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## Declaration

I hereby declare that the specific master thesis with title *Psychology of Pricing*, written with the purpose to obtain the title Ing. of International Business, Central European Business Realities studies has been solely authored by me personally and it has not been submitted or approved under other master or undergraduate degree in the Czech Republic or abroad. The used literature and sources are stated in the thesis as citations and in the end of the paper.

In Prague on:

Signature

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## **Dedication**

I lovely dedicate this thesis to my sister, Afrodite, for being always supportive to me with the biggest smile and hug.

## Acknowledgements

I would like to express my deep gratitude to my master thesis advisor, Dr. Ing. Petr Kral. Having Mr. Kral, as a professor has been the most worthy and educational time during my master studies. His transmissibility, encouraging approach toward the students, the support and guidance during the writing of the master thesis but especially his understanding and patience during all the preparation period have been outstanding.

Special thanks to my colleagues, managers and advisors in the company Deutsche Post DHL IT Services, for their help, willingness to provide me information and their support despite of their time limitation.

Last but not least important, I owe more than thanks to my family members, my parents, my younger sister and dear friends who have supported me all along this journey. Those two years, during my master studies, I have not only been educated from an academic point of view but it has been a lifetime experience, which made me a better person. Their supports gave me the strength and enabled me to reach at this final point of my studies.

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## **List of abbreviations**

DP DHL: Deutsche Post DHL

DGFF: Global Forward and Freight

ITS: Information Technology Services

GDP: Gross Domestic Product

DSC: Desktop in the Collaboration Services

GBS: Global Business Services

T&M: Time and Material

SOW: Scope of work

NFE: New Forward Environment

SAP: Systems Applications and Products

GB: Gigabyte

SWOT: Strengths, Weaknesses, Opportunities, Threats

GUI: Graphical User Interface

CRM: Customer Relationship Management

SPOT: Single Point of Trust

EU: European Union

R&D: Research and Development

FUD: Fear, Uncertainty and Doubt

E2E: End to End

WTP: Willingness to pay

WTA: Willingness to accept

VALS analysis: Values, Attitudes And Lifestyles Analysis

## Introduction

The subject of the present thesis concerns the psychological factors that influence the process of setting the prices. Pricing is an issue of utmost importance since the wrong or defensive design of the pricing process and the use of a wrong pricing method can have negative consequences in the business. The decision of setting the price is one of the most important but also one of the most difficult that a business has to take. The reason for that difficulty originates firstly from the many different factors that every profit oriented company needs to take into consideration while setting a price and secondly the reactions that the price will bring. The price is the element that motivates and sets to motion many different behaviors from all the stakeholders who are affected. The stakeholders are two main groups; the first is consisted of those who set the price, organizations and marketers and the second group from those who are the receiver of the price, the consumers and customers.

Until now, the marketers have priced the products very successfully and profitably, based on economic principles of price elasticity and many economic theories that for years were able to interpret economic behavior. However, over the last three decades the standard models of economic rationality have come under question. The evolution of internet and the ability to access freely a large number of information have changed significantly the disciplines of economics. The evolution of sciences such as psychology and biology, the technological improvements, the reduction of cost and time for travelling, the environmental changes are all factors that influence and shape the behavior of every person. The internationalization of trade, the transnationality of business activities and the recent global financial crisis are additional dimensions of the contemporary business reality that show that the standard models of economics cannot explain the continuous changes, the variations and the large number of empirical anomalies in the current economic environment. All of these changes and developments affect the economic attitude, which the traditional economic principles cannot adequately explain. The result of the changes in the environment has caused change in the behavior and psychology of the people as well. The behavior of the consumers has significantly changed and marketers cannot anymore explain traditional and rational economic theories. The structure of the business requires from the marketers new ideas and new pricing principles to keep up with the changes. The above new circumstances brought the need for new trends in economics that attempt to combine the approaches of all the behavioral sciences, in particular economics, psychology, sociology and biology in order to explain the consumers'

behavior. All the above factors affect the businesses and the pricing process needs to be very precise in order bring profits to the company. Therefore, marketers need to be aware of such new trends in the behavior and in the science of economics in order to be able to understand and influence that behavior when aiming to set the prices.

Despite though the great importance of the pricing, there is the tendency from the businesses to price according to cost recovery methods and not taking into consideration important parameters related to the decision such as psychology of the buyers or the value that need to be offered to the customers. Because of the new conditions in the market, both consumers and marketers are facing changes that they did not observe before. The economic principles need to expand and embrace those changes in order to survive.

All the changes have made a significant impact on the pricing process and therefore it is very interesting to study the psychology and behavior of the customers under the new economic conditions and how the marketers can, use and implement this information in order to set the best pricing methods based on that psychology.

For that reason, in the present thesis, are presented terms and ideas of the new trends of economics related with the pricing models, the changes that affect the pricing strategies and psychology of all the stakeholders.

The first goal of the thesis is to examine the new economic trends and circumstances related to the psychology of consumers and then to understand the effect that those parameters can have on the pricing methods. For that purpose, the research will start by introducing Behavioral Economics and a number of psychological concepts that are related with pricing. The second goal is to understand the factors that are important for the businesses in order to set the most appropriate price. The topic in question at this point is if the use of different psychological pricing methods during the pricing process can be helpful to reach the best price. In order to achieve this goal, will be present different aspect of pricing process and numerous psychological pricing methods that marketers can use in order to set the optimal price. Third goal of the research is to study the pricing strategies of a company in order to see how the company sets the prices for its product or services and if the psychological factors are taken into consideration during the process. In the end, the aim is to confirm or decline that there is a relationship between psychology and pricing and to answer the question if taking into consideration the psychological factors in the pricing process can benefit a company and increase its profits.

In order to achieve those goals the thesis is divided in three units with the following structure: Chapters 1 will include the psychological side of economics and pricing from the consumer's point of view. First, Behavioral Economics will be introduced which is the field of economics that relates psychology with economics, and pricing.

Chapters 2 will focus on the psychology and pricing methods from the marketers' point of view. The chapter will include the factors that affect the process of setting the price, it will describe a number of psychological pricing methods and it will include suggestions of how the companies can best use those methods.

Finally, chapter 3 will be based on the study of the pricing methods that one international company is using in order to price its services. The research focuses on the study of the pricing principles used by DP DHL IT Services. In the end, a SWOT analysis in combination with interviews will identify the connection of psychology of consumers and marketers with the price.

The nature of the methodology that is being used in order to answer to the above questions is both interpretative and quantitative. Initially, the information will be gathered regarding the behavioral economics, the consumers' behavior, the pricing methods, and the aim is to interpret them in order to understand the relationship of pricing with behavioral economics principles and psychology. The next step of the research is to use the theoretical information and to see if they are implemented already in the pricing strategy of the company Deutsche Post DPDHL IT Services. The quantitative part of the research is related with SWOT analysis based on the responses regarding the pricing methods of the company from both the customers and the employees who are responsible for the pricing strategies in the company. The thesis will include the SWOT analysis which gives the strengths, weaknesses, opportunities and threats of the pricing methods of the company from both angles of the customer and the company as a marketer who sets the price. The thesis will be concluded with an interview with the head of Professional Services Domain of DPDHL IT Services. The interview was consisted of 15 not strictly structured questions related with the pricing of the company and it lasted one hour.

During the research process there have been a few limitations during the research. The first limitation, regarding the theoretical part, was the small number of resources available for the topic. Although pricing is a crucial point for the companies, the theoretical studies were difficult to be reached.

The difficulty increases significantly when the topic is as specific as the psychology of pricing. Regarding the limitation in the practical part, the main constraints lay to the core of the topic of the pricing. The pricing strategy is considered a very sensitive topic, therefore the access to information related to the pricing methods and even searching deeper with questions related to the psychology behind it, made it difficult to identify the information.

Third limitation was the nature of the company itself. The company from which the data and examples were collected was an “Internal” provider worldwide multinational business. As IT Services are internal providers, they do not have external customers to provide their services.

## **Chapter 1 Pricing psychology of consumers**

### **1.1 Behavioral Economics**

*“Behavioral Economics are making economics more realistic”*

Behavioral Economics is the field, which is studying the effect that a variety of factors have on economic behavior. These factors are psychological, sociological, anthropological, and the results of their affect are reflected on market prices, investments, resource allocation and in every aspect of economically related decisions. Behavioral Economics is “the combination of psychology and economics that investigates what happens in markets in which some of the agents display human limitations and complications”.<sup>1</sup> Alternatively, Behavioral Economics is “a field concerned with the empirical validity of neoclassical assumptions about human behavior, where these assumptions are found to be invalid, with describing behavior more adequately”.<sup>2</sup> In other words, Behavioral Economics is the expedition of the borders of the neoclassical economics and the transformation of the culture of economics as known until now.

The core idea of Behavioral Economics is the conviction that increasing the realism of psychological bases of economic analysis will suggest better policies, study the insights and improve the economics by making better predictions.<sup>3</sup>

From the beginning of classical economics, there have been discussions that were relating economics with psychology and human behavior. Adam Smith in his book *The Theory of Moral Sentiments*, 1790 commented, “we suffer more when we fall from a better to a worse situation, than we ever enjoy when we rise from a worse to a better”.<sup>4</sup> Jeremy Bentham discussed issues regarding psychological behavior related to fairness, justice and utility. Later, the neoclassical approach

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<sup>1</sup> Sendhil Mullainathan, Richard Thaler: Behavioral Economics, In: Massachusetts Institute of Technology Department of Economics, Working Paper 00-27, 2000

<sup>2</sup> Peter Diamond & Hannu Vartiainen: Behavioral Economics and Its Applications, In: Princeton University Press, Working Paper Chapter One, 2007

<sup>3</sup> Colin F. Camerer, George Loewenstein: Division of Humanities and Social Sciences 228-77, In: Carnegie-Mellon University, 2002

<sup>4</sup> Adam Smith: *The theory of Moral Sentiments*, Cambridge: Cambridge University Press, 2002, ISBN: 0521591503

widened the scope of economics from just studying the ways of economic growth, increase of income and resource allocation to individual choices and utility maximization. As a result, of this evolution, the study of behavior was also in scope. Between many neoclassical economists that were interested in studying economics further was Vilfredo Pareto who gave sophisticated psychological explanations in his theories regarding economics. Later on as well, the development of cognitive psychology and prospect theory by psychologist Daniel Kahneman explained deviations between economic decisions and neo-classical theory.<sup>5</sup> Most of the ideas of Behavioral Economics return to the roots of classical and neoclassical theories but since psychology was just emerging and many economists rejected the idea of psychology to be involved in science of economics, the topic of Behavioral Economics as individual unit was shaded. It has been only in 2002 when Daniel Kahneman earned the first Nobel of Economics related to Behavioral Economics<sup>6</sup> that gave an official recognition to the field.<sup>7</sup>

Nowadays, Behavioral Economics have become a part of many fields and have developed many forms and applications that it considered “an umbrella above all fields”. Some of the areas that Behavioral Economics are used are Psychology, Behavioral Finance, market efficiency, market pricing, Prospect theory, and limits to arbitrage, investor’s psychology and investor’s behavior.

The most of the methods of Behavioral Economics are not new; they are methods already used in all the economic fields. As all part of economics, Behavioral Economics rely on trials, observations and experiments. One of the main ideas and methods that can prove the connection of classical ideas with by Behavioral Economics is the Game Theory principles. Game Theory is working with parties that try to maximize a preference relation and to achieve equilibrium. Game theory is one of the basic milestones of the behavioral economics. The players are aiming at optimization of their situation in every game using all the information available to find the best possible strategy and receive the payoffs. If it is assumed that consumers and the marketers are the players and the environment, market, society are the information provided, people should take into account all the details available to reach to the best buying decision and marketers to set the optimal pricing. However, based on Behavioral Economics, rationality is not always the behavior upon which people make decisions. People make decisions according to different criteria that are unstable and complicated. People will often fail to perform the expected optimal level in real life because they are not always motivated to find the best solution. The main reason for this is that when people

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<sup>5</sup> Daniel Kahneman; Amos Tversky, An Analysis of Decision under Risk, In: *Econometrica*, Vol. 47, No. 2, Working paper 263-292, 1979

<sup>6</sup> <http://www.apa.org/monitor/dec02/nobel.aspx> [10.04.2013]

<sup>7</sup> Colin F. Camerer, George Loewenstein: Division of Humanities and Social Sciences 228-77, In: Carnegie-Mellon University, 2002

have different options to choose from and when the cognitive effort is costly then the behavior is not tending to maximization. On the other hand, the marketers, are aiming at maximizing their profit but still they need to take into consideration the risks therefore might be more reluctant. However, there is the other side of the coin, which is the self-interested behavior theory. According to that, people are trying to reach excellence and identify their identity. Consumers and marketers transfer this attitude in consumption in a way that both self-interested consumers and self-interested marketers are trying to reach specific types of payoffs and this can lead to over use of financial and non-financial resources, economic problems and even mistakes that might be vital for the business. Therefore, using the Game Theory, someone can try to find the equilibrium of both players and behave in a more responsible way while setting the prices.

In general, Behavioral Economics approaches economic or social issues in the same way is economics; both aim at equilibrium and maximization but psychological forces influence behavioral economics as well.<sup>8</sup> The difference between Behavioral Economics and the classical economics is that Behavioral Economics do not stand only to the rational motivations that aim to reach utility maximization but expand the idea to irrational attitude as well. Behavioral Economics have moved beyond experimentation but also include computer simulation<sup>9</sup> and sometimes and even brain scans.<sup>10</sup>

One of the fields of Behavioral Economics that first started to study the market environment and consumer's behavior is Behavioral finance. The main assumptions of Behavioral Finance are that investors will act in unbiased trends to maximize the value of their portfolios and individuals want to invest for the future in places that they feel secure and can control the product/investment. The central issues of Behavioral Finance are firstly, the explanation of markets' systematic errors that affect price returns and create market inefficiencies and secondly, how other participants take advantage and react to such information and inefficiencies (arbitrage). The models of behavioral finance consider these factors and incorporate those parameters in order to set the price.<sup>11</sup> Behavioral Finance is connecting with psychological aspects as it includes reactions related to

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<sup>8</sup> Chris Foote, Behavioral Economics and Consumer, Federal Reserve Bank of Boston Department of Research, 2008

<sup>9</sup> George –Marios, Angeletos, David Laibson, Andrea Repetto, Jeremy Tobacman and Stephen Weinberg :The Hyperbolic Consumption Model Calibration, Stimulation and Empirical Evaluation In: Economic Perspectives Volume 15,

<sup>10</sup> David P. McCabe , Alan D. Castel :Seeing is believing:The effect of brain images on judgments of scientific reasoning:In Department of Psychology,Colorado State University,Department of Psychology,University of California,Working Paper 343-352,2008

<sup>11</sup> Uluslararası Sosyal Araştırmalar Dergisi : Behaviour Of Individuals And Institutions In Relation To Finance And Accounting, In: The Journal of International Social Research, Working paper Cilt: 5 Sayı: 20 Volume: 5 Issue: 20, 2012, : ISSN: 1307-9581



investor's attention, overconfidence, over optimism or instincts and therefore it argues that some financial phenomenon and decisions are not fully rational.

As Behavioral Finance is the part of behavioral economics that is focusing on mistakes and errors the principles of the model are accurate beyond the financial markets as well. People do not always act rationally but they make also mistakes. The behavioral analysis aims to identify those circumstances that people are making mistakes related to their economic behavior. Mistakes are an indication of space for improvement in the decision making process. In order to make suggestions and better decisions there is the need to identify those mistakes and the circumstances under which they take place and then suggest alternative options that can eliminate them. The mistake is not only studied by the effect it has on one individual but also as a general situation, that can affect many others. That is the reason that suggested policies for improvement need to include changes in others' situation as well. On the other hand, people might change their behavior in situations that they do not consider it as mistakes but those situations might be indicated as potential mistakes or dangerous by others.<sup>12</sup> Therefore, the study of these mistakes can be helpful to understand the psychology of the consumers and to interpret the economical choices they make even if the decision does not seem to be rational.

