of capped repairs for each scenario.

Figure 25 shows that the Scenario X does not recommend changing the Z coefficients. The scenario X is mainly supported by the fact that the whole portfolio of current spare parts seems balanced and the current AMS is *(Hidden due to confidentiality agreement)* profitable from the overall perspective (*(Hidden due to confidentiality agreement)* % ROI). The outcomes of the internal expert interviews have pointed out that some of the Hilti company market organizations, who can afford higher price premium on the products, have only one coefficient Z (at the recommended level Z = *(Hidden due to confidentiality agreement)*) for all the spare parts within their spare parts portfolio (Scenario A). Implementation of such a scenario would on one hand lead to a significant increase in customer satisfaction, since the spare part prices and number of cap repairs would decrease by 35%. But on the other hand, it would lead to a serious drop in the AMS income (- 18% change in the AMS sales) under the level of overall profitability. Scenario B simulates the increase of prices of the spare parts whose Z coefficients are lower than *(Hidden due to confidentiality agreement)* (In total *(Hidden due to* *confidentiality agreement)* single spare parts). Logically, this increase of prices is entailed with the growth of total cap repairs. However, this scenario adjusts the prices of spare parts that are under the recommended profitability level, it does not modify the prices of spare parts which have an extreme absolute value of Z coefficients. These “extremely” overpriced spare parts are generating customers’ complaints and therefore have a negative effect on customer satisfaction. The Scenario C includes the above mentioned increase of prices that are under the recommended profitability level and also lowers the prices of spare parts which have the Z coefficients greater than *(Hidden due to confidentiality agreement)*. These “extreme” spare parts will have coefficient Z = *(Hidden due to confidentiality agreement)*. The total effect is 4% increase of the AMS Sales. The Scenario C is recommended, despite the fact that the customer satisfaction will in general decrease, but this will be solved by further recommendations.

Scenario X		Scenario A		Scenario B		Scenario C	
"Current state"		"Flat coefficient Z"		"Bottom Up"		"Remove extremes"	
Total AMS sales CZK *	*Hidden due to confidentiality agreement*						
Absolut change CZK							
Change in sales %	0,0 %	**Change in sales %**	**-17,7%**	**Change in sales %**	**4,1%**	**Change in sales %**	**4,0%**
% change of cap repairs	0%	**% change of cap repairs**	**-35,7%**	**% change of cap repairs**	**8,4%**	**% change of cap repairs**	**8,1%**

Figure 25. Spare parts pricing – set of scenarios and its effect on the profitability and total number of cap repairs. (Source: Analysis of internal data - Author)

The research has shown that the customers are sensitive to the spare parts pricing and in order to increase the general customer satisfaction with the AMS, it is necessary also to revise the pricing of cables and switches. The reduction of prices is highly recommended. The simplest approach would probably be the price unification with the competitors’ prices and secondary market prices. But since the customers do not reflect the quality and additional costs for the exchange of the particular spare part (workforce and additional adjustment) when comparing the strategic spare parts prices, this approach is not recommended. Additionally, the Hilti company is perceived as a premium brand and therefore it is recommended to set the prices of strategic spare parts slightly above the market price. The recommended absolute value of the coefficient Z for the strategic spare parts is *(Hidden due to confidentiality agreement)*. However, this will lead to a significant drop in prices of the strategic spare parts; it will not have such a big impact on the total AMS sales (only – *(Hidden due to confidentiality agreement)* CZK). Most of these spare parts are changed during the “2 year no cost period” and after the 2nd year the customers tend to buy these spare parts on the secondary market.

Besides, it is recommended to revise the translation of designations of the strategic spare parts in the invoices. The designations do not usually correspond with the substantiality of the spare part. For example "switch" is generally understood as *"a small piece of plastic that triggers the tool"* (Customer, position: CEO) and the high price for such a "switch" causes customer complaints. In reality, the "switch" is the main part of the electrical tool.

The total financial effect of all the above mentioned recommendations is visible on the figure 26. Since the adjustment of the spare parts pricing system does not require any involvement of any other company department, the recommendations can be implemented immediately.

Hidden due to confidentiality agreement

Figure 26. Spare parts pricing – Total financial effect of the recommendations

(Source: Analysis of internal data - Author)

3.4.2. Top Stop Limits

Based on the conducted internal and external in-depth interviews and further analysis of the outcomes, it was uncovered that the Hilti company generally keeps the current TSLs under the recommended level (*(Hidden due to confidentiality agreement)*% of a price of a new tool) and therefore has problems with profitability on some repairs. Additionally, there is a significant discrepancy between the AMS, its TSL communication and the reality. The analysis of secondary data has pointed out that the Hilti company and its marketing organization in the Czech Republic have a significant variability within the TSL/Price ratios which does not match the headquarter policy and the recommendation. The consequence of this variability is lower profitability on some repairs of the Hilti products.