## 1.2 Rationality and irrationality

The notions of rationality and irrationality are closely related with modern economics and the decision making process. Especially with the introduction of Behavioral Economics, those two terms seem to be important issue for discussion between the scholars. Adam Smith was the first who introduced in economics the notion of rationality. In his, book *The wealth of nations*; he is mentioning that 'It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest. We address ourselves, not to their humanity but to their self-love, and never talk to them of our own necessities but of their advantages'<sup>13</sup>. The motives of the butcher is that he wants the bread from the baker and the baker wants the meat from the butcher, so the exchange is beneficial for both parties and their self-interest is satisfied. The statement from Adam Smith is an early description of rational behavior as this attitude is currently named in modern economy. In 2006, Kacelnik proposes that 'agents assign

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<sup>12</sup> Colin F. Camerer, George Loewenstein, Matthew Rabin *Advanced in Behavioral Economics*. New Jersey: Princeton University Press, 2004

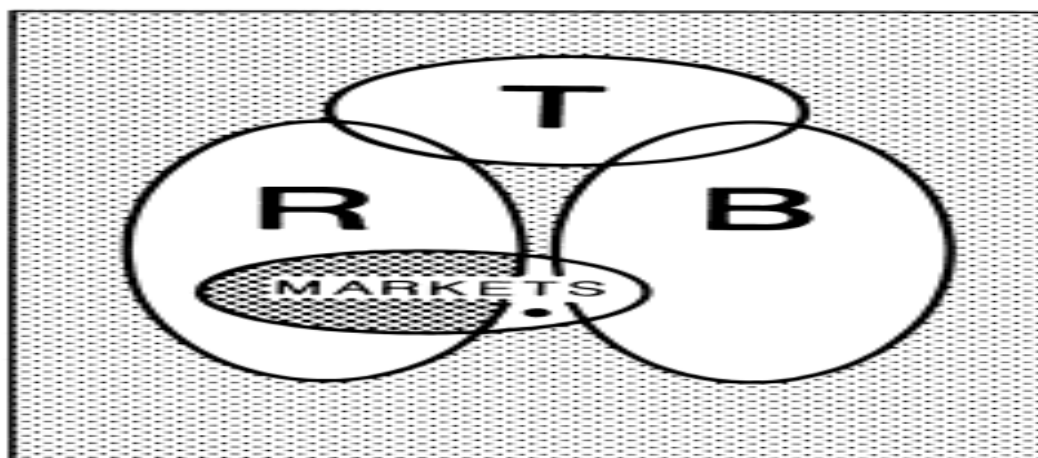
<sup>13</sup> Adam Smith: *The theory of Moral Sentiments*, Cambridge: Cambridge University Press, 2002, ISBN: 0521591503

curtain values to all possible choices and those values remain constant in different situations, so that the agent maintain his preferences across situations in order to maximize a particular utility'.<sup>14</sup> As a result, rational behavior is the decision a person is making after higher cognitive process such as reasoning in order to choose the best method to achieve a goal. The set of favored choices in decision-making process is the proof for the existence of rationality and every deviation from these preferences would mean economic irrationality.<sup>15</sup>

The process of evolution, the unbalanced market and financial situation and the disability of traditional economics to explain many phenomena in the world are factors that favored the evolution of psychological mechanisms that generated irrational behavior. The idea that people do not act optimally regarding their economic decisions is the bases of irrationality. Irrationality can be explained as the action taken with inadequate use of reason or emotion. The irrational behavior and its extend is the point that economists are trying to explain and combine with decision making process. Behavioral Economics analysis is related with this term more than traditional economics because it includes the human psychology in the theories. The question that rises from the comparison of those two notions is how much rational or irrational human's buying behavior is. The debate between the economists that support only the rational economics and those who are in favor of behavioral economics is how much of economic behavior can be explained by the traditional economics, behavioral economics or the combination of both.

The below figure (Figure 1) is a representation of the areas of rational (R) and irrational or behavioral (B) theories. The ovals for rational theories and for behavioral theories are denoted with R and B respectively and they show the strong points of each theory.

**Figure 1 Rational and Behavioral economics**



<sup>14</sup> <sup>16</sup>

Nicoletta Czechowska ,Rationality and Irrationality in Animals Are Animals able to show rational behaviour, In: Academic Student Journal, Vol. 1, 2011

Source: Richard Zeckhauser, Behavioral versus Rational Economics: What You See Is what you Conquer, Chicago, Journal of Business.

The third oval denoted with T is the third dimension that combines both rational and irrational behaviors, that is Theology. The oval shaded and denoted as Markets is the area that represents the amount of the market studied by rational economists. The main idea, for which there are many scientific observations and evidence, is that rationality can describe the behavior with certainty. The behaviorists on the other hand are a smaller part of the economic society but are able to understand the human basic needs of survival and explain their non-rational market behavior based on that. The rational and irrational are two opposite meanings and therefore is logic that they do not osculate. It is the marker and in some cases the theological theories that connect those two concepts with each other. The study of the market and the interpretation of the consumers' behavior cannot be complete without the study of both terms as both give significant information from different perspectives.<sup>16</sup>

As Behavioral Economics are aiming to combine both economics and psychology, Dan Ariely, a behavioral economist comes to combine both terms of rationality and irrationality. Based on experiments made in MIT, he mentions that when it comes to decision-making people think they are in control and they make smart and rational decisions but that is not the case. People overpay, underestimate and they make repetitively the same simple mistakes that deviate from rationality. People fail to understand the profound effects of their emotions but these misguided behaviors to them are not so random or senseless to marketers, which make people predictably irrational.<sup>17</sup> There are forces that can drive the decision of the consumers and the understanding of those forces can be beneficial either people are consumers, businesspeople or price makers in order to improve our decision making process. Therefore, consumers' psychology and behavior in under scope of many studies in that shows the significance of the explanation of that behavior for economics.

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<sup>16</sup> Richard Zeckhauser, Behavioral versus Rational Economics: What You see Is what you Conquer, Chicago, Journal of Business, 1986, 0021- 9398/86/5904-0024

<sup>17</sup> Dan Ariely Predictably Irrational, The Hidden Forces That Shape Our Decisions. United States of America, HarperCoMinsPublishers, 2008, ISBN 978-0-06-135323-9

## 1.3 Consumer psychology

The traditional economics theory assumes that the consumer is a rational person. The aim of every purchasing decision is to derive the greatest amount of satisfaction and utility by using his or her income as better as possible. Buyers have a clear idea of how much marginal utility they will get from the units of the various goods they might purchase and they have clear preferences for the products available in the market. In recent theories, the above assumption can be partially correct but only when “goods” are taken into consideration and not “bads”, or consumers have only one simple decision to make with low risk, which will not affect drastically their life. When people have to decide how to spend their budget, only positive ideas come in mind but in life, people need to deal with negative situations as well (e.g. a very bad investment that failed or the danger of bankruptcy that countries are facing due to financial crisis). This is the point where Behavioral Economics and Prospect Theory appear and make the connection between rationality and emotionally negative situations that people need to deal with.

People can get more emotional when they buy a present for their beloved ones than when they go to the grocery shop. The use more of rationality or emotionality varies according to the circumstances. Therefore, people judge things in relative terms if something is good or bad, positive and negative according to their current situation. As people perceive both diminishing marginal utility and diminishing marginal disutility as losses, when they deal with a “bad” situation the decision is more difficult. However, for every unit that they lose it hurts less and the negative feeling is decreasing in comparison to the previous unit, which is a positive thing. In addition, people are loss averse, which means that people feel more intensively losses than gains in the scale of 2.5 times more intensively.

The above points are related to human perception, to the placebo effect and the positioning that the consumers make to the product. Those three aspects are the three P's of pricing related to the consumers' behavior and pricing. The marketers and price makers need to understand those psychological reactions in order to be able to affect them.<sup>18</sup>

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<sup>18</sup> Peter Doyle: Marketing Strategies for Corporate Growth and Shareholder Value, 2000, ISBN 978-0-470-77314-7

## 1.4 The 3 P's of pricing

Latest studies give new dimensions that connect consumer's behavior, pricing and psychology. The 3P's of pricing are three basic considerations that a company needs to take into consideration when it comes to pricing of its product.

### 1.4.1 Perception

“Perception is the process by which an individual selects, organizes, and interprets information to form a cohesive picture about an entity”.<sup>19</sup> In other words, perception is an approximate of the reality. However, there is not a one-dimensional explanation of the reality. People perceive differently the same message and they value it with their own personal criteria. Therefore, the difficulty for pricing process is to identify that pricing point where consumers will equalize the price that they are paying with the perceived value they are getting from consuming that product. Perception is the pre-purchase consideration of pricing thus marketers need to identify, in advance, that price level that will not categorize the product as under value or overprices.<sup>20</sup> As in the below figure shows (Figure 2), in the case, that the price of the product is too low, then the targeted customers might translate the low price to value and there is the possibility that they reach to the conclusion that low-priced product is also low-value.<sup>21</sup> The other extreme, which is a higher price, can give a better-perceived value. Since though, price-quality correlation is not universal and not always positive, high prices can be perceived as overpricing of the product.<sup>22</sup> However, companies can more easily avoid overpricing while it is more difficult to balance the underpricing cases. The challenge therefore, is to price in the green area of the below graph that falls in the middle of the high or low range pricing.<sup>23</sup>

<sup>19</sup> [http://www.consumerpsychologist.com/cb\\_Perception.html](http://www.consumerpsychologist.com/cb_Perception.html) [11/04/2013]

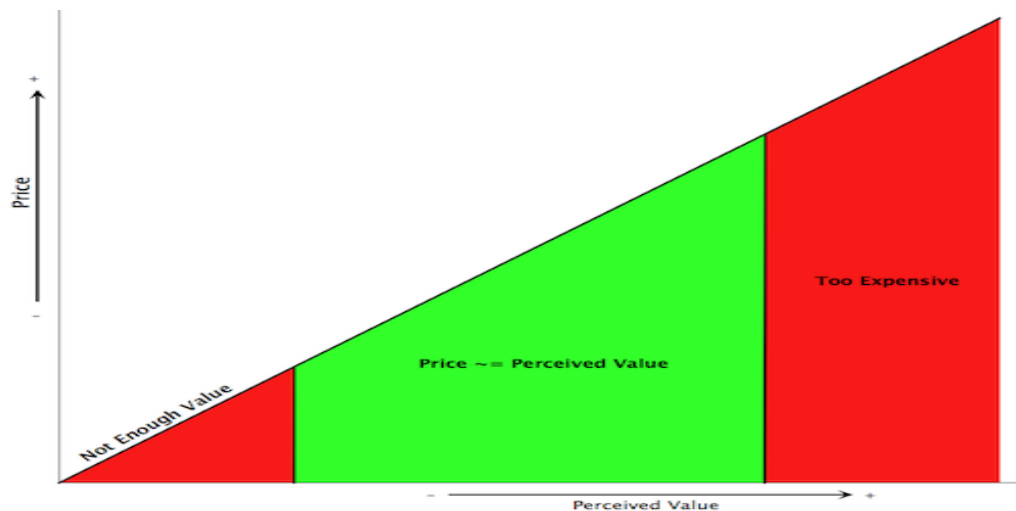
<sup>20</sup> Anthony chemero, Information for Perception and Information Processing, In: Kluwer Academic Publishers.,2003, ISBN: 577-588

<sup>21</sup> Paul Rooks, Jane Willson; Perception- Theory, development and organization. London: Routledge, 2000, ISBN: 0802086217

<sup>22</sup> Valarie A. Zeithaml ,:Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence, In:American Marketing Association ,Working Paper 2-22, 1988

<sup>23</sup> <http://www.productiveflourishing.com/the-3ps-of-pricing-perception-part-1/> [11/04/2013]

Figure 2 Perception and pricing



Source: <http://www.productiveflourishing.com/the-3ps-of-pricing-perception-part-1/> [15/05/2013]

## Perception Theories

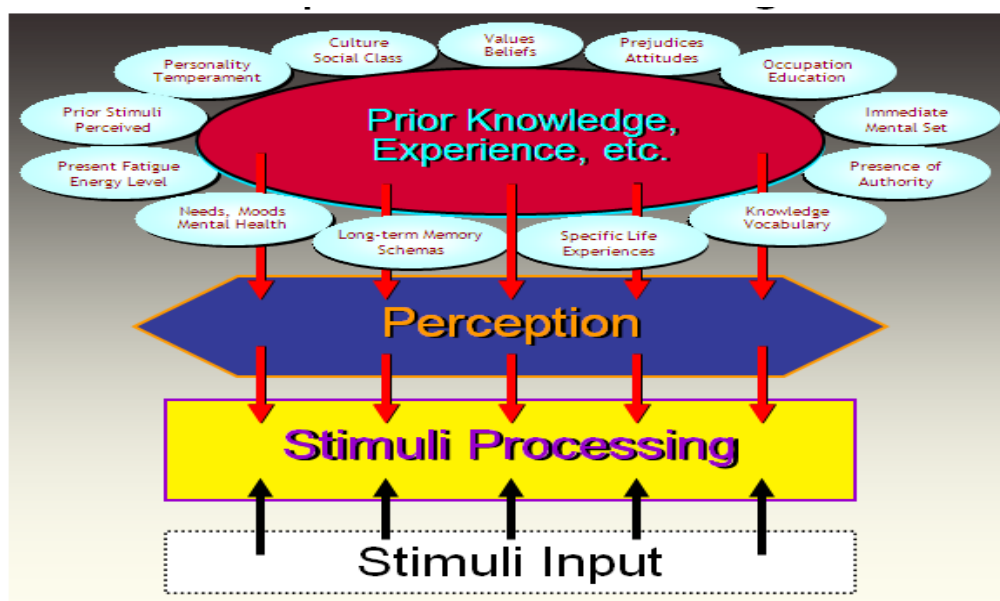
As mentioned, our brain attempts to interpret the stimulation to which it is exposed but individuals can interpret the same entity in different ways. The two main perception theories related to the interpretation process of the human brain when it comes to decision-making process are the Top-Down Processing and The Bottom-Up Processing.

### Top- Down Processing

According to the Top- Down Processing theory, people use their “stored knowledge” to shape their perception.<sup>24</sup> People use information related to their knowledge or previous experiences while processing information. In that way, people focus less to the stimulation related the object, for which the stimulation process started and base their decision more on the past (Figure 3). It is therefore experience-driven and less stimulus-driven process. The advantages of the process are that it is quick and inferential but at the same time can cause misperception as the individual is making the decision based on something else and not on the specific stimulus.

<sup>24</sup> <http://ebookbrowse.com/vessels-on-perception-botton-up-vs-top-down-ppt-d157708245> [15/03/2013]

Figure 3 Top-Down Processing

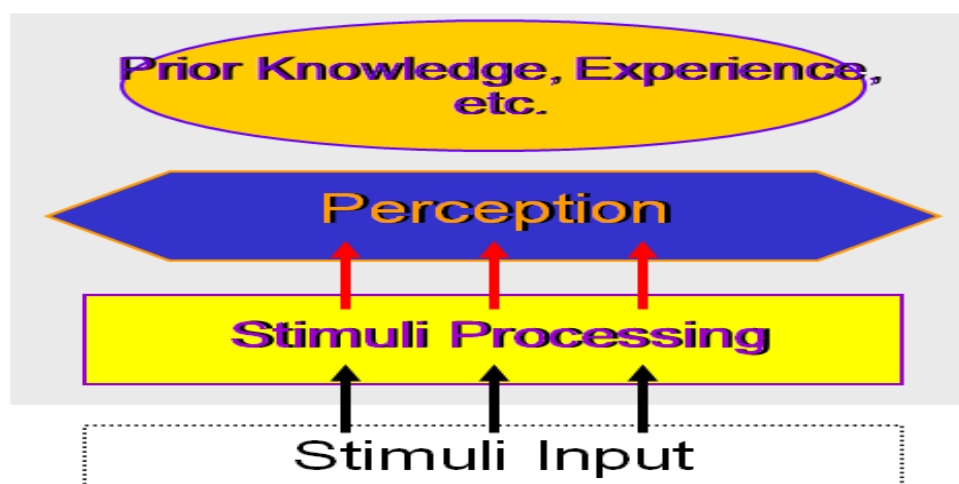


Source: <http://ebookbrowse.com/vessels-on-perception-botton-up-vs-top-down-ppt-d157708245> [15/03/2013]

### Bottom-Up Processing

The Bottom-Up Processing theory relies on properties of the stimulus which the human brain perceives and organizes the individual parts into a whole. The information available is based on the stimulus itself, which also is the main benefit of the process. The perception as shown in the figure (Figure 4) is first based on the specific stimulation and after that, the human brain continues to connect the stimuli and the information with previous experiences and knowledge.

Figure 4 Bottom-Up Processing



Source: <http://ebookbrowse.com/vessels-on-perception-botton-up-vs-top-down-ppt-d157708245> [15/03/2013]



## Factors affecting perception

Factors that affect the human perception are exposure, attention and stimulation, selective distortion, retention and subliminal perception.

The exposure itself is not enough to affect the decision. Exposure should be combined with extensive repetition in order to draw the attention and then, the brain starts the process of perception and interpretation of the message, which means make sense out of the stimulus. The degree of attention (high or low) is important as well. For example, if people are multi-tasking and do not pay attention on the TV advertisement then the attention is low. However, if there is an advertisement of a product that they are interested in then still the brain can escalate the message to the process of interpretation.

In addition, human's brain has selective attention. Selective attention is the situation where consumers receive the message and maintain heightened awareness of stimuli that meet their interests and screen out the rest of stimuli that are irrelevant to their needs.<sup>25</sup> Nowadays, an average person is exposed to 1500 ads or brand messages and other estimates range as high as 3,000 exposures per day.<sup>26</sup> The consumer though perceives only 76 of these messages that more likely noticed first, are related to their current needs, then they notice stimuli they have been anticipating and last stimuli that deviate more than others do. Therefore, marketers and price makers need to capture that mind space and to bypass the attention filters, to understand the connection between perceptions, attention, correct stimulation, and to apply this knowledge to the pricing principles.

Selective distortion, retention and subliminal perception affect the perception as well.<sup>27</sup> Selective distortion is the tendency to interpret the information to fit our preconception or to be consistent with prior brand and product beliefs.<sup>28</sup> Even if the stimuli sent are in a noticed way, consumers will distort information to be consistent with their beliefs and previous experiences. Selective distortion is usable in benefit of price makers when consumers distort neutral or ambiguous brand information so they can make more positive connections when the brand is stronger. For example, a can may seem to be safer or worth the cost when a particular brand is involved. Additionally, selective retention is the process when people remember messages that are closer to their beliefs and attitudes and will fail to register a big amount of the information that are irrelevant to that. For example, a consumer might remember only the positive health benefits that a

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<sup>25</sup> <http://www.studymode.com/essays/Consumer-Behaviour-Short-Report-Selective-182591.html> [11/04/2013]

<sup>26</sup> [http://highered.mcgraw-hill.com/sites/dl/free/0070974284/605841/sample\\_ch03.pdf](http://highered.mcgraw-hill.com/sites/dl/free/0070974284/605841/sample_ch03.pdf) [12/04/2013]

<sup>27</sup> Consumer & Business Buyer Behavior ppt [12/04/2013]

<sup>28</sup> Paul Rooks, Jane Willson (2000) Perception: Theory, development and organization London: Routledge [12/04/2013]



product they consumer offers. The marketers, therefore, need to highlight the positive points of the product so the consumers perceive them that way. Because of selective retention, people are likely to remember good points about a product that like and forget good points about competing product. Selective retention works to the advantage of strong brands. It also explains why marketers need to use repetition in sending messages to their target market to make sure that consumers do not overlook the message.

The third dimension is the subliminal perception<sup>29</sup>. The argument regarding subliminal perception is that marketers put hidden messages in the advertisements in order to influence consumers. The latter are not consciously aware of these messages but yet those messages affect their behavior and that way marketers can affect and direct the decisions.<sup>30</sup>

### 1.4.2 Placebo effect

Placebo effect is well known in the medical field, which is working with the idea that a patient is taking a pill to feel better thinking that is medicine while the pill is a sugar pill. Nevertheless, since the patient does not know that the pill is a sugar pill he or she believes that the pill is medicine so because of that belief, he or she actually feels better and the pill has therapeutic effect.<sup>31</sup>

The placebo effect is applicable in behavioral economics as well. Placebo effect from the economic and behavioral point of view is the “consumers’ beliefs and expectations, shaped by experiences in their daily lives that often influence their judgments of products and services”.<sup>32</sup> When the effect as applied to pricing, it can affect the perception of value of a product.<sup>33</sup> For example, an experiment conducted regarding the consumption of an energy drink, showed that the participants who belonged in the first group and they were paying a discounted price for the product, solved in average 30% fewer puzzles when they were asked to, than those from the group that paid the full price for the energy drink.<sup>34</sup> That means that people were more productive when consuming a product with higher price than those who paid a discounted price. The idea behind the experiment is that the more consumers invest in a product the more they will try to benefit from it.

<sup>29</sup> <http://www.citeman.com/696-selective-attention-distortion-and-retention.html#ixzz2R1zmqcEU> [12/04/2013]

<sup>30</sup> [http://www.intropsych.com/ch04\\_senses/subliminal\\_perception.html](http://www.intropsych.com/ch04_senses/subliminal_perception.html) [12/04/2013]

<sup>31</sup> Daniel E. Moerman, “Meaning, Medicine, and the “Placebo Effect”, City: University of Michigan-Dearborn, 2002, ISBN 0 521 80630 5 hardback, ISBN 0 521 00087 4

<sup>32</sup> <http://www.slideshare.net/jdinsmore/price-perception-the-placebo-effect-in-marketing> [12/04/2013]

<sup>33</sup> [http://www.amazon.com/gp/product/B004MKLRQ0/ref=as\\_li\\_ss\\_tl?ie=UTF8&tag=velveverbo-20&linkCode=as2&camp=1789&creative=390957&creativeASIN=B004MKLRQ0](http://www.amazon.com/gp/product/B004MKLRQ0/ref=as_li_ss_tl?ie=UTF8&tag=velveverbo-20&linkCode=as2&camp=1789&creative=390957&creativeASIN=B004MKLRQ0) [12/04/2013]

<sup>34</sup> [http://www.amazon.com/gp/product/B004MKLRQ0/ref=as\\_li\\_ss\\_tl?ie=UTF8&tag=velveverbo-20&linkCode=as2&camp=1789&creative=390957&creativeASIN=B004MKLRQ0](http://www.amazon.com/gp/product/B004MKLRQ0/ref=as_li_ss_tl?ie=UTF8&tag=velveverbo-20&linkCode=as2&camp=1789&creative=390957&creativeASIN=B004MKLRQ0) [12/04/2013]

The product itself has not changed but the expectations and the orientation of the customer has changed.

### **Factor affecting placebo effect**

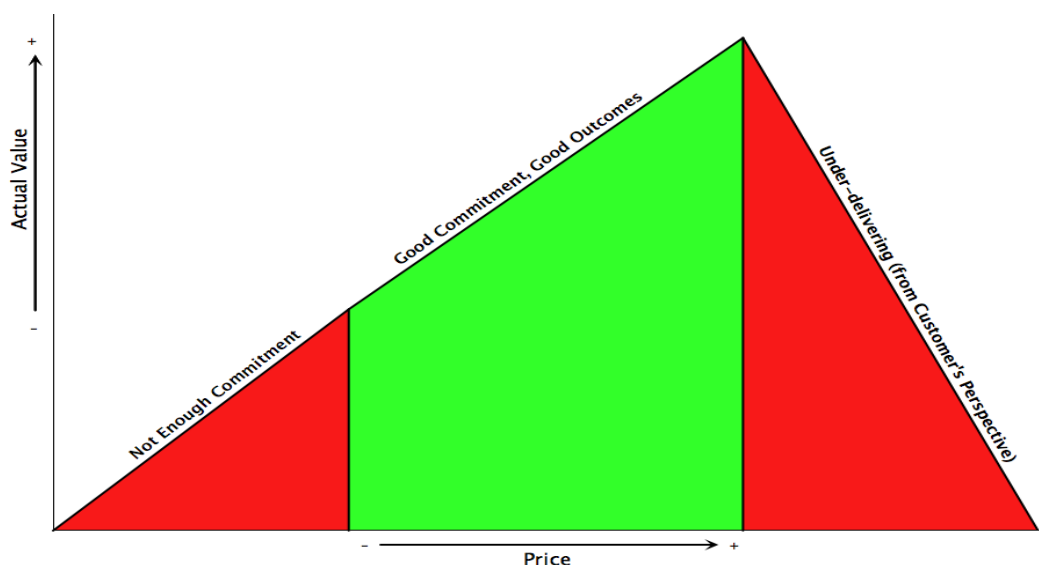
One important factor marketers need to take into consideration regarding the placebo effect is the priority. The priority that consumers give for buying a specific product can affect significantly the results. In case the customers do not perceive a specific product as high priority, then the placebo is less effective. As the below figure shows (Figure 5), when a product does not belong to the category of very important products and the price is low, as shown in the lower spectrum of the below figure, then the consumers are not committed enough in order to purchase the product. As a result, they perceive the actual value lower than it could have been in other cases. Additionally, the increase of price might not be perceived as an increase in the value. The consumers believe that the price is too high and the value they receive is not balancing that cost, so the product is under delivering according to their expectations so the value decreases as shown on the upper end of the spectrum.

As placebo is the post-purchasing consideration, the challenge therefore is to find the price that is in the green part of the spectrum. In that area the price commits the customer to buy the product and prioritize it among others. Regarding the value, customers value the product higher than others do and they believe that it over-delivers comparing it with the price they are paying. At that point, consumers are satisfied with the combination of value, the cost and the possibility to have the best outcomes.<sup>35</sup>

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<sup>35</sup> <http://www.productiveflourishing.com/the-3ps-of-pricing-placebo-part-2/> [15/05/2013]

**Figure 5 Placebo effect**



Source: <http://www.productiveflourishing.com/the-3ps-of-pricing-placebo-part-2/> [15/05/2013]

### 1.4.3 Positioning

The third and last P of the 3P's theory is positioning. As mentioned, perception is the pre-purchase consideration and placebo is the post-purchase consideration. Positioning is the third element that is related with both the pre and after purchasing decision. According to the perception theories, customers compare the products with the competition either consciously or subconsciously. Therefore, positioning and perception are interconnected. If the consumer compares the product with cheaper ones, which the company might not consider as competitors but they categorize them as inferior, then the marketers need to consider this observation and try to change the perception by changing the positioning. This is the first point regarding the positioning, which is related to the pre-purchasing decision. Positioning is also an important aspect when the consumer is making the purchase because customers will compare the results and effect of the specific product to other similar that have bought in the past. That can increase or reduce the commitment and loyalty of the customer to the brand and as a result can affect the expectations, actual results, outcomes and experiences that the consumers will have from the specific product<sup>36</sup>.

<sup>36</sup> <http://www.productiveflourishing.com/the-3ps-of-pricing-positioning-part-3/> [15/05/2013]

## Chapter 2 Psychological Pricing

While all factors are putting pressure on prices to go downwards the combination of psychology in the new pricing methods examines how to move the price upwards or, in case that is not possible, to increase the sales keeping the price the same. Some prices are too high or too low. Some customers would pay more for the product or would buy the product if they were in other purchasing points. The competition through price war, the economic growth, the suppliers, the media including internet that provide many options, are making the consumers more price sensitive and as a result they push the price downwards.<sup>37</sup>

### **2.1 The importance of price**

Price is a term that can have many definitions and names. One definition for the price could be that is “the value that will purchase a finite quantity weight or other measure of a good or service”.<sup>38</sup> Price is the total of numerical elements that equals “something” of value. The price is consisted of the many elements (taxes, costs, etc.) and equals value to the buyers through the products.

From the marketers’ point of view, pricing is important, as it is the most changeable characteristic of the product. The core, the label or the package are not as flexible to changes as price. The cost related to changing those features, the research to identify the next best suggestion and the risk of failure or success of the new ideas makes it difficult for marketers to take the decision. In addition, the change of price has the fastest impact in the revenues, in the value and in the perception of the product. Adjusting the price has a profound impact on the marketing strategy. The change of the price according to the price elasticity can influence the sales and cash flow.<sup>39</sup>

The price is a key element of the profit equation that has a strong effect on the firm’s profitability because it the element, which relates directly to generation of revenues and quantities sold. The rest elements that are related to the process of production and promotion generate costs and the correct pricing is providing the revenues and profits that the business needs to cover them. In addition, through the price the marketers are aiming to achieve profits, increase sales and establish the status-quo of their company. Regarding the psychological effects, the price has

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<sup>37</sup> Gregory Passewitz: Consumer Psychology Toward Price, Columbus, Extension Factsheet, CDFS-1326-95

<sup>38</sup> [http://www.sagepub.com/upm-data/43169\\_1.pdf](http://www.sagepub.com/upm-data/43169_1.pdf) [10/03/2013]

<sup>39</sup> Michel Wedel, Wagner Kamakura: Market Segmentation, Conceptual and Methodological Foundations, United States of America: Kluwer Academic Publishers, ISBN: 0792386353

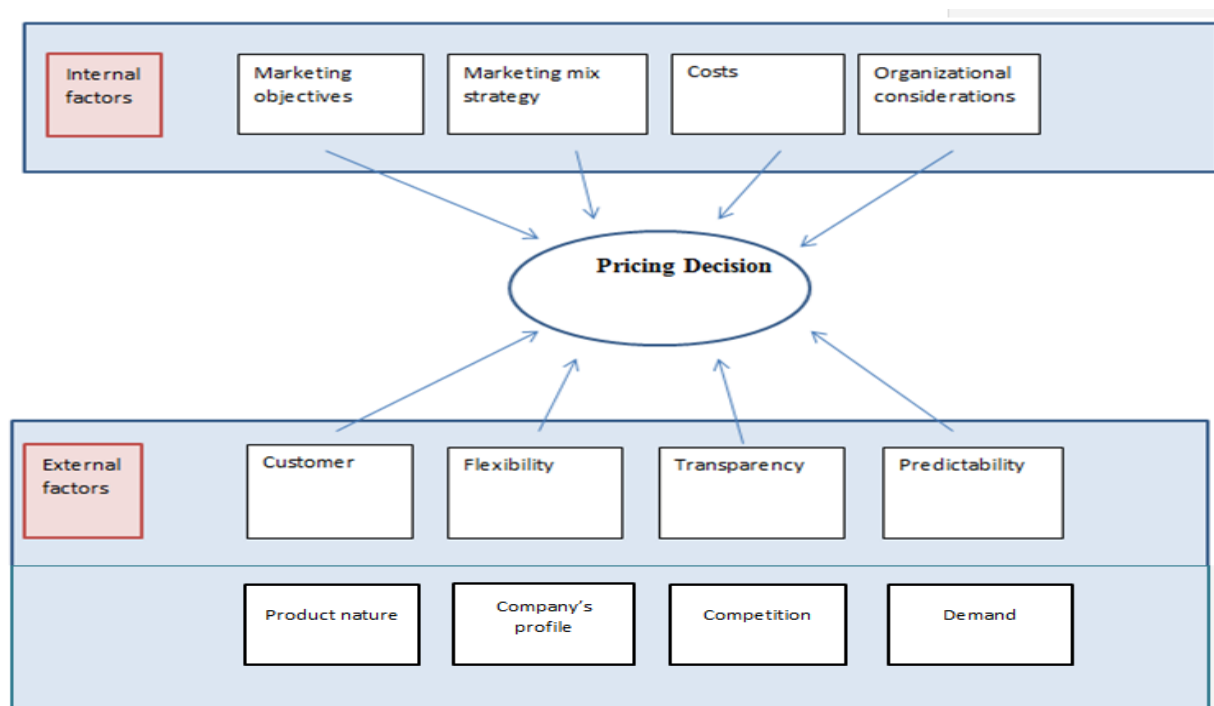
symbolic value to the customers. The price can increase the value of a product; it can differentiate the perception of the customers and affect their loyalty towards the brand of the product.<sup>40</sup>

## 2.2 Factors affecting pricing decision

Setting the prices is a difficult process. Many factors influence the choice of the correct pricing model. Companies have to take into consideration costs, expenses, economic forces and government regulations. Main factors that affect the pricing decision are divided in two categories as shown in the below figure (Figure 6).