One of the incremental objectives of this Master's thesis is to develop a strategy and propose concrete steps that would lead to an increase of profitability of the whole AMS system and maintain the overall level of customer satisfaction. The strategy development process was conducted in alignment with the regional top management of the Hilti company. The reason for the necessity of consultations with the top management is the complexity of the whole AMS and the fact that any changes may have a large impact on the overall business sustainability and moreover on customer satisfaction. During the process of final strategy development, several possible scenarios were taken into consideration. These scenarios have respected the best practices from other market organization within the Hilti company world. All the considered scenarios with their descriptions are outlined in the table below.

Strategy	Short name	Description / Action	Mark
Scenario 0	**"Current TSL"**	**Leave the current situation = NO TSL ADJUSTMENTS**	**≈**
Scenario 1	**„Flat TSL"**	**Flat adjustments of TSL for all the tools at the level of** *(Hidden due to confidentiality agreement)***%**	**↗ TSL ↙**
Scenario 2	**"Remove extremes"**	**Adjustment of TSL extreme values All the tools with TSL** *(Hidden due to confidentiality agreement)*	**↗ Z≈Z↙**
Scenario 3	**"Flat TSL +Light tools"**	**Flat adjustments of TSL for all the tools at the level of** *(Hidden due to confidentiality agreement)* **for the "light tools"**	**↗ TSL* ↙**

Figure 27. Top Stop Limit – scenario set (Source: Author)

All the scenarios stated above were analyzed both from the financial and customer satisfaction point of view (See figure 27). For the purpose of the right scenario selection, an interactive model, which allows the user to change the variable input data (the level of TSL), had been developed. This complex model simulates the changes in the AMS 2012 sales data of Hilti Czech Republic and immediately shows the incremental AMS sales figure and the change in customer satisfaction. The impact of each scenario is displayed in figure 28. Since the research has shown that customers reflect only the total amount of cap repairs, the change in the number of cap repairs was taken as the most representative indicator of customer satisfaction. Therefore, figure 28 does not only contain the incremental changes in the AMS sales in CZK but also the percentage change in the number of capped repairs for each scenario. Figure 28 already incorporates the recommendations regarding the spare parts pricing from the previous chapter.

Figure 28 shows that Scenario 0 does not recommend changing the current level of TSLs. Scenario 0 is mainly supported by the fact that the whole AMS system seems balanced and the current AMS *(Hidden due to confidentiality agreement)* profitable from the overall perspective (*(Hidden due to confidentiality agreement)*% ROI). Scenario 0 already incorporates the changes in the spare parts pricing from the previous chapter, therefore figure 28 displays incremental AMS sales of *(Hidden due to confidentiality agreement)* CZK. The outcomes of the internal expert interviews have pointed out that most of the Hilti company market organizations have only one TSL level for all the tools within their product portfolio (Scenario 1). The major benefit of this scenario is the power of united and clear TSL communication on the market. Scenario 1 would possibly eliminate customer complaints caused by the current discrepancy between the TSL communication and the reality. Furthermore, such a policy would allow the TSL to react flexibly to the price changes of the tools. Since the research has shown that the account managers are using the expression “one third of the price of a new tool” and the price premium on the local market is relatively low compared to other markets, Scenario 1 recommends the level of TSL at *(Hidden due to confidentiality agreement)* % of a price of a new tool. This would lead to a slight increase of the current TSLs (current TSL level *(Hidden due to confidentiality agreement)* % - median) and therefore to a decrease in the total number of cap repairs. The increase of the TSL level will on one hand mitigate the general customer perception that all the repairs are invoiced for the limit but on the other hand, increase the real cost for repairs of some tools which might cause some complaints. Furthermore, since the AMS system pricing is perceived as comparable to the mass market, such an increase should shift the current perception to the desired level. Scenario 1 would increase the AMS Sales by almost 8%. Scenario 2 recommends the removal of the TSL’s extremes. A deeper analysis of the TSL of the current tool portfolio has shown that the extreme levels of the TSL are held mainly by historical products that are not on the market anymore and are repaired very rarely. Therefore, Scenario 2 would only have a small impact on the current profitability and the customer satisfaction level. Since the research has shown that there is generally lower profitability on “Light tools” repairs, Scenario 3 recommends a modification of Scenario 1 (flat TSL level for all the tools) and proposes a special level of TSL = *(Hidden due to confidentiality agreement)* % for the “Light tools.” However, while such a two tier system would lead to higher AMS sales (*(Hidden due to confidentiality agreement)* CZK more than Scenario 1), it would diminish the power of united communication and might lead to customers' embarrassment.