The first category includes the external factors affecting pricing decisions and the second category the internal factors.

**Figure 6 Factors affecting Pricing Decision**



Source: Andreas Zehentner: Business Marketing Tactics Business-to-Business Marketing Fundamentals, Upper Austria University of Applied Sciences, 2012

<sup>40</sup> Andreas Zehentner: Business Marketing Tactics Business-to-Business Marketing Fundamentals, Upper Austria University of Applied Sciences, 2012

## **Internal factors**

### Marketing objectives

The main goal, that is the priority of every company despite the product life cycle, is the increase of sales. Marketing needs to return to investment meaning that the increase of sales need to exceed the costs of the marketing. The next goal is related with the improvement of product awareness. A marketing effort can be focused on reviving a product according to its life cycle in the market. Additionally, the establishment in the industry in combination with the correct brand management in order to make a place in the mind of the public can influence significantly the pricing decisions.<sup>41</sup>

### Marketing mix strategy

The marketing mix is the combination of promotion, pricing, place and product. According to the budget that the company has set for the marketing of the product the pricing will be significantly affected. For example, the introduction of a product in a local market or the promotion of it in the international market will affect significantly the costs and therefore the price of the product. One important factor is the size of the company and the kind of the product that will influence as well the price.

### Costs

The costs incurred in running a business are divided into fix and variable costs some of which include salaries, interest and repayment, fees, marketing campaign spend and cost of sales. The high of these costs are affecting the pricing of the product.

### Organizational considerations

Final additional factor regarding the pricing is the organizational structure. Every company follows a structure regarding the responsible people or the pricing department in charge and they can influence the prices with their decisions.

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<sup>41</sup> <http://smallbusiness.chron.com/examples-marketing-objectives-20231.html> [10/04/2013]

## External Factors

### The company's profile

Businesses need to take into consideration the costs and expenses that are necessary to continue to operate. In order to achieve that, the company needs to make profit by setting the price higher than the costs and expenses, using fixed and variable costs price strategies. The most important thing that companies realize is that their pricing structure affects the product costs.<sup>42</sup>

### Customers

The customers that the company is targeting and the environment they are in is significant for setting the correct price. First goal is to identify the power of supply and demand (elastic and inelastic demand) of the product in the market. According to the elasticity, the business can increase or reduce the price of the product respectively. Government Regulations and laws also affect prices, as they do not allow businesses to use some types of discriminations; they limit the use of advertising or set the minimum pricing. Additionally, technological trends change rapidly and the effects are in every aspect of pricing policies. After identifying those factors, consumer perception is the last step. The price helps to create the image in the minds of customers. The main point is to balance the price; very low prices can make people believe that the product has a low quality and high prices may convey high quality.<sup>43</sup>

### Flexibility

Organizations must take into consideration their ability to be flexible with their price strategy. The main factor influencing that ability is the kind of the product. In cases, the product requires a fix price or it has a long lifecycle then it is more difficult to make the change in the pricing policies. Certain models are more flexible to accommodate the changes in the technological and business environment than others do.

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[http://www.usaid.gov/sites/default/files/documents/1870/USAIDSustainableUrbanServicesPolicy\\_DraftforReview\\_Marc\\_h2013.pdf](http://www.usaid.gov/sites/default/files/documents/1870/USAIDSustainableUrbanServicesPolicy_DraftforReview_Marc_h2013.pdf) [10/03/2013]

<sup>43</sup>Tony Cram :Smarter Pricing , In: The Ashridge Journal, 2006

### Transparency

Transparency is a very important factor that ensures that the organization understands its costs, the relationships between service levels and pricing, the impact of increased or decreased use and other factors. Organizations do not always have access to all the proprietary information of competitors to set the best price, or cannot reach all the potential consumers in order to study their behavior but must understand the elements of price, service categories and the relationship of various terms to the price with the given available information. The organization must ensure that it gets the transparency it needs. Some pricing models offer more transparency than others do.<sup>44</sup>

### Predictability

Some organizations have fixed or strict budget planning processes and in these cases, predictability can be a very important attribute. Although predictability may seem the opposite of flexibility, many organizations need to know precisely how much services will cost throughout each fiscal year and, often, beyond that. A number of pricing models provided are more appropriate to be used in such cases but it is important for the organization to determine how much predictability it needs.

### Competition

Setting the price according to the competition reflects the method of pricing based on what the competitor is charging. There are three options related to the price, set price above the competition, set the price below the competition or set the price at the level of the competition. Companies prefer this type when the product is in the market for a long time.<sup>45</sup>

### Product nature

Companies that have a variety of product lines use this type of pricing strategy. The product costs and price elasticity affect the final decisions for the pricing. The product price needs to cover the costs, bring profits to the company but at the same time it needs to be competitive.<sup>46</sup>

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44 Michael V.Marn and Robert L.Rosiello,; Managing Price,Gaining Profit, In:Harvard Business Review, Working Paper 92507,1992

<sup>45</sup> 1. Graham Hooley, Nigel F. Piercy, Brigitte Nicoulaud: Marketing Strategy and competitive pricing, United Kingdom: Pearson Financial Times, 2008, ISBN: 0273740938

46 Michael V. Marn,Eric V.Roegner,and Craig C.Zawada ,;Pricing New Products, Workin paper 40-49,2003



### Demand

This method uses the supply and demand to set the price of a good and quantity sold. The demand curve shows how much the quantity of the goods sold depends on the price. For example, if the price of the goods is reduced then the quantity demand rises.<sup>47</sup>

## **2.3 Pricing methods**

This chapter is aiming to provide a number of pricing methods that the marketers can use in order to influence the purchasing decision of the buyers. There are a number of pricing methods based on traditional economics and the businesses are mostly using. One the common characteristics of these methods are that companies generally follow a product-mix pricing strategy that involves cost recovery and increase of sales based on numerical estimations.

The category of the pricing methods based on behavioral economics has a different approach. As listed below in the table (Table1) there are a number of pricing methods that are based on behavioral economics principles they are the result of combining the rational principles with psychological theories in order to set the prices. In the following sub-units will be provided more details for seven of the below methods in order to understand better the connection pricing and psychology which are pricing according to segmentation, positioning and completion, psychological pricing, anchoring, decoys and hyperbolic discounting. The reason for describing in more details those methods among others is that they are applicable in almost every company despite their activity. The aim of these methods is to add different extras to the original price such as apply discounts for a short time, offers, free offers and even more unobvious methods that do not affect the price but the perception of the customers.

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<sup>47</sup> N. Gregory Mankiw: Brief Principles of Macroeconomics, USA, Thomson Higher Education, Fourth Edition, ISBN 0-324-23697-2

**Table 1 Pricing methods based on behavioral economics**

Drip pricing	Bundle pricing	Hyperbolic discounting
Bait sales	Pricing based on segmentation	Equity participation
Complex pricing	Decline price as adoption	Cost-based calculations
Reference pricing	Seasonal pricing	Anchoring
Multiple unit price promotions	Pricing based on competition	Free offers
Pricing based on positioning	Psychological pricing	Decoys

Source: Leigh Caldwell, The psychology of price, London, Crimson Publishing Ltd, 2012

### 2.3.1 Segmentation

“You CAN’T just ask customers what they want and then try to give it to them. By the time you get it built, they’ll want something new”.<sup>48</sup>

Consumers do not have stable preferences, desires and opinions, especially when it comes to decision making for purchasing new products. The company needs to drive the consumers towards the direction they want them to go. The tool to manage that is segmentation. Segmentation is “the process of defining and subdividing a large homogenous market into clearly identifiable segments having similar needs, wants, or demand characteristics. Its objective is to design a marketing mix that precisely matches the expectations of customers in the targeted segment”.<sup>49</sup>

Dividing the market into segments, in every segment the customers have different desires beliefs, values and the most important, price sensitivity. For example, taking into consideration the VALS analysis<sup>50</sup> someone can see that each of the groups has different needs and constrains, either financial or social. Consequently, defining the segmentation can be very important for setting the price and understanding the psychology of the consumers because in every segment customers are willing to pay (WTP)<sup>51</sup> different amount for the product.

<sup>48</sup> Bo Burlingham and George Gendron, The Entrepreneur of the Decade, In: Inc. Magazine, 1989

<sup>49</sup> Michel Wedel, Wagner Kamakura: Market Segmentation, Conceptual and Methodological Foundations, Second Edition, Third Printing. United States of America: Kluwer Academic Publishers, 2003

<sup>50</sup> VALS – Value Attitude Life Style, ISEG MBA 2007 – Marketing [ 14/04/2013 ]

<sup>51</sup> <http://www.sesrtcic.org/files/article/79.pdf> [ 14/04/2013 ]

## **Factors that affect the segmentation process**

### The nature of the product

According to the kind of product, the company has to divide the segment in order to identify with what alternatives the customers compare the product in terms of value, service or price so they can guide the perception or take action to adjust the marketing campaign and pricing according to that. The unusual products or services can aim at a more premium price segment.

### The variety of the product

The ability to offer a variety of product is essential for segmentation and price setting process. For example, a coffee company introduces new coffee product, the Flavored with price of 2, 65 Euros. The product might be expensive for a group of consumers, therefore the company can offer a not flavored coffee in price of 1,5 Euros so they do not lose the customer that still prefers the brand but is not willing to pay the price for the flavored coffee.

### Competition

The market characteristics such as the competitors' power, market share, and distance of your product with the competition (close competition) can significantly influence the decision of the chosen segmentation and pricing policy.

## **Segmentation is not easy**

The importance of segmentation is big in order to understand the psychology of the consumers, but the correct determination of the segment is not easy. Companies, in order to get insights on what the customers are willing to pay need to ask questions and try to understand their behavior. The existing segmentation tools base their conclusions firstly on lifestyle attitudes and purchasing habits of the consumers and secondly on research and questionnaires in which they ask consumers to guess what they would do or how they would react in an hypothetical, future situation. The latter part causes the majority of problems and discrepancies because the behavior of the consumer is not stable. Also, questionnaires ask people to decide at present for a future situation without knowing the conditions of the future is even more difficult to make a decision and less possible to be accurate. For example, the question of how much would someone pay for a new flavored coffee

cannot give accurate results as the customer does not know how much he will be able to afford in the future for it, where he will find the product ( supermarket or coffee house), mood, coffee thirst, etc. Even more importantly, the customer might not even reveal his/her real intention to pay.

Therefore, the suggestion for the best segmentation is after the company defines within a framework the segment most appropriate for the product, can direct the customers towards it by asking the questions in another format, or make the environment more realistic ( offer free trials), or if to company offers services, the company need to make the service more tangible and understandable to the customer.

### 2.3.2 Positioning

Positioning is a perceptual location. It is the process of designing the company's image or product image in order to obtain a distinctive place in the consumers' memory.<sup>52</sup> In order to identify the spot that a product belongs in the market or how is perceived by the customers, different perceptual maps are being used. Positioning is a tool that helps to create an image for the product or service but also to set the best price according to how the company wants its customer to perceive the product it is offering. Positioning does not only include rational aspects of pricing but mostly emotional and psychological because of the close link with perception.

From the customer's point of view, when a company is introducing a new product or service, the customer does not have the clear image of the product. No one knows the specifications of the product no matter how excellent is the description even if the product is not highly complicated or does not have high tech features. For example, if a coffee maker is introducing a new flavored coffee, the customers cannot exactly understand the taste unless they try it first. Regarding services, the solution is not tangible and with previous usage of similar services, the result can be very closely estimated but in the end, until the implementation or trial takes place, the user still has a vague idea if the solution will work this time or the satisfaction will be at the expected level. Therefore, it is difficult to predict in advance the price of a product or if that price is reflecting the expected value. Studies show that even in the case consumers try to estimate the monetary value of a product, automatically the brain compares it with something similar that it has experienced on terms of characteristics as a benchmark, instead of comparing it according to the price.

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<sup>52</sup> [http://class.classmatandread.net/P%20Map/Percept\\_Map\\_Overview.pdf](http://class.classmatandread.net/P%20Map/Percept_Map_Overview.pdf) [15/05/2013]

As a result, because of the disability of people to understand in advance, what a product is, the positioning can efficiently be used during the price setting in order to add features to the product despite the price and make it more attractive for customers. First, it is necessary to identify what kind of product it is, or who are the customers that it is designed for and the benefits the customer will gain from the product, or, in other words, the reason that someone would prefer to buy the product from the specific company.

### **Methods of positioning**

The first method of positioning is the location of the product alongside a more expensive alternative. This way, the company directs the customer to the products it wants the customer to compare it with. Automatically, customers have a perception and a picture of the category of the product. For example, placing a new coffee flavor next to premium coffee brands in a retail store, automatically increases the perception and expectation of the product by the consumers who think that the new brand will be similar to the already existing ones. Therefore, the consumers accept the higher price easier. On the other hand, introducing the product next to lower in price products that are considered as normal quality will affect the image of the product.

Positioning is also about the distribution channels and the selling points that have been chosen for the product. The sell points are important because they influence the reach the customers have to the products. The variety of the sell points, between supermarkets and premium selling points can provide an estimation of the alternatives the customers might perceive as competition for the product. In case the product is more successful to the supermarkets instead of the premium coffee shops, might be an indication of the perception that they have for the brand or the product.

The most important point is to identify a biological desire behind the benefit and values of that product. For example, coffee is sweet and coffee drinkers might connect it with positive thinking and pleasure memories. There are two fundamental emotional drivers behind this attitude and they are the pain and pleasure; and two fundamental material benefits, time and money. Since the customer will take into consideration only a small number of these reasons, it is an opportunity the company to take advantage of that. In order to support the model, the use benefit matrix supports the model.<sup>53</sup>

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<sup>53</sup>Source: Leigh Caldwell, The psychology of price, London, Crimson Publishing Ltd, 2012, ISBN: 1780590075

The benefit matrix is aiming to explain the reasons that someone would buy a product from a specific company. The company will use the critical value dimensions in the profit matrix. Those are the benefits or values that the company classifies as the most important for the price setting and based on those the company will build the whole pricing strategy. In the following example (Table 2), the coffee company has divided the drivers in four main levels: the first level or primary drivers, second level, third level and basic drivers. The primary driver is the trigger point that stimulates the feelings. Second and third level drivers translate the stimulations into what that trigger is offering to the customer. All of these aspects drive to the last level which is the basic one and identifies the feeling the customer have when he or she consumes that product.

**Table 2 Benefit Matrix**

Level 1 drivers (Primary drivers)	Level 2 drivers	Level 3 drivers	Basic drivers
The taste of coffee	Sweetness, Quality, Price	Sharing a drink with someone	Pleasure
Habit	Satisfying caffeine habit	Reducing tiredness	Reducing negative feelings
	Social bonds		Pleasure

Source: Leigh Caldwell, The psychology of price, London, Crimson Publishing Ltd, 2012, ISBN: 1780590075

As a result, companies can increase the value of their product and understand the price the customers are willing to pay by positioning the product next to right competition. Finally, the identification of the benefits will be a key tool in understanding the psychological pricing and marketing of the product.

### 2.3.3 Competition

Competition can be best explained with the example of a couple that decided to go for shopping. Emmy and John spend many hours in the shopping stores and the result was the purchase of one black jacket by Emmy. John complained that Emmy spend more time than she should in order to buy the jacket while all the jackets were almost the same with prices only to be different. Emmy argued that the jackets were all black and almost same style but there are many differences between them regarding the quality of the fabric, the button order, the collar shape, etc.

This is a very simplistic but at the same time a characteristic example of competition that already provides us with some of the main characteristics of competition, a) benefits of competition, b) disadvantages of competition and c) the price set according to the competition.