Scenario 0		Scenario 1		Scenario 2		Scenario 3	
"Current TSL + Scenario C "		"Flat TSL"		"Remove Extremes"		"Flat TSL + Light tools"	
Total sales CZK	*Hidden due to confidentiality agreement*						
Absolut change CZK							
Change in sales %	4,0%	**Change in sales %**	**7,8%**	**Change in sales %**	**0,8%**	**Change in sales %**	**10,2 %**
% change of cap repairs	8%	**% change of cap repairs**	**-18,4 %**	**% change of cap repairs**	**-1,0%**	**% change of cap repairs**	**-21,3 %**

Figure 28. Top Stop Limits – Set of scenarios and its effect on the profitability and total number of cap repairs. (Source: Analysis of internal data - Author)

From all the above mentioned proposed scenarios, Scenario 1 seems the most transparent, profitable and customer acceptable at the same time, therefore it is recommended. Together with Scenario 1 the launch of a special "trade in – change the old for a new one" for the "Light tools" is recommended that would decrease the price of a new tool and compel the customers to buy a new tool instead of repairing it. This would lead to a higher AMS profitability of those tools. Moreover, it is recommended to create an annual AMS report that would help the product managers and the top management steer the profitability of the whole AMS department. The total impact of the TSL recommendation part is displayed in figure 29.

Hidden due to confidentiality agreement

Figure 29. Spare parts pricing – Total financial effect of the recommendations (Source: Analysis of internal data - Author)

3.4.3. AMS Marketing Communication

As the research has shown the current Hilti customers do not clearly understand the AMS system and do not see its differentiation from the competitors warranty programs. In order to clearly differentiate from the Hilti company competitors and be able to explain to its customers the added value of the AMS based on their needs and preferences, it is necessary to revise the current AMS marketing communication. To make the customers understand the AMS system and further build sustainable partnerships with the Hilti company it is recommended to redesign the main marketing communication tool (the logo) and increase the efficiency of the main medium of information, the direct sales force, throughout the additional training. The AMS accompanies the customer throughout his journey, which is closely connected with the tool's lifecycle (See figure 30).

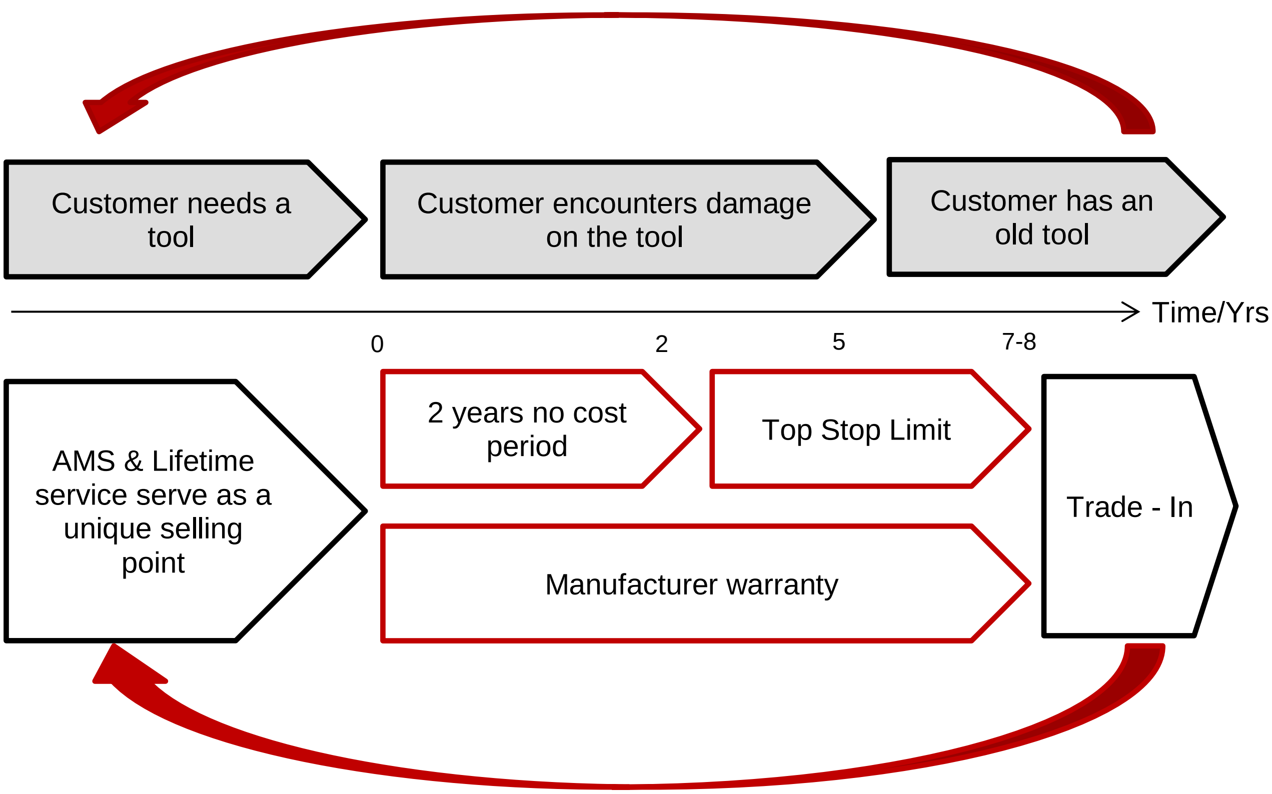
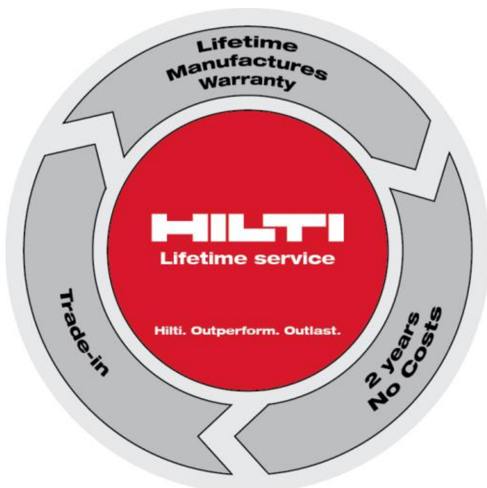
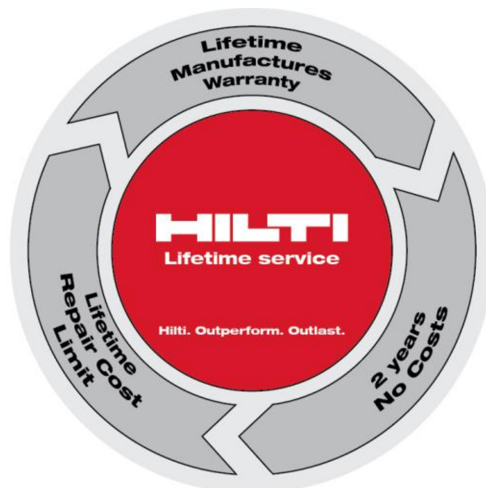


Figure 30. Customer journey within the Hilti company AMS (Source: Author)

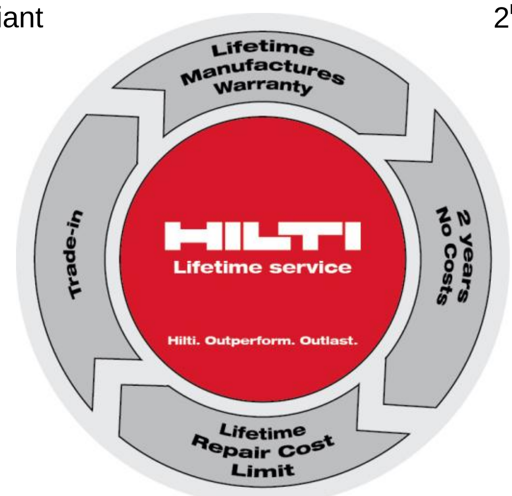
During the process of interviewing the Hilti company employees from the sales department it was found out that the most experienced sales people explain the AMS using the tool's lifecycle and the customer's journey throughout the whole process. It has been tested on the customer afterwards and the test has proved that the customers are more capable of understanding the AMS system when using such an explaining technique. Based on these results it is recommended to change the main communication tool, the logo, with respect to the customer's journey and the product lifecycle. The changes in the design should increase the self-explanatory aspect of the AMS & TSL logo. These variants were developed in order to leave the option of final decision for the top management of the Hilti company. Each of them has its own logic and reasoning behind itself.