As Emmy mentioned, the jackets might look the same but there are many differences in the quality and the rest of the features. This is the result of the competition. Companies compete with each other and in order to gain advantage, they on R&D, on marketing, they come up with innovations, which can improve the market environment and trigger benefits for the customer from pricing point of view and quality.

Examining the effect of competition beyond the above example, the competition can also “fire up” the market. Consumers might not accept very positively a new product when it is unique or unknown to the market. The existence of competition or the entrance in the market of a competitor later might build the confidence of the consumers to use the product more assuming that there must be more people willing to buy the product since the market of the product is growing.

Nevertheless, competition can also be challenging or dangerous. As John commented, all jackets seemed almost the same and at similar price and they were placed very close to each other in the store. Competition in the meaning of rivalry between two or more businesses striving for the same customer or market can reduce the market share, reduce profit, as the jackets’ producers need to reduce the price repeatedly in order to be competitive.<sup>54</sup> Emmy continued to search for more details to find the best jacket only after she noted that the price is according to her budget. Price can be the first criterion for purchasing decisions and that competition can start price war<sup>55</sup>. When companies continuously lower prices to undercut the competition then the companies can use the price war to increase the revenues in the short term and in the long-term strategy, they aim to gain

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<sup>54</sup> [http://articles.businessinsider.com/2011-05-09/strategy/30074360\\_1\\_portfolio-companies-marketing-team-competitors](http://articles.businessinsider.com/2011-05-09/strategy/30074360_1_portfolio-companies-marketing-team-competitors) [ 14/04/2013 ]

<sup>55</sup> <http://www.investopedia.com/terms/p/price-war.asp> [ 14/04/2013 ]

market share.<sup>56</sup> In addition, competition can spread fear, uncertainty and doubt (FUD).<sup>57</sup> Competitors may spread negative information regarding the product of a company by hurting that way the portfolio of the latter significantly or can influence the consumers' minds with different messages and comments. For example, one of the competitors could give the rumor that one of the jackets brands produces its clothes in a country using illegal children labor and that, might affect dramatically the sales of the company.

In order to "beat" the competition companies need to differentiate the product from the competitors. That can be achieved with adding features to the product so customers cannot easily compare the product offered with the competitors. The risk to this method is that companies might copy the features as well. Therefore, it is necessary the change to be constant and using different tools, for instance, marketing promotion tools such as packaging, offers, coupons, free trials, smaller version of the product, etc.

As a result, companies can use competition in their advantage for price setting as long as it is offering something additional to the customer. In order to achieve that, the use of the benefit matrix can be helpful. The company needs to find a benefit area that they can be stronger than the competition. The other suggestion would be the company to decide on the approach it would like to have. For example, it will offer massive quantity of products in low prices or smaller quantity focuses in quality even if this is option assumes higher price. Customers find it easier to compare the product with the competitor than evaluate it as a new one. However, that can also be dangerous when the product of the competition is very similar. The best strategy could be the introduction of two products, one product better or more expensive than the competitors' and the other one lower price.

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<sup>56</sup> Z. John Zhang and Dongsheng Zhou, *The Art of Price War: a Perspective from China*, 2012

<sup>57</sup> [http://www.togaware.com/linux/survivor/Fear\\_Uncertainty.html](http://www.togaware.com/linux/survivor/Fear_Uncertainty.html) [ 14/04/2013 ]



### 2.3.4 Psychological pricing

The aim of this pricing method is to discover the effect of the pricing endings on the consumers' purchasing decision. The psychological pricing is based on the observation that people, tend to start reading the numbers from the left and paying more attention to them while ignoring the last digits on the right.<sup>58</sup> In order to enforce the effect, the pricing tags print the price in smaller letters.<sup>59</sup> When consumers see the price 2, 99 they perceive the price to be closer to number 2 than to number 3.<sup>60</sup> Another important psychological factor is that odd numbers "feel" smaller than even numbers anchoring the consumers this way.<sup>61</sup> Number 9 feels less than 8 as there is the tendency to round up even numbers but round down odd ones. On the other hand, number 6 "feels" better than 9 as vowels and consonants sound smaller or bigger; for example, six sounds smaller than nine do.<sup>62</sup>

During an odd pricing study carried out in Palmerston North, New Zealand at which it was analyzed all advertising displayed in two free newspapers in the city.<sup>63</sup>

An odd price is a price that fell just below and within:

- 5 cents of the nearest whole dollar (e.g., 95, 96, 97, 98, 99)
- 1 cent of the nearest whole dollar (e.g., 19, 29, 39 )
- \$5 of the nearest \$100 or \$1000 amount
- \$1 of the nearest round dollar amount (e.g., 19, 29, 39...)

The results show (Table 3) that odd prices outnumbered all the rest of price endings with the endings of digit 9 to be the first choice by 60% of the rest of the numbers. The next two most preferable digits were number 0 and 5 and in combination with 9, they concentrate 97% of pricing endings. Therefore, no matter the pricing method that the companies use, odd price endings are the most appropriate.

<sup>58</sup> [http://www.ehow.com/about\\_7421400\\_psychological-pricing-strategy\\_.html](http://www.ehow.com/about_7421400_psychological-pricing-strategy_.html) [ 15/04/2013 ]

<sup>59</sup> <http://www.accountingtools.com/psychological-pricing/> [ 15/04/2013 ]

<sup>60</sup> <http://www.post-gazette.com/stories/business/news/99-cent-pricing-hooks-shoppers-464011/> [ 15/04/2013 ]

<sup>61</sup> Anchoring will be analyzed in the next subsection. [ 15/04/2013 ]

<sup>62</sup> <http://www.slideshare.net/grahamjones/perfect-pricing/> [ 15/04/2013 ]

<sup>63</sup> Judith Holdershaw, Philip Gendall and Ron Garland,: The Widespread Use of Odd Pricing in the Retail Sector ,In: Marketing Bulletin, Working Paper 53-58, 1997

**Table 3 End digit preference: Pelmerston North study 1995**

Digit Ending	0	1	2	3	4	5	6	7	8	9	Total
N	89	3	3	9	3	340	3	5	12	721	1188
%	7,5	0,26	0,26	0,76	0,26	28,6	0,26	0,4	1,0	60,7	100

Source: Judith Holdershaw, Philip Gendall and Ron Garland,: The Widespread Use of Odd Pricing in the Retail Sector  
 ,In: Marketing Bulletin, Working Paper 53-58, 1997

### 2.3.5 Anchoring

In this sub-chapter it is introduced the power of anchoring by showing how high prices can affect the value perception in the mind of consumers.

In the previous part, it is mentioned that sometimes customers cannot hypothetically estimate the value of a product, or how much they are willing to pay for that product. That is the “unknown expected utility”. Using the “unknown expected utility” is where price makers can influence the customers’ decision the desired direction and marketers can shape the customers’ perception for how much the product worth. The best method to achieve that goal is anchoring.

An anchor is a price point that gives you an idea of how much something should cost<sup>64</sup>. Using the example of the coffee and imagining that consumers are going to drink a coffee in one of the central cafeterias in the city center of Prague. Sitting on our table and looking at the menu, they noticed that one of the coffees costs 6 Euros while next to it there is another one costing 3,5 Euros. Considering the fact that 6 Euros for a coffee are too much, the best choice would be 3,5 Euros. However, in reality the same, second coffee would cost 2 Euros. The first impression here is that the first coffee is too expensive so the cleverest choice would be to prefer the second one. Anchoring is the first impression effect. The expensive coffee is on purpose the anchor in this case so the customers prefer to buy the second one.<sup>65</sup>

Anchoring is based on the human tendency to rely on too heavily on one piece of information while making a decision and then adjust to that value to account for other elements of the circumstance.

<sup>64</sup> <http://www.cepe.ethz.ch/education/IntermediateMicro/behavior.pdf> [15/05/2013]

<sup>65</sup> Birte Englisch, Thomas Mussweiler: Fritz Strack Playing Dice With Criminal Sentences: The Influence of Irrelevant Anchors on Experts’ Judicial Decision Making, In: Personality and social psychology bulletin, 2006, DOI: 10.1177/0146167205282152

Anchoring is a tool that consumers cannot easily be ignored. That is also the he main advantage of anchoring for the psychology of pricing. In a study conducted in order to explain the anchoring effect the authors themselves, described the effect “as easy to demonstrate, but hard to explain”.<sup>66</sup> Some factors that can influence anchoring are mood<sup>67</sup> (people with more depressed mood use less anchor), experience<sup>68</sup> (experts on a field are more resistant to the effect), personality<sup>69</sup> (people who have more open character are more susceptible to the effect) and cognitive ability (those who have greater ability, the anchoring effect is decreasing).<sup>70</sup>

### **Process of how a business to apply anchoring effect**

The best application of the anchoring is by following a specific process. The companies need to collect the data from the market regarding the range of prices that the competitors charge. Even if there are not direct competitors, the company can find a range of products that would like to be compared with.

The second step is to order the products by price level in order to see the range of prices charged for similar products. The then marketers need to put themselves in the position of the customers and they need to consider the path that a customer will take before choosing to buy the product. This aims to identify if the customers an easily find the range of products either by searching on the Web or if the product is in the shop alongside to the competition.

The next step is to identify a spot available in the path of comparison where the company can introduce a new product at a higher price. The kind of the company and the direct or indirect control of the positioning of the product are important at this stage. For, example, in the case that the company is a retailer then it can directly enter the product in the market and place the high-priced product in a more obvious point for the customer to see, before he or she reaches the standard product.

Next, follows the choice of the anchor. If the price of the product and the anchor price are close together, customers are likely to compare them directly instead of changing their subconscious

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66 Fritz Strack and Thomas Mussweiler,: Explaining the Enigmatic Anchoring Effect: Mechanisms of Selective Accessibility, In: University Wtirzburg,:Working Paper 437-446,1997,:INC . 0022-3514497

67 Birte Englich, Kirsten Soder: Moody experts — How mood and expertise influence judgmental anchors. Judgment and Decision Making, vol. 4, no. 1, 2009

68 Birte Englich, Thomas Mussweiler, Fritz Strack: Playing Dice With Criminal Sentences: The Influence of Irrelevant Anchors on Experts’ Judicial Decision Making. Vol. 32 No. 2, 2006

69 Todd McElroy and Keith Dowd,: Susceptibility to anchoring effects: How openness-to-experience influences responses to anchoring cues, In: Department of Psychology Appalachian State University: Working Paper 48-53,2007,

70 <http://www.sciencedaily.com/articles/a/anchoring.htm> [ 15/04/2013 ]

evaluation for the value of the product. Therefore, the anchor price must have big difference from the price of the product. For example, setting the anchor price at 6 Euros when the price of the product alongside is 5 Euros will not have a strong effect. In contrast, setting the anchor at 20 Euros instead then the true value of the standard product is more likely to be shifted.

The last stage is to measure the consumers' behavior with and without the anchor. While the product and the anchor is in the market the variables, such as the number of consumers who buy anything at all, the proportion who buy this type of product and the product that sells the more, can change. Therefore, measurement is important so the company is able to identify the rate of these changes and the strength that they have.<sup>71</sup>

In conclusion, anchoring is one of the most powerful psychological effects related with pricing. The first impression is a very important aspect. If the companies show to the customers a product with higher price then they increase their expectations. When though they see the lower price that they will pay, the attractiveness increases and this is the success of the anchoring effect.

### 2.3.6 Decoy

In this part, are defined the decoys and the effects they can have and are presented study two main forms they can take. "Decoys, in marketing, are products, services, or price points that a business does not really want the customer to purchase, but rather use as a reference to make another product look better".<sup>72</sup>

Decoys have many forms and can work in every situation or product. There are decoys as skills according to which a decoy acts as an enthusiastic customer aiming to attract others<sup>73</sup>. One of the biggest examples of successful use of decoys is Apple that sells each gadget in a price series for different storage capacities and the buyer in the end decided to buy the product Apple wants while he/she could buy a cheaper one even with more features.<sup>74</sup> One of the researches that have taken place regarding decoys is by the economist Dan Ariely. In the book, Dan Ariely is mentioning the example of his observation regarding an ad on the Web site of the magazine, *The Economist*. As it is shown figure below (Figure 7) which is an abstract from the magazine, the first offer is the

71 Leigh Caldwell, *The Psychology of Price*, Westminster, Crimson Publishing, 2012, ISBN: 9781780592008

72 [http://www.businessweek.com/technology/content/sep2010/tc2010091\\_060916.htm](http://www.businessweek.com/technology/content/sep2010/tc2010091_060916.htm) [ 15/04/2013 ]

73 <http://www.optimum7.com/internet-marketing/advertising/5-online-marketing-lessons-from-hurricane-sandy.html> [ 15/04/2013 ]

74: [http://www.businessweek.com/technology/content/sep2010/tc2010091\\_060916.htm](http://www.businessweek.com/technology/content/sep2010/tc2010091_060916.htm) [15/04/2013]

Internet subscription for \$59, the second option for \$125 print subscription and the third option again the same price as option two but offering both print and internet subscription together. The question was for Dan Ariely the use of the third option that had the same price with the second.

Figure 7 Subscriptions

Economist.com	
OPINION	<b>SUBSCRIPTIONS</b>  <b>Welcome to</b> <b>The Economist Subscription Centre</b>  Pick the type of subscription you want to buy or renew.  <input type="checkbox"/> <b>Economist.com subscription - US \$59.00</b> One-year subscription to Economist.com. Includes online access to all articles from <i>The Economist</i> since 1997.  <input type="checkbox"/> <b>Print subscription - US \$125.00</b> One-year subscription to the print edition of <i>The Economist</i> .  <input type="checkbox"/> <b>Print &amp; web subscription - US \$125.00</b> One-year subscription to the print edition of <i>The Economist</i> and online access to all articles from <i>The Economist</i> since 1997.
WORLD	
BUSINESS	
FINANCE & ECONOMICS	
SCIENCE & TECHNOLOGY	
PEOPLE	
BOOKS & ARTS	
MARKETS & DATA	
DIVERSIONS	

Source: Dan Ariely, Predictably Irrational, The Hidden Forces That Shape Our Decisions United States of America, HarperCollins Publishers, 2008, ISBN 978-0-06-135323-9

He based his assumptions that everything is relative and most people do not know what they want unless they see it in context. That is the point of the three options. If consumers have had only two options then they would have to spend some time if they prefer internet only or print only subscription and the process of thinking might be difficult and sometimes unpleasant. Therefore, the Economist offered a third “no-brainer” option looks as superior. Then the author gave this ad to 100 students at MIT's Sloan School of Management in order to choose the one they would prefer and the results are:

1. Internet-only subscription for \$59—16 students
2. Print-only subscription for \$125—zero students
3. Print-and-Internet subscription for \$125—84 students

The decoy is the print only option. The results showed the in the second case with only two options the students had a very different reaction.

1. Internet-only subscription for \$59— 68 students
2. Print-and-Internet subscription for \$125— 34 students

The result show that the decoy effect is very much working as it was that that increased the sales of the third option and offering more sales of the expensive version to the company. This reactions in not considered to be irrational but predictably irrational.

## **The main forms of decoys**

### Price level decoys

People are not so good at estimating the value and maybe the benefits of a product, especially when the product is not so familiar. The students chose the option that looked the best one and did not take a lot of thinking. One other explanation of that attitude that is connected with price level decoys is the “Goldilocks effect”. The term derives from the story where Goldilocks decides to eat the bowl of porridge that is not either the hottest one or the coldest one out of the three choices. This is also, where “goldilocks pricing” refers. It is the practice of giving a premium and a budgeted option alongside to make the standard option more appealing<sup>75</sup>. People do not like to choose between the higher and the lower option as both are extreme but they like to choose in between despite the intrinsic benefits.

### Asymmetric dominance

Asymmetric dominance is the effect when two products are each superior to the other on one dimension. The customer needs to choose according to the features he/she prefers and the price level assuming that the one is cheaper than the other one and has fewer features. Then the company introduces a third option. According to the asymmetric approach, the company can influence the decision of the customer by offering the third product and still the customer to buy either one of the two initial offers.

As a result, the companies can apply the decoys by first finding out at which value dimensions or price level the customer is comparing the company’s products with the competitor’s ones. For tangible products, the values can be on features but for services, the value dimensions depend on the years of experience and expertise the company has. So the above two methods are simply applicable by offering a third option with a different price or a third product with different features.<sup>76</sup> Customers instinctively compare the products with each other in order to make their buying decision easier. Therefore, the companies should use a product as a decoy that is worse than the

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<sup>75</sup><http://shortboredsurfer.com/2010/09/understanding-the-power-of-the-goldilocks-effect/> [14/04/2013]

<sup>76</sup><http://prateekvjoshi.wordpress.com/2013/02/21/asymmetric-dominance/> [ 16/04/2013 ]

main product. In that way, the main product will look subconsciously better than it would be without decoys. In the case that people cannot understand the differences in the features, then the companies can even use the price difference as a decoy.

### 2.3.7 Hyperbolic discounting

“Hyperbolic discounting refers to the tendency for people to increasingly choose a smaller-sooner reward over a larger-later reward as the delay occurs sooner rather than later in time”.<sup>77</sup> When offered a larger reward in exchange for waiting a set amount of time, people act less impulsively (i.e., choose to wait) as the rewards happen further in the future. People avoid waiting more as the wait nears the present time. Hyperbolic discounting is applicable to a wide range of phenomena. These include lapses in willpower, health outcomes and consumption choices over time, and personal finance decisions.”<sup>78</sup> Hyperbolic discounting is a phenomenon that scientists discussed since 1960 by psychologists and they started to use it in economic studies in the 1980. Hyperbolic discounting says that people perceive the value of money in future to be much less than in the present.

For example, furniture shops use this method and this way they win their customers and make them pay even more in total. In case a consumer would like to buy a new sofa for his living room, if the sofa costs 990,99 pounds and he was asked to pay directly, maybe the customer would not buy the product as it is difficult to pay that amount all in once. However, the option furniture shops give to pay every month a much smaller amount, for example, 38 pounds over 3 years with payment to start in three months, sounds a very good deal. In the case of hyperbolic discounting, it is not the rational part that is being discussed but the emotional side and feeling of pain of payment. By offering the second option, and consumers are more willing in that case to buy the product because the pain is deferred and therefore they are less sensitive to the price. The method is applicable in many industries and not only in products but in services. Banks, services sold in small businesses, consultancy can offer or accept payment terms or credit so they can buy now but pay in the future. However, one important fact for hyperbolic consumers is the existence of commitment technology that the government is providing and especially in the above industries (e.g. term deposits with high

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<sup>77</sup>: Lisa A. Robinson, James K. Hammitt, Behavioral Economics and the Conduct of Benefit-Cost Analysis: Towards Principles and Standards, In: Harvard University and Toulouse School of Economics, Working Paper Volume 2, Issue 2, 2011, DOI:10.2202/2152-2812.1059

<sup>78</sup> <http://www.behaviorlab.org/Papers/Hyperbolic.pdf> [10/05/2013]



penalties for early withdrawal, pension funds, etc.). In addition, it has the benefit that sellers can make consumers buy products even in higher prices and the latter commit to pay in the agreed period. The disadvantage is that consumers are committed to pay no matter the uncertainty of future wage reduction as the feeling of fear or the thought of considering this factor is reduced under the offer that the seller is making driving the hyperbolic consumers to over-consumption.<sup>79</sup>

An additional psychological effect contributes the hyperbolic discounting method that is the psychological distance. Psychological distance applies to every aspect of life (decision, experience and object) and it about the feeling human have that the future activities and decisions are in a way displaced from the current experience.

The conclusion of hyperbolic discounting and psychological distance in pricing setting is anything that allows customer to pay in the future instead of the present increases the chances that they will buy now.<sup>80</sup> Also, companies can “invent” new methods of credit payment but generally the most preferable ones should be the ones already available (e.g. credit cards) that already customers are familiar with and also the responsibility of payment is transferred to the credit companies (e.g. bank).<sup>81</sup>

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<sup>79</sup> Michal Andrlé Jan Brůha, : Hyperbolic Discounting in Economic Modelling, In: Vysoká Škola Ekonomická V Praze – Fakulta Národohospodářská, Working Paper: No. 12/2003

<sup>80</sup> Cheryl Wakslak, : Construal Levels and Psychological Distance: Effects on Representation, Prediction, Evaluation, and Behavior , In : New York University , Tel Aviv University ,Working Paper :83-95,2007

<sup>81</sup> Rodney R. Cocking K. Ann Renninger, :Meaning of Psychological distance, City: Hillsdale, New Jersey ,1993



## Chapter 3: Pricing methods of DPDHL IT Services

The aim of the following chapter is to study the pricing strategies of one of the biggest companies worldwide. After discussing the different pricing approaches that are available, it is interesting to see which of these methods DP DHL IT Services uses. That will provide information and understanding of the circumstances under which the company chooses the specific strategies.

### **3.1 DHL Company profile**

On September 24, 1969, Adrian Dalsey, Larry Hillblom and Robert Lynn incorporated DHL. The company's name is consisted of the first letters from the last names of the establishers (Dalsey, Hillblom and Lyn). The company begins to operate with the door-to-door delivery service and transporting documents from San Francisco, California and Honolulu and Hawaii. The network grew rapidly and the company expanded its action to further territories by providing international services in order to cover the demand.

DHL International was officially founded in 1972 with the opening of the first office in Hong Kong. The company continues the next decades to expand geographically and to improve its services. By 1980, DHL had already established international air express services, it has been using state-of-the art packet switching to track packages, offers total logistics solutions and integrated shipping processing system. In 1990, the company continuous its expansion with some examples to include signing an historic Global Transport Alliance with Lufthansa Cargo, initiation of Easylynk services and much more to follow. The main characteristic of this decade is the use of technological advancement in their services and the main goal is to improve the customer's service by providing the next day delivery services. Regarding the next decade and specifically in 2002, the partnership DHL International which begun with acquisition of minority interest in 1998, expanded in 2000<sup>82</sup>. In 2002, Deutsche Post acquired DHL by becoming the majority stakeholder increasing its stake to 51%. After the acquisition, the group of Deutsche Post, its brand DHL and Postbank seek to become the first choice for all of its customers and increase their satisfaction.

At present, DP DHL International is already a pioneer in global express shipping and the international network links over 220 countries and territories and the workforce exceeds 283,000

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<sup>82</sup> <http://wap.dhl.com/info/history.html> [ 16/04/2013 ]

employees. Specifically in the Czech Republic covers the majority of the cities and Supply chain has 250 000 square meters of storage in the country.<sup>83</sup> The company encompasses three divisions: 1) DHL Express, which delivers worldwide, 2) DHL Global Forwarding & Freight delivers with planes, trucks, ships, trains, and DHL Supply Chain that includes packaging to repairs, international mail deliveries and customized shipping.<sup>84</sup>

### IT Services DHL

IT Services company is one of the largest service lines of the Global Business Services (GBS)<sup>85</sup> division and serving business units of Deutsche Post DHL across Europe, America and Asia-Pacific.<sup>86</sup>

IT is the key factor for the success of Deutsche Post DHL as it provides integrated applications and high performance systems are prerequisites in a global market of logistics with high growth potentials. IT Services offer Build (development), Run (operation) and Integration IT services to the business units of the Deutsche Post DHL. IT Services is a single professional Supply Organization, which means that the services are only available to Business Units of DP DHL and not to external companies (another term used in order to describe the nature of the company is “internal”). IT Services of Deutsche Post DHL are located in Temple, United States; Cyberjaya, Malaysia; Prague, Czech Republic and Darmstadt, Germany.

The main goal and vision of the company is to increase IT efficiency, provide defined services globally, support global expansion, optimize integrated and lean processes and leverage an excellent infrastructure.

## **3.2 Pricing level of IT Services compared to the market**

Despite the fact that IT Services is an internal provider, the prices of the services are required to be competitive. The following diagrams shows one of the market research methods used to identify the position of the company in the market. The charts are comparing four of the main pillar services provided by IT Services in three regions, Cyberjaya (Malaysia), Prague (Czech Republic) and Bonn (Germany). In the charts, for comparison reasons, the rates are normalized; the maximum

<sup>83</sup> [http://www.dhl.cz/en/country\\_profile.html](http://www.dhl.cz/en/country_profile.html) [ 17/04/2013 ]

<sup>84</sup> [http://www.dhl.com/en/about\\_us/company\\_portrait.html](http://www.dhl.com/en/about_us/company_portrait.html) [ 17/04/2013 ]

<sup>85</sup> <http://www.deloitte.com/assets/Dcom-UnitedKingdom/Local%20Assets/Documents/Services/Consulting/uk-consulting-day2-plenary6-worldis-notenough.pdf> [ 17/04/2013 ]

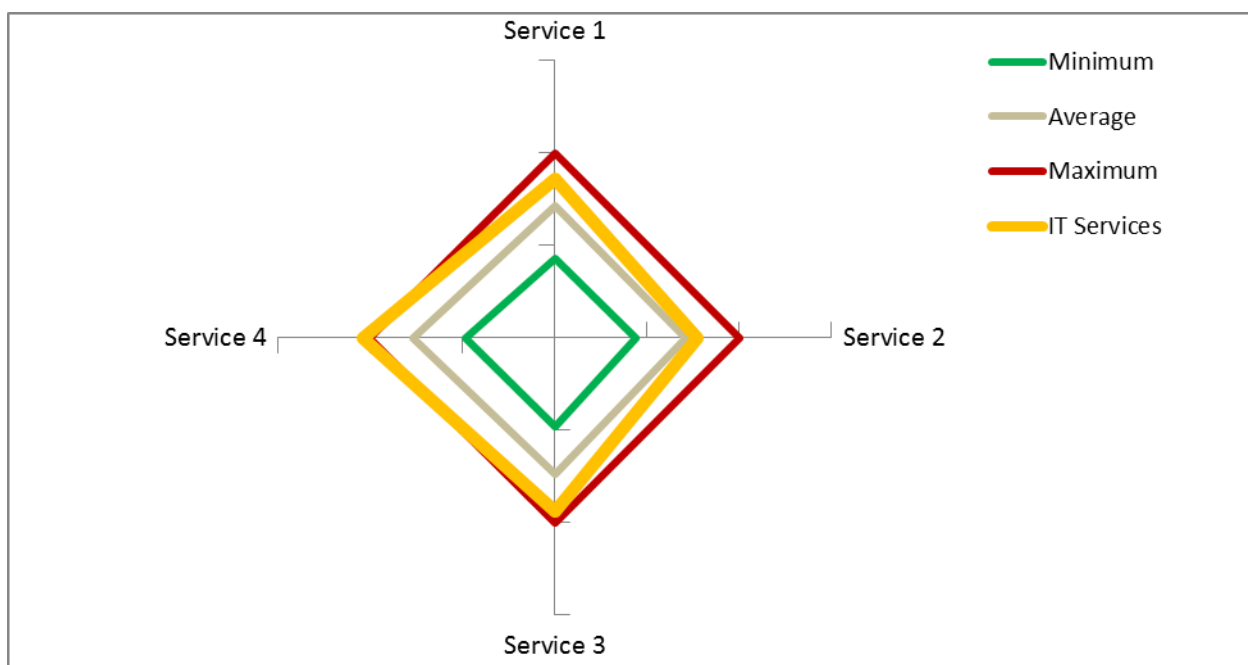
<sup>86</sup> [http://www.dp-dhl.com/en/about\\_us/corporate\\_divisions/it\\_services.html](http://www.dp-dhl.com/en/about_us/corporate_divisions/it_services.html) [ 17/04/2013 ]

price was set to 1 and forms the outer marker (red line) while the closer point is at the center, the lower the price. In contrast, the larger the enclosed area, the higher is the price level. The information are also based on the company's research regarding the internalization and the competitiveness of the countries including the three main countries as mentioned above that DPDHL has offshored its IT Services.<sup>87</sup> Therefore, the combination of the information regarding the country competitiveness and the position of the company in each of the markets can provide useful information about the pricing of the company.

### 3.2.1 Malaysia

According to the graph, the prices of DHL IT Services are above the average in the market and in Service 4 they are the highest. The price of the Service 4 is the highest one in the market and it exceeds the average price of the market. From the table below (Table 4) the highest price is set to 100 and the price for the Service 4 is 104. The lowest price among the services of the company is the one of the Service 2 that reaches 77 units and the average of the market is 71 units. In general, the price level in the country is relatively consistent with prices to fluctuate above the average.

Figure 8 Market prices in Malaysia



Source: IT Services company analysis, New Price List 2012

<sup>87</sup> <http://www.dp-dhl.com/content/dam/presse/pdf/2013/sme-competitiveness-study.pdf> [15/05/2013]

**Table 4 Market prices in Malaysia**

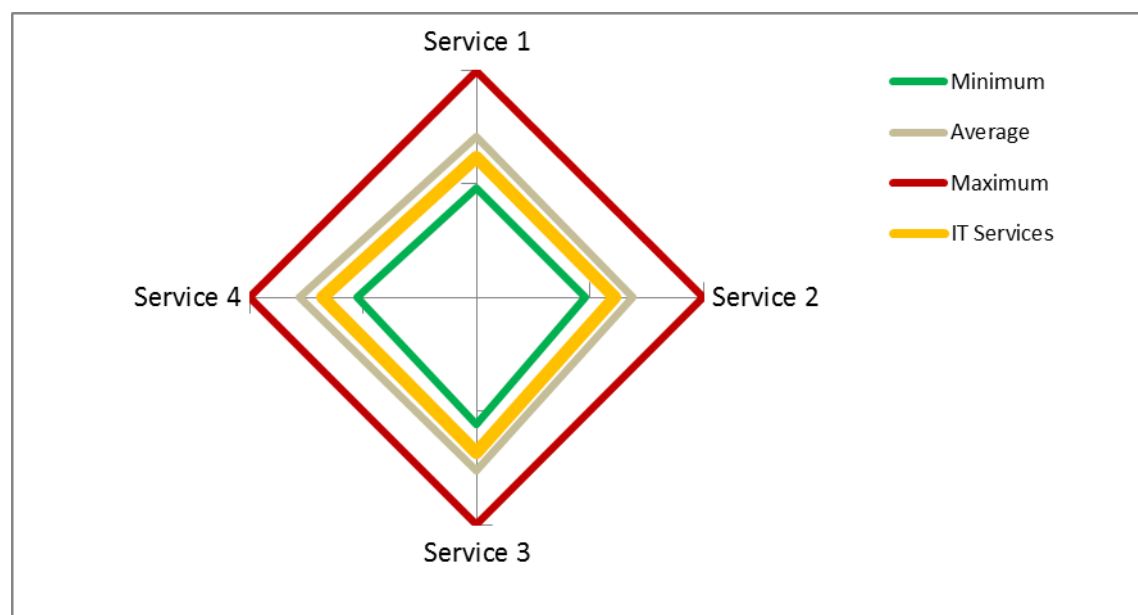
	Minimum	Average	Maximum	IT Services
Service 1	43	71	100	86
Service 2	44	71	100	77
Service 3	48	74	100	94
Service 4	48	77	100	104

Source: IT Services company analysis, New Price List 2012

### 3.2.2 Germany

As the figure below shows (Figure 10), the prices of the company in Germany are below the average in all four main services. The average is different for the services (Table 5) but the prices in of the company are consistent between 61 to 68 units.