1st variant



2nd variant



3rd variant

Figure 31. New LTS & AMS logo concepts – 3 variants (Source: Author)

There are two elements in the lifecycle of the tool and the customer's journey which, according to the results of the research, recall negative emotions in the customers. Trade-in and Life Time Repair Cost Limit (TSL) are both connected with additional future expenses on the customer's side and because of that are conflictingly accepted. The first variant does not include the information about the TSL since the research has identified negative emotions evoked by this expression among most customers. However, customers are relatively sensitive to any sign of further investment in the tools; they accept the fact that the tool will alternatively need some service or repairs in the future without any significantly negative emotion. It is necessary to mention that the first variant does not remove the TSL from the current AMS portfolio. It is recommended to have the TSL in place but not to advertise it heavily and rather use it as an additional unique selling point which is in favour of the customers. On the other hand, the “trade-in” information might raise the feeling that the customer is somehow pushed already into the purchase of another new tool and might consider it as a sign of low quality of Hilti products. The second variant does not contain the information about the Trade-in option. As the first variant without TSL, the second variant leaves the Trade-in information as one of the possible turning points in the future sales process when the customer considers the tool portfolio renewal or upgrade.

The research has shown that the warranty programs or after-market service systems are generally perceived negatively by the customers. This is a result of an on-going unclear marketing communication of some market players who offer superior warranty conditions, which are accessible only under certain and usually tricky conditions. These conditions are commonly not transparent during the sales process and the customers feel betrayed when the first problem appears. In order to differentiate from such market players it is recommended to implement the third variant of the logo, where all the elements and aspects of the Hilti Lifetime service and AMS system are transparent. The sample of the sales team managers founded the third variant as intuitive and self-explanatory. Besides, transparent communication is in line with one of the brand image elements of the Hilti company. Further, it is believed that such communication will lead to successful long-term business relationships based on trust.

“I can see the clear story behind the Hilti Life Time Service system. I am sure that this will help our sales people explain it to our customers!” (Hilti employee, position: Area Sales Manager)

During the external interviews the customers were asked to give a feedback on the complex understanding of the logo. Among others, the majority of the interviewees have remarked that the wording used on the LTS logo is not clear and poses lots of additional questions. Since this possible issue with wording requires deeper analysis and more knowledge and experience in this field it was left out from the recommendation part of this Master's thesis. Further research in this field is recommended and here are some suggestions that might help during the initial part of future study.

1. Message should be short, simple, easy to understand and should strengthen the Hilti brand message
2. Replacement of the “Lifetime” terminology is necessary
3. The new wording should re-evaluate the “No Costs” term
4. The message should eliminate side by side the comparison of “2 years of no costs” with standard manufacturers’ warranty programs offered by the competitors

Changing the wording and the logo type only will not have such a big impact on the Hilti company AMS marketing communication efficiency. Based on the research conducted among the account managers, the ability to clearly explain the LTS & AMS system to the customer goes hand in hand with the sales experience and moreover with the length of employment at the Hilti company. But the ability is generally relatively low. Despite the fact that the account managers deal with the customers on a day to day basis and are the main transmitters of information to the customer, only 20% of the account managers have stated that they explain the whole LTS & AMS system when selling to a new or not frequent customer of Hilti. In order to increase the customer understanding and ability to realize the benefits of the AMS system in general, it is necessary to improve the efficiency of information transmission via on-going situational training of the account managers. Since all account managers have to undergo a basic product and sales skill seminar at the very beginning of their carrier, it is highly recommended to reserve special attention during these seminars to a short training dedicated only to the LTS & AMS system and its beneficial aspects for the customer. This seminar should focus on the ability to clearly explain the AMS system and its efficiency during the sales process. To fulfil the aspect of continuity of the training, it is suggested to train the trainer, in this case the sales manager, who is in daily contact with the direct sales force and very often visits the customer together with the account manager and may coach the account manager and practice with him the ability to clearly explain the AMS system. The training itself should be situational, which means that the coach should be simulating the possible behaviour of the customer for the purpose of authenticity.

After conducting the research and proposing some if the above stated recommendations for improvement of the AMS marketing communication, it is necessary to say that it is not recommended changing the style and intensity of the Hilti company AMS marketing communication dramatically. The current manner of communication towards the customers is relatively sufficient and it requires only small adjustments in order to increase the efficiency and profitability. It is important to note that the AMS or the warranty programs in general evoke negative emotions in the customers and any massive AMS marketing campaign might have a counterproductive effect. Despite the fact that the impact on profitability or customer satisfaction of the communication improvement proposal is not measurable and cannot be quantified on the graph, it is indisputable that any changes in the transparency of communication will have a positive effect on the overall satisfaction of the customers, brand perception and future sales.