**Figure 9 Market prices in Germany**



Source: IT Services company analysis, New Price List 2012

**Table 5**Market prices in Germany

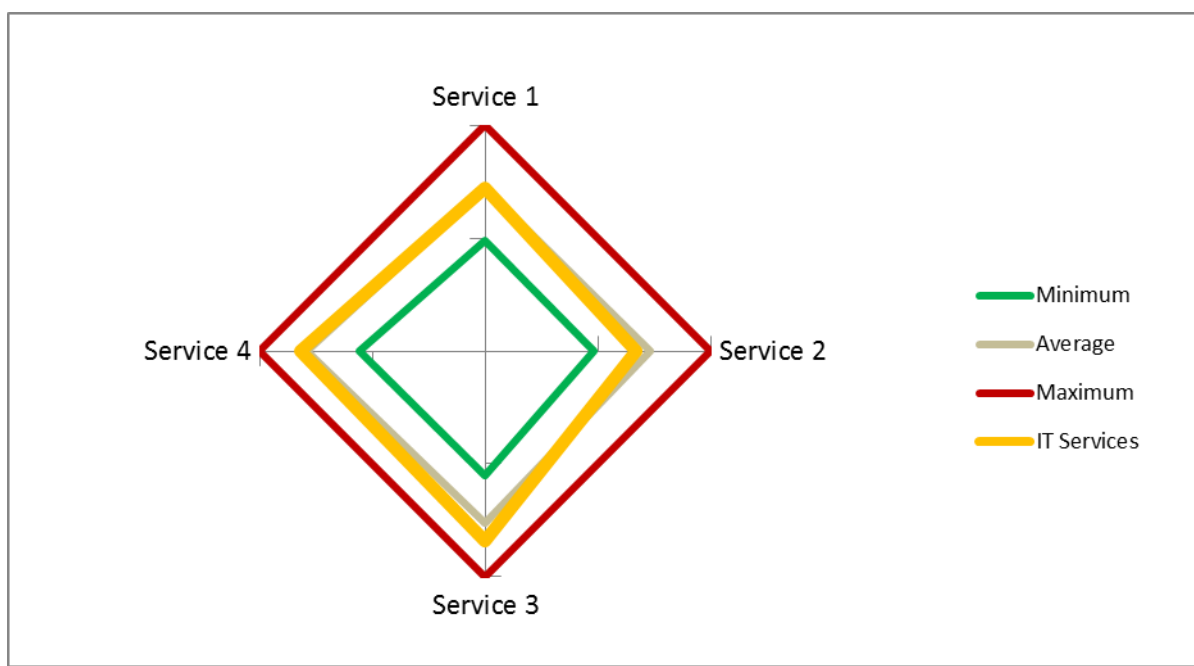
	Minimum	Average	Maximum	IT Services
Service 1	48	71	100	62
Service 2	48	69	100	61
Service 3	56	76	100	68
Service 4	53	78	100	68

Source: IT Services company analysis, New Price List 2012

### 3.2.3 Czech Republic

The prices of DHL IT Services in the Czech Republic are almost in the average of IT Services in the country as shown in the table (Table 6) and the figure below (Figure 11). The lowest price, below the average is the one of the Service 2 that is 67 and the average is 73 units. Service 3 has the highest price at 84 units, which is above the average of the market, which are 76 units.

**Figure 10**Market prices in Czech Republic



Source: IT Services company analysis, New Price List 2012

**Table 6**Market prices in Czech Republic

	Minimum	Average	Maximum	IT Services
Service 1	49	72	100	72
Service 2	48	73	100	67
Service 3	55	76	100	84
Service 4	56	79	100	82

Source: IT Services company analysis, New Price List 2012

### 3.3 IT Services pricing principles

The company conducts the pricing strategy on annual base that is the budgeted period. The scope of the pricing principles covers all three IT divisions located in Prague, Bonn and Cyberjaya. The main pricing objective of IT Services is the full recovery of costs through pricing. As IT Services are single professional suppliers, thus, the company is not targeting in profit, as this is included in the revenues of DP DHL as a total. Second goal through the strategies of pricing is to achieve full transparency of Run services. Transparency is a way to open and improve the communication and as a result, to strengthen the bond between customers and employees by creating lasting relationships based on reality and facts. Last objective also connected with transparency is to avoid cross subsidies among the services. IT Services are aiming at common and fair pricing methods that will not include pricing a group of customers higher pricing in order to subsidize lower prices of other groups. The calculation methodology of pricing is based on volumes of the services sold according to the main tool that is being used by the company in order to record those volumes. The pricing calculation derives from different pricing models that use specific agreed units of measure. Those models are based on three main blocks, which are the pricing building blocks, the price update process and the demand change.

#### Price building blocks

Pricing building blocks focus on direct costs of the company and overhead allocation. First goals it is to identify the costs and then they are included in the pricing setting as a part of the pricing model. The allocation of overheads is a process done proportionally in direct costs for all services provided by the company.

### Price update process

Price update process delivers changes to ITS Price List that ITS charges to DP DHL customers (Business Divisions Express, DSC, DGFF, Mail and GBS). These prices are covering Build Roles, B2Bi and Run shared services and licenses. This process applies to both update of current services prices and development of price for new service. This process does not apply to individual quotations and Country IT Run charges.

### Demand changes

Demand changes include the effect of demand change in the price setting process and the necessary updates related to the changes. Major reduction or increases in volume of a service might result in residual costs, which in that case the cost is borne by the Business Unit responsible for the reduction.

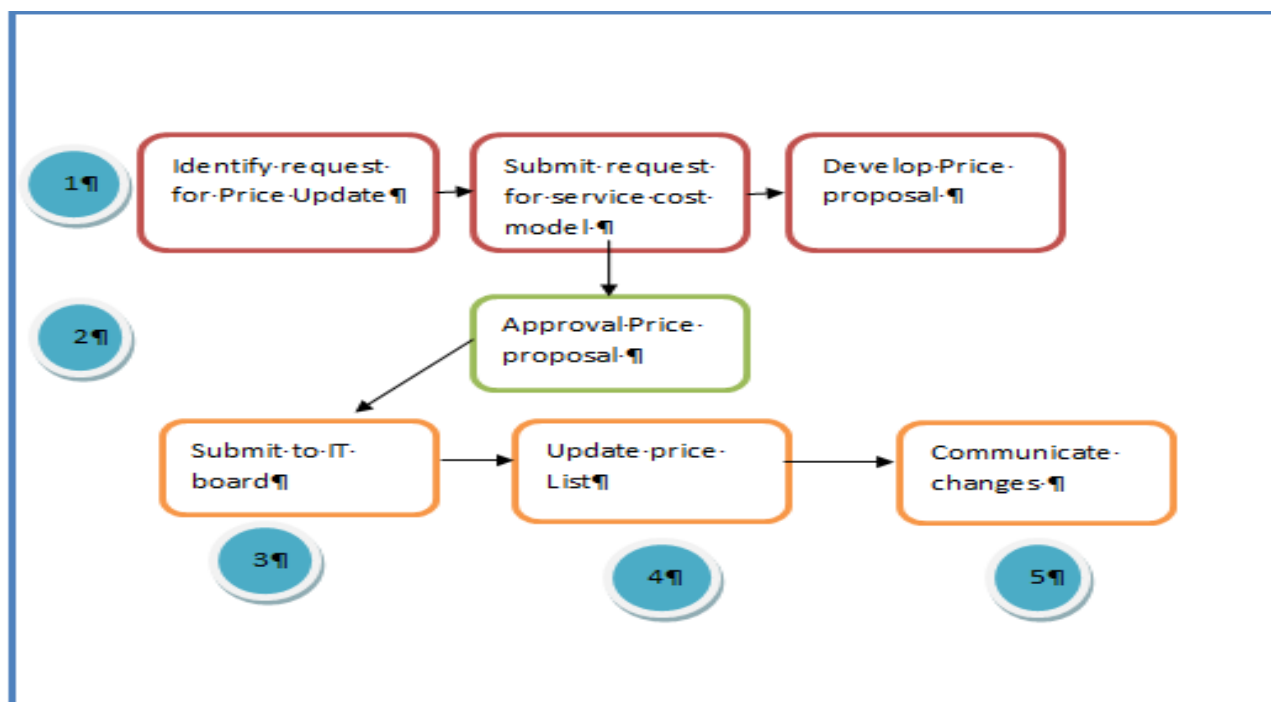
### **Touch points with other processes**

Price update process is a part of a bigger Service Development process (or Technology Governance process) that covers the activities of service definition and design, service implementation and development of service commercials. The described process of prices update affects other processes like charging, quotation etc.

The following figure (Figure 12) is a systematic description of the pricing flow in order to understand better the process. First step is to identify the need for price update. The customer triggers the process. The customer is requesting update of the prices by submitting a request to Professional services for the latter to provide a service cost model. The delivery function department provides cost and volume data in order to provide the first pricing assumptions. Those assumptions are transferred to the rest of the responsible departments. All the data are then combined and the pricing proposal-cost model is being developed. Second step of the process is the submission of the proposal to the IT board for approval. In the case, that the board does not approve the prices in the first stage, then the process the pricing department reevaluates and reexamines the pricing assumptions. Forth step, after the revaluation and the final approval, is the update of the price list and the price guideline. The last and fifth step includes the update and the notification of

the change to the department of the companies. Final target of this step is to communicate the changes to the company and eventually trigger the process by implementing the changes to the quotations but also to the customers who initially requested the change.

Figure 11 IT pricing principles



Source: IT Services company analysis, The First Choice Way, Price Update Process, 2013

The price process department delivers changes to ITS Price List that ITS charges to DP DHL which is the customer (Business Divisions Express, DSC, DGFF, Mail and GBS). This process applies to both update of current services prices and development of price for new service. Price update process is a part of a bigger Service Development process and it affects other processes like charging, quotation etc. Professional services, Portfolio Management and Pricing team are accountable for the process - they drive the process and involve the departments and roles necessary to deliver the pricing proposal while they are also responsible for the communication with the Business Partners for price related topics.<sup>88</sup>

Most of ITS functions are involved in the process of price creation or update, at least as approver of the pricing proposal. Regarding the timelines, this process is executed continuously with agreed topics to be submitted for approval monthly and major update of prices is performed

<sup>88</sup> Business Partner is referring to the customer



annually in line with the Budget cycle (June-August). New service price development and approval can range from about one month to several months. After the approval process follows the implementation. Every change is announced first internally to PfS and BSM (Business Services Management) and then those departments make available to all IT Services via Service Catalogue. Price update process ends with communication of the updated price, triggering actions like implementation in the various tools. The last step is the customer facing communication for informing the Business Units about the changes.

### **3.4 Main pricing models by IT Services**

IT services use mostly a number of pricing models. In this section are included, for each pricing model, the types of requirements, scope of service and other factors that work best with the model. In addition, the level of risk is described and the advantages and disadvantages of each model when the model is appropriately used. If the model used does not suit the requirements, then the level of risk, pros and cons will change. The company by applying different pricing categories is aiming to set efficiently local prices and set the residual costs. The main pricing categories that the company uses are the Time and Material, Fixed Price, Unit-Based/Use-Based, Cost Plus, Shared Risk/Shared Reward and Customer Driven Pricing.

#### Time & Material

T&M (Time and Material) is the pricing method according to which the organization pays the provider for the labor supplied at negotiated labor rates (such as hourly, daily or monthly). The provider is reimbursed for the cost for the materials used or other costs incurred, such as travel expenses. This method is most appropriate when the organization cannot accurately estimate the work effort and expects the scope or project requirements to change, for example, the method is effective for staff augmentation contracts. Regarding the pricing risks, the organization bares high risk and the provider lower one. The organization has no long-term commitment to the provider, pays only for the resources used and can readjust those resources according to its needs. On the other hand, there are no incentives for the provider to improve their efficiency and effectiveness and there is difficulty in tracking the costs and comparing the prices that other providers could offer. From the provider's point of view, there is low risk on potential disconnection between revenue and cost and

good margin on no commoditized skill sets. However, the disadvantages for the provider are the no long-term revenue commitments and administrative overhead to track resources with billings.

### Fixed Price

According to the fixed price method, the organization pays the provider a fixed amount for a fixed scope of work (SOW) at the completion of the project. The best use of the method is in situations when the organization needs to control costs, to obtain predictable pricing for services, to achieve a well-defined fixed SOW and to ensure predictability. The pricing risk for the organization is low to medium and the provider's medium to high. The organization benefits from the well-defined scope and requirements and the predictability of the services and costs. Although, for any modification of requirements, a change order is needed and there is the danger to pay more than market price for long-term engagement. The provider ensures committed revenue stream for the engagement and has the ability to have accurate use of resources. There is though the risk of margin erosion if the company makes a pure management of pricing assumptions.

### Cost Plus

The organization pays the provider for the actual cost of doing the work, plus an additional negotiated profit margin. In the cases when the organization does not have a clear baseline of the costs and it needs the identification of the true costs uses best this method. The pricing risk is high for the organization and low for the provider. The organization can obtain an accurate baseline of costs and develop a good understanding between price and service level. In case that the organization does not manage carefully the environment then potential problems might rise with the escalation of costs if. For the providers, the method has a low risk of undocumented services but there are high administrative overheads and allocation of costs.

### Unit-Based/Use-Based

The Unit-Based or Use-Based pricing method is based on the payment from the organization to the provider for each service unit or service transaction, which is based on output or consumption (number of users, workload volumes, device counts, capacity, transactions or incidents). This pricing approach accommodates fluctuations in service output or consumption and the best use would be when the organization has established baselines and stable requirements. This model is a good choice when the organization is expecting fluctuations in service output or consumption and the providers favor unit-based/use-based pricing for services that are or can become standardized,

and when the services are transaction-intensive and demand-driven. The pricing risk of this method is lower for the organization as it pays only for services it uses with low capital investment for new technologies or processes. Unit or use costs pricing can be problematic for very high-unplanned volumes of the organization and gives only the minimum amount of revenue stream to the provider. However, for the latter the method can be beneficial as the provider can leverage its solution and is in control of delivery while it has the ability to create value and charge for it.

The organization charges the price per user, which is related to the cost of providing the service (e.g. Desktop in the Collaboration Services). Offering different billing methodologies to different internal clients would significantly drive up the cost of chargeback administration. The issues of fairness and transparency would be a constant point of debate. However, the capabilities of IT performance management and chargeback tools are well advanced enough to allow a level of detail and transparency to show costs using many methodologies, with the drawback being comparability between business units if charged differently. Because the ultimate goal of many IT organizations is to show the business value of IT, a mixed methodology environment is often a political segues in organizations making the transition from basic methodologies to tiered access methods, and ultimately to creation of well-defined IT services. This occurs where one business unit does not want to give up the benefits of the locked-in price and comparatively beneficial basic methods versus another business unit or department that wants a better demand predictability and end-to-end business value.

### Customer driven pricing

One pricing model, which is unique and is deviating from the total of the rest of the models, is the pricing according to the customer's specifications. The customer has an offer to make to the market (company and competitors) and they provide them with the budget limit, the project description and the deadline. Therefore, the company has to price and cover the costs according to specifications provided by external factors. The risk of this method are high for the supplier since IT will engage many resources in the project and the costs need to be covered by the specific budget of the customer. Therefore, there is no flexibility for additional financing if additional resources are used.

One major project in the IT Services that the price is customer driven is the development of the New Forward Environment (NFE) for DGFF. The applications that DPDHL uses to cover the business of Forward and Freight are more than 800. The maintenance of all of these applications, the cost of updating them and the cost of maintaining and functioning older versions, which is increasing

as the systems get the older, brought the need to deploy the same solution in every country by providing one common global solution which is the NFE. The new environment will summarize all the applications in six SAP modules that are customized for DGF and they have four satellites application to run the whole environment. NFE is divided in four main pillars according to the time that they will be implemented and the sequence of the activities they include. The total cost of this modification will cost tens of million annually and will run for five years. The main risk is there is no “turning back”. In the timeframe of five years, the new environment should be fully functioning and implemented all around the world. In addition, the costs related to the architecture of the environment, the education of the employees to use the new environment and the education of the customers to apply the changes still the profits are high. However, the profits from the process are estimated to be much higher than the costs. NFE will have huge impact on operations, many changes in user’s landscape, new finance system and fast environment so the company can win more customers, updated systems with less operation problems difficult to be maintained.

DPDHL provided the specification and budget limits to IT Services and external competitors and required from them the best solution in combination with the best price according to their limit. IT Services in order to deal with the request followed a different price structure for this project. The role structure of resources is calculated with a specific percentage uplift according to the region the resource is located (Bonn, Prague, Cyberjaya). The rates for the activities are calculated at direct cost rate using specific percentage indirect cost (overhead) uplift.