3.4.4 Conclusion of the recommendation part

To conclude the whole recommendation part it is necessary to mention that all the above mentioned solutions were deeply analysed and consulted with the managers of all involved departments in order to ensure the applicability of each solution. Moreover, since the whole research was a real project in the company, it was necessary to align all the departments involved in order to ensure the ease of adoption of all the proposed solutions at the final regional top management meeting. The final recommendation was based on the financial projections and the customer satisfaction analysis (See the figure 33). It is recommended to remove the extreme absolute values of the Z coefficients in the spare part price creation process with respect to the strategic spare parts and install one unified level of Top Stop Limits at *(Hidden due to confidentiality agreement)* %. Moreover, it is suggested to revise the AMS marketing communication, specifically the logo, and improve the efficiency of transmitting information to the customers. The transmitter in this case is represented by the direct sales force. The total impact of all the recommended scenarios and solutions is visible in figure 32. Figure 32 does not include the impact of the revised AMS marketing communication due to its impossible measurability.

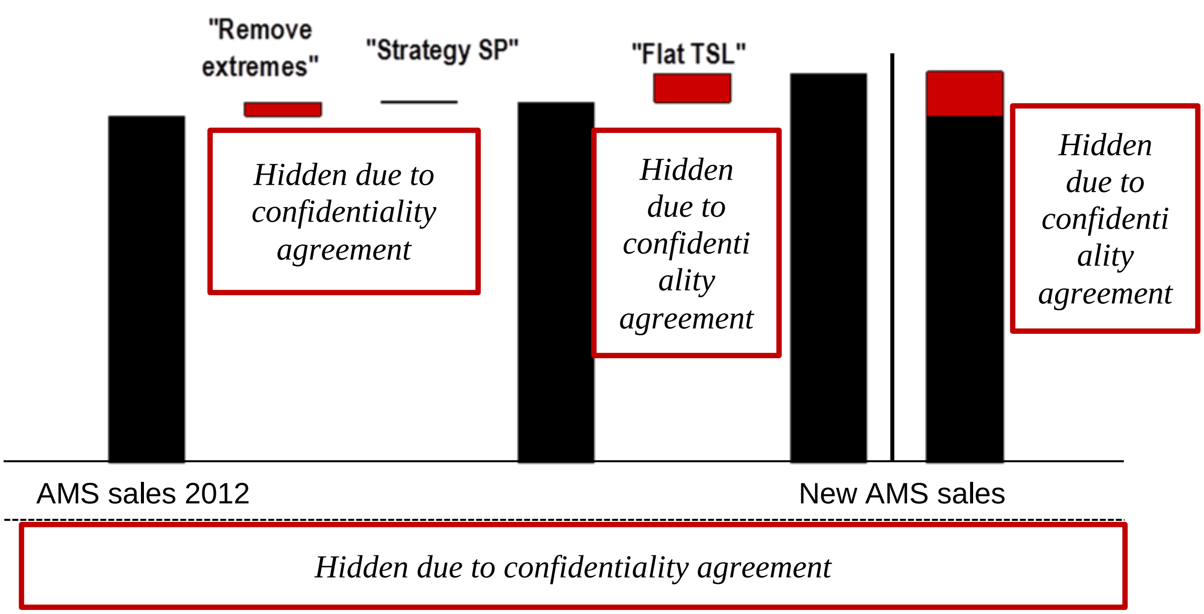


Figure 32. Total financial effect of the recommendations

(Source: Analysis of internal data - Author)

The above mentioned recommendations will lead to a 12% increase of AMS sales and moreover, since the TSLs will in general slightly increase the total number of cap repairs will decrease and consequently the customer satisfaction should increase. It is important to note that the AMS marketing communication revision should not lead to a significant change in the intensity of communication. All solutions were designed in order to straighten the perception of the Hilti brand. Among others, the interactive AMS tool report that should help steering the profitability of each tool was developed and distributed among the product managers who are responsible for the AMS profitability of the tools. This interactive report analyses each tool separately, based on the total costs and cumulative income from the repairs. It also allows the user to change the level of TSL and see the change in the AMS sales for each tool and number of cap repairs. This tool will help the product managers to identify the "Light tools" that need special trade-in offers.

← Spare Parts →

↓ Top Stop Limits ↑

Parametrs	Strategy↓→	Scenario X "Current state"	Scenario A " Flat coefficient Z"	Scenario B "Bottom Up"	Scenario C "Remove Extremes"
Total sales CZK	Scenario 0 "Current TSL"	Hidden due to confidentiality agreement			
Absolut change CZK					
Change in sales %		/	-17,8%	4,2%	4,0%
% change of cap repairs		/	-36,0%	8,3%	7,9%
Total sales CZK	Scenario 1 "Flat TSL" 35%	Hidden due to confidentiality agreement			
Absolut change CZK					
Change in sales %		11,2%	-16,2%	12,4%	12,1%
% change of cap repairs		-13,0%	-43,1%	-11,0%	-12,0%
Total sales CZK	Scenario 2 "Remove extremes"	Hidden due to confidentiality agreement			
Absolut change CZK					
Change in sales %		4,2%	-18,0%	5,0%	4,9%
% change of cap repairs		6,1%	-36,2%	7,1%	6,8%
Total sales CZK	Scenario 3 "Flat TSL + Light tools"	Hidden due to confidentiality agreement			
Absolut change CZK					
Change in sales %		11,5%	-13,7%	14,4%	14,2%
% change of cap repairs		-15,2%	-32,0%	-18,4%	-21,3%

Figure 33.Model - Combination of scenarios – total financial projections

(Source: Analysis of internal data - Author)

4. Conclusion

Throughout this project, I have researched the applicable theory concerning the construction industry in the Czech Republic, conducted a research based on in-depth interviews with the Hilti company customers, the Hilti company internal process experts and the top managers, made a secondary internal data analysis, outlined the research findings; and moreover gave detailed solutions to the key issues identified during the research..

I have delivered a positive answer to the concerns expressed by the Hilti Company management team at the beginning of the project – whether there is a possibility to increase AMS profitability and remain or increase the customer satisfaction at the same time. From the analysis of the conducted research I have determined that the current level of the AMS profitability is on the borderline, there is a discrepancy in product brand perception and AMS perception since the current AMS communication is conflicting with reality and the AMS system is in general misunderstood by the customers. The research has shown that the Hilti Company and its product are perceived as premium, therefore the customers are willing to pay higher price for the product. On the other had the pricing of AMS in general is perceived as comparable to the mass-market. After running the analysis of the findings, I have identified the cause of this discrepancy and three main areas within AMS for improvement as follows: Spare part pricing, Top Stop limits and AMS marketing communication. Having used the research findings to determine the main requirements for such improvements, I have developed and proposed a multidimensional model that aims at resolving the identified issues. The solution is primarily aimed at improving the AMS system, its profitability and customer satisfaction. The recommendation consists of several scenarios that were taken into the consideration when drawing the final solution. All potential scenarios were discussed with all departments involved and analysed from the financial and customer acceptance points of view. It is recommended to remove the extreme absolute values of the coefficients Z in spare part price creation process with respect to the strategic spare parts and install one level of Top Stop Limits at *(Hidden due to confidentiality agreement)* %. Moreover it is suggested to revise the AMS marketing communication, specifically the logo and improve the efficiency of the information transmission to the customers. The transmitter in this case is represented by the direct sales force. The above mentioned recommendations will lead to a 12% increase of AMS Sales and moreover, since the TSLs will in general slightly increase, the total number of cap repairs will decrease and consequently the customer satisfaction will increase. The 12% increase does not include the impact of the revised AMS marketing communication due to its impossible measurability. It is important to note that the AMS marketing communication revision should not lead to any significant changes of the intensity of the communication. All solutions were designed in order to straighten the perception of the Hilti brand. Besides others, the interactive AMS tool report that should help with steering the profitability of each tool was developed and distributed to the product managers whose responsibility the AMS profitability of the tools is. This interactive report analyses each tool separately, based on total costs and cumulative income from the repairs. It also allows the user to change the level of TSL and see the change in AMS sales for each tool and number of cap repairs. This tool will help the product managers to identify the “Light tools” that needs special trade in offers.

Furthermore the analysis of the outcomes of the internal and external in-depth interviews and secondary internal data analysis have shown that the Hilti Company has relatively low price of the labour invoiced to the customer. The labour price has been identified as the lowest within the Hilti Company European region. Additionally, a simple research has shown that the companies which are offering premium services in comparable industries (automotive), charge approximately 30% more for after-market service labour. Moreover, the customers reflect the increasing price of the labour, since most of the customers are employing the construction site workers and therefore potential increase of the price of the labour would not cause any significant increase in the customer complaints. The increase of the prices is not recommended since this topic requires deeper research and further analysis. The case study could not cover all the topics and therefore I suggest further research projects:

1) The effect of customized “no cost period” length on the company profitability and customer satisfaction.
2) The labour cost within the AMS pricing- increase or decrease?

5. References

Alsemgeest, Liezel; Smit, A. v. A, 2013 The Contribution of Business Units to Overall Company Customer Satisfaction and Profitability. Journal of Applied Business Research, 29 (3): 1093-1102

Anderson, E. W., Fornell, C., & Lehmann, D. R. (1994). Customer satisfaction, market share, and profitability: findings from Sweden. The Journal of Marketing, 53-66.

Bove, L.L., and L.W. Johnson. 2000. A customer-service worker relationship model. International Journal of Service Industry Management 11 (5):491-511.

Cho, Y., Im, I., R. Hiltz, and J. Fjermestad. 2002. The effects of post-purchase evaluation factors on online vs offline customer complaining behavior: implications for customer loyalty. Advances in Consumer Research 29 (1): 318-26.

Dobni, D., and G.M. Zinkhan. 1990. In search of brand image: a foundation analysis. Advances in Consumer Research 17 (1):110-19.

Edgar, D.A., and L. Nisbet. 1996. A matter of chaos: some issues for hospitality businesses. International Journal of Contemporary Hospitality Management 8(2): 6-9.

Foster, G., & Gupta, M. (1997). The customer profitability implications of customer satisfaction. Available at SSRN 45941.

Grönroos, C. 1994. From Marketing Mix to Relationship Marketing. Management Decision, 32 (2): 4-20.

Gummesson, E. 2007. Case study research and network theory: birds of a feather. Qualitative Research in Organizations and Management 2 (3): 226-48.

Gwinner, K.P., Gremler, D.D., and Bitner, M.J. 1998. Relational benefits in services industries: the customer‟s perspective. Journal of the Academy of Marketing Science 26 (2): 101-14.

Hallowell, R. (1996). The relationships of customer satisfaction, customer loyalty, and profitability: an empirical study. International journal of service industry management, 7(4), 27-42.

Hem, L. E., and N. M. Iversen. 2002. Decomposed similarity measures in brand extensions. Advances in Consumer Research 29: 199-206.

Kotler, P. 1999. Marketing Management: Analysis, Planning, Implementation, and Control. Englewood Cliffs, NJ: Prentice-Hall.

Lee, W-N. 1989. The Mass-Mediated Consumption Realities of Three Cultural Groups. Advances in Consumer Research, 16: 771-778.

Louro, M.J., and P.V.Cunha. 2001. Brand Management Paradigms. Journal of Marketing Management, 17(7): 849-875.

McNamara. (2009). General guidelines for conducting interviews. Minnesotta, USA.

McNeil. (2005). Research Methods. London and New York: Routledge.

Mittal, V., and W. A. Kamakura. 2001. Satisfaction, Repurchase Intent, and Repurchase Behavior: Investigating the Moderating Effect of Customer Characteristics. Journal of Marketing Research 38(1): 131-142.

O‟Cass, A., and H. Frost. 2002. Status brands: examining the effects of non-product-related brand associations on status and conspicuous consumption. Journal of Product & Brand Management 11 (2): 67 – 88.

Park, C., and V. Srinivasan. 1994. A survey-based method for measuring and understanding brand equity and its extendibility. Journal of Marketing Research 31 (2): 271-88.

Patterson, P.G. 1998. Customer perceptions of relationship benefits across service types.

Payne, A., Holt. S., and P. Frow. 2001. Relationship value management: exploring the integration of employee, customer and shareholder value and enterprise performance models. Journal of Marketing Management 17: 785-817.

Plummer, J.T. 2000. How personality makes a difference. Journal of Advertising Research 40 (6): 79-83.

Pollay, R.W. and K. Gallagher. 1990. Advertising and cultural values: reflections in the distorted mirror. International Journal of Advertising, 9: 359-72.

Rust, R. T., & Zahorik, A. J. (1993). Customer satisfaction, customer retention, and market share. Journal of retailing, 69(2), 193-215.

Song, K.I. 2003. Advertising strategy development by using consumer value structure, The Association of Korean Advertising and P.R.: 191-205.

Sontakki, C. (2010). Marketing Research. Mumbai, India: Global Media.

Thomas R., and D.Ford. 1995. Technology and Networks. In Moller, K. and Wilson, D.Business Marketing: an Interaction and Network Perspective. Kluwer Academic Publishers, Boston.

Turner. (2010). Qualitative Interview Design: A practical guide for novice investigators. The qualitative report 15 (3) . Fort Lauderdale, Florida, USA.

Vigneron, F., and L.W. Johnson. 1999. A review and a conceptual framework of prestige-seeking consumer behavior. Academy of Marketing Science Review 99 (1): 1-15.

Vigneron, F., and L.W. Johnson. 2004. Measuring perceptions of brand luxury. Journal of Brand Management 11 (6): 484-506.

Webster, Frederick E. 1992. The Changing Role of Marketing in the Corporation. Journal of Marketing 56 (4). 1-17.