### Shared Risk/Shared Reward

The provider and organization share the upfront costs of the development of the service or solution as well as the downstream revenue generated by the new product or service. First step is to negotiate the level of upfront investment and the mechanisms for sharing upfront costs and then the companies determine the level of return on investment. This model is a good choice when the organization has a culture that supports collaborating with a provider and is willing to share the upside or downside potential of the relationship or when the organization must innovate with low upfront costs. The pricing risk is high for both the organization and the provider. Both sides face difficulties regarding the determination of the value of contribution and to maintain alignment and also there is risk of no return in case that the organization backs out after the project initiation or the provider might not be able to cover the project capacity or needs as required. The main common advantage is the joint development of business in case of true commitment from both sides.

### 3.5 SWOT analysis

The study of the pricing principles of IT Services and the case studies are providing the necessary information for a better understanding of the pricing strategies of the company. In this section, there is conducted a SWOT analysis regarding the pricing that the company is using.<sup>89</sup>

The key purpose of the SWOT analysis is to evaluate the potentials, limitations and opportunities of a company's strategy in relation to the environment the organization is operating.

The analysis is studying the opportunities, strengths, threats and weaknesses of the pricing methods that DHL IT Services are using and it is based on two levels that reflect two different perspectives of the pricing. Specifically, on the first level, employees of IT Services are sharing their professional opinion based on their experience about the Strengths, Weaknesses, Opportunities and Threats of the pricing of their services. The responders are professionals in managerial positions in the company (Key Account Managers and Account Managers from Professional Services, Head of Finance and Controlling department, Key Account Manager from Express) and among them is the head of one of the Professional Services domain. Professional Services is the domain that is directly in contact with the customer and one of the responsible departments of making the price strategies. Second level of SWOT analysis is based on the responses received from the customers who in this case are Business Unit DP DHL. Customers are from the Business Unit from Forward and Freight and have a different perspective of the pricing strategies IT Services are applying.

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<sup>89</sup> Terry Hill, Roy Restbrook : Swot Analysis: It's time for a Product Recall ;:Working Paper 46-52,: PII: SOO24-6301(96)00095-7

## Strengths

### IT Services:

- Pricing is comparable with other vendors/competitors.
- High quality of delivered.
- IT Services do not need to be profitable. As IT Services are internal providers they do not to consider the margin as the main driver. The main goal is to focus on cost recovery and potential investments.
- Good balance of cost comes from the ability to combine the resources from different regions (Bonn, Prague and Cyberjaya).
- Because of the nature of the company as internal providers, the employees are in direct contact with the customer. Therefore, it is easier to change, adjust the pricing and negotiate faster with the customer. The customers' business, costs, profits, budget are many times known so it is easier to adjust the pricing of the quotations accordingly. For example, if a customer has an approval limitation of 5000 Euros then it is possible to make the offer as close at that price possible so the customer approves, accepts the offer).

### DHL as customer of IT:

- IT Services are winning opportunities by providing Prague based resources to Germany. This is thanks to the large base in Prague.
- The prices for Prague based resources are highly competitive on the European market even with extra travel costs added on top.

## Weaknesses

### IT Services:

- The level of transparency of items charged to customer it is not as high as expected to be.
- GUI needs to become user friendlier to customer as well as to Account Managers.
- CRM is not 100% correctly setup and the data entered are not correct either.
- Missing clear benchmark against which competitors the benchmark was done

- One of the pricing tactics is the adjustment of prices every year either increase or decrease. The main problem is that the customers are required to pay according to the new price no matter the year they requested their service or the year IT Services provided the product to the customer. For example, even if the customer bought the service last year and pay 50 k they need to pay 55 k for this year for the same service according to the new prices). Because of the price instability and price fluctuation, the customer cannot make the budget planning for the next year.
- In some cases, the margin of some services is set higher compared to others without a specific reason (e.g., why two similar roles have a different margin).
- The methods setting the price are not the best. Consistency is missing from setting the price of roles and makes the allocation of time to some roles not very attractive. The high price reduces the utilization of those roles as a result, some roles are overbooked and some not used at all.
- Prices per country are different (e.g., the price of a build role in Germany is double as the same role in Prague and triple or even more than the one in Cyberjaya).
- Main weakness as well is the role margin is not clear so the manager has to choose according to his experience.

#### DHL as customer of IT:

- The prices are in many cases higher than the market while IT Services are internal company.

## Opportunities

#### IT Services:

- Setup automatic ordering system for most requested services/group of services.
- Setup friendly reporting system of what has been charged, what still left in budget and variance.
- Move from product (effort) oriented pricing to service oriented pricing (consumption based). Improve the pricing for run and pay a fix payment method from above.
- There is the space for improvement in the “Business for service” pricing models. According to this method, customers pay for the total of service but it would be better if the method could be changed and pay per volume and give benefits.

- The difference in the price of some roles, which is a weakness, can be an opportunity for improvement. Those prices are set under the pricing principles that include market research. In cases that The IT Services are more expensive than the competitors are after the results of the market analysis they can turn that in an advantage and reduce the prices.

#### DHL as customer of IT:

- According to the customer, the prices of the centralized Help Desk service might be higher than the market price in a particular country for a local Help Desk (e.g. in China or North America).
- By bundling the Help Desk service with other services or by providing E2E( End2End) service, the total price is lower and the customer can have IT Services as a single supplier responsible for the total E2E service instead of sharing the project with other providers as well.

### **Threats**

#### IT Services:

- Limited number of the customers IT Services can sell to as internal providers.
- Price will get higher then competition (EU region).
- ITS will be finally beaten by Far East suppliers as they have prices approx. 60% cheaper.
- IT Services can have only one customer because the company is an internal providers. However, the company has competitors in the market that need to compete. Since the aim is not the profit for investments and specialization but it is a customer cost/ budget driven, therefore it is challenging to improve and be more creative to compete at the same level.
- In addition, if one of the main customers decides to stop the cooperation with IT Services, there is a big effect to the cost for the rest of the customers. As IT cannot compensate that loss with new, external customers, the prices will increase to cover the costs and then the rest of the customers will pay the extra costs.
- IT Services is very much depended on DHL performance. Any negative balance of DHL can directly affect IT Services as customers might reduce their business.



DHL as customer of IT:

- The customers are concerned about ITS RUN prices, whether those are competitive, especially as all the new RUN business should go straight to ITS.
- There is the main suspicion toward IT organizations in general because of the belief that the latter are not transparent in providing information particularly in relation to costs for technical systems.

### 3.6 Interview

After the collection of the data from the SWOT analysis, the research is completed with an interview with the head of the Professional Services regarding the pricing of the company. From IT Services point of view, pricing helps the company to be perceived as a good IT provider. IT Services reflect the quality but also the value of the services. There are still a number of subsidized services to be reduced but the prices are, in general, competitive according to the market. Although it has been suggested to be used different pricing approaches to different service areas (like infrastructure, support, collaboration services etc.), it is important to have a consistent approach of the prices in order to achieve transparency. From the customers' side, the pricing methods that IT Services is using are in benefit of the customer, as ITS only requires cost recovery. Even though the price changes could lead to higher margins, there is not the flexibility to change the pricing strategy accordingly. Despite the intention and the technical capability, there is still not the flexibility for R&D or specialization so IT to become more competitive.

Another topic discussed is the cost pressures that both customer/business and provider (IT Services) are facing. Due to cost limitations, the IT operations group develops architectural and process standards to reduce costs and improve efficiency. When the IT organization tries to encourage businesses to comply with its standards, businesses push back if they feel that standards do not result in the optimal solution. The key to controlling costs is ensuring that business units and the enterprise are aware of the issues and accept the higher costs, or change their behavior to better control costs. It is important that both organizations show willingness to improve the situation and find a common solution. ITS customers should consider the cost if they require higher service levels or nonstandard services. Consider establishing "standard" and "expedited" fees for service

requests to encourage planning, and get customers thinking about whether their needs are urgent. If the business perceives IT services as free of charge, then everyone will demand the fastest response and the best service quality. However, it is admitted that pricing issues and the perception of them are among the leading causes of relationship problems between business and IT, and between IT and external service providers.

Discussing the customers' expectations, they may wish to have year-over-year unit cost reduction in service pricing. This issue is even more visible in the DP DHL IT Services as the customer has a bigger visibility to the prices and the costs since IT is an internal provider. It is harder to conceal IT cost increases in the environment of service pricing. One of the main solutions is to create a long-term budget in order to smooth out the spikes in IT investment between the years so the organization can absorb the cost in the long term.

Regarding the psychology of the customers, when IT Services treat users like customers, the result is that they will treat IT as a supplier. If customers are under pressure to reduce their costs, then they will underestimate their expected use. IT organizations should be aware that the IT/customer relationship is typically transformed with the introduction of service pricing. For example, if a business unit is under pressure to reduce its operating costs, then it may underestimate its demand for a particular IT service. In this environment, the business unit's cost pressures can become the organization's cost pressures.

## Conclusions

The objective of the present thesis was to examine the psychology of consumers, under the new economic conditions, and to present new psychological pricing methods that the marketers can use based on that information. Therefore, the goals of the thesis were firstly, to introduce the new economic trends and circumstances related to the psychology of consumers and then to understand the influence that those parameters had on the pricing methods. Secondly, the aim was to understand the factors that are important for the businesses in order to set the most appropriate price and to answer the question if the use of different psychological pricing methods during the pricing process can be helpful to reach the best price. The final goal was to study the pricing strategies of a company in order to see how the prices are set and if the psychological factors are taken into consideration during the process. In the end, the aim was to confirm or decline that there is a relationship between psychology and pricing and to answer the question if taking into consideration the psychological factors in the pricing process can benefit a company and increase its profits.

The initial goal was reached in chapter one and it was related to the new economic trends and ideas, which have changed the traditional approach of economics. The new trend presented in the thesis, were the Behavioral Economics. Behavioral Economics do not cancel the principles of the traditional methods of economics but in contrast, based on them they enrich those principles by accumulating other sciences in order to reflect the new economic conditions. As the market is significantly changing due to the current financial situation, the science of economics needs to include those changes in order to become more realistic and connect with them. In order to achieve that, it is necessary to take into consideration the effect of the psychology that those changes have; that is the goal of Behavioral Economics. In this new economic approach are taken into consideration factors related with the psychology of the consumers, the mistakes and the rationality or irrationality related with their decision making process. Traditional economics consider that the consumer is a rational buyer that is aiming at maximizing his utility with every purchasing decision and bases that decision on solid information he has available regarding the product and its price. Behavioral Economics come to question that approach and introduce the idea of irrationality and mistakes. The scientific proof to the assumption that consumers make mistakes is the financial market and the differences in the prices between markets that allow arbitrage. Therefore, consumers

are not perfect, they make mistakes, so they do not only act rational but they are also affected by their emotions and psychology that make them reduce their will to maximize their utility and drive them to economically wrong decisions. One important finding was that people act irrationally but that irrationality is more predictable than they think. According to Behavioral Economics, people make mistakes but those have a repetitive nature and they can easily be detected, affected and directed by the marketers who study that behavior.

Additional psychological theories related as well with Behavioral Economics are focused on the perception of the consumers, on the placebo effect and the understanding of positioning. Those three dimensions were not used in a great rate until now in the economic theories but their effects prove that their connection with the economics is very strong. Consumers' perception about a product and the way they perceive a message has tremendous effect on their decision making process. The placebo effect, which is mainly a medical term, works on the pricing of a product as well. Consumers feel that they are getting more value from a product when they pay for that at a specific price. Also, the way they position a product comparing it with the competition and the perception in terms of value for price, is affecting their purchasing decision.

Therefore, the new trend of Behavioral Economics and the psychological parameters show the influence that those factors can have on the pricing process. Companies need to take into consideration the psychological parameters when setting the correct price for their products. Companies cannot base anymore their pricing decision on their belief that consumers will buy the product that offers the best price or quality in order to maximize their utility. They need to take into consideration the environment, the high competition, the exposure that the consumers have on products and marketing messages, which is highest than ever, and, in the end, how consumers perceive the price of the product and where they position it.

After studying the new economic concepts, marketers can use the information as an input to set the optimal prices. Despite those psychological information related with the consumers, companies are influenced by other factors as well during the pricing process. In the chapter 2, were mentioned the factors that are important for the businesses in order to set the most appropriate price. Those factors are external and internal. The need for the companies to consider those factors is crucial because they can help them to frame themselves in the market, to give them a clear idea of their constraints and provide information for potential improvement. Companies are mostly using traditional pricing methods based on numerical estimations and cost recovery. Those methods though do not include aspects related with the new economic conditions and the psychology of the

consumers. Therefore, in the chapter were given in more details a few new pricing methods with a different approach without again cancelling the principles of the existing ones, but extending and enriching them with psychological factors.

Starting with price based on segmentation, companies can direct the customers towards the product by having a clear understanding of the customers needs and make the environment more realistic for them to reach the product. The positioning method is based on the disability of people to understand in advance, what a product will exactly offer to them in terms of value. The positioning can efficiently be used during the price setting in order to add features to the product without using price changes as a tool but alternative ways in order to make the product look more attractive. Companies can increase the value of their product and understand the price the customers are willing to pay by positioning the product next to right competition. The tool that supports the model is the benefit matrix. The benefit matrix is aiming to explain the reasons that someone would buy a product from a specific company. The company can use the critical value dimensions which are the benefits or values that the company classifies as the most important for the price setting. Based on those, the company can build the whole pricing strategy. With pricing according to competition, companies can use competition in their advantage for price setting as long as it is offering something additional to the customer. The company needs to find a benefit area that they can be stronger than the competition. Next strategy, the psychological pricing method is using the pricing endings on the consumers' purchasing decision. People tend to read the number from the left to the right and pay less attention to the last digits. Even the size, the color and the odd numbers of the prices affect the decision. Anchoring is the pricing method based on first impression and on the human tendency to rely on too heavily on one piece of information while making a decision and then adjust to that value to account other elements of the circumstance. An anchor is a product that works as a price point that gives you an idea of how much something should cost. Companies can follow a specific process that guides them how to apply the anchors. Decoys have many forms and can work in every situation or product. The price level decoys and asymmetric dominance decoys are two methods that the companies can use to influence their customers. Finally, the hyperbolic discounting is the method based on psychological distance in the pricing. Anything that allows customer to pay in the future instead of the present increases the chances that they will buy now.

All these pricing methods available have potential to be applicable to the pricing processes of the companies and they answer the question raised in the goals about the existence of the new methods that can be successful and bring profits to the company.

The final goal was concerning the pricing methods that DPDHL IT Services is using and if the company is using some of the psychological methods already described or if they take into consideration the psychology of the customers. The company is following a specific pricing method that is consisted of a specific process initiated by the customers' needs. According to the market research in the countries where IT Services are based, the prices of the company are very competitive close to the average price of the market.

The results of the SWOT analysis and the interview were very enlightening as well. From the customers' perspective, the prices of IT Services are higher than the market in specific cases. This is also their main concern as IT Services is only aiming at cost recovery and not profit. According to the market research, though the prices are not the highest in the market but in many cases are lower than average. Therefore, the question risen was why the customers feel that the prices IT Services is providing services with higher prices than external providers are. In order to answer to the above question, are taken into consideration the main pricing methods that the company uses. The main methods of pricing are not based on psychological strategies that are focusing more on psychological impact, but are based on cost recovery. Therefore, the customers are not presented properly with the benefits and the value they receive from the services. The pricing methods do not show focus on how to make the pricing more attractive to the customers and as a result customers have a wrong perception. In addition, the fact that IT is offering services makes it even more difficult to understand the value, as services are not tangible. That is another reason why the company needs to take into consideration psychological pricing in order to affect positioning and to make the services to seem more tangible.

IT Services employees responded that the prices of the company are in a very good level according to the services and the quality provided. The main issues for them were the limitations they have because of the internal nature of the company. It would be interesting to them to have flexibility and offer different options to the customer in order to make them realize the value of the service and this is possible with using alternative pricing methods. However, it is difficult to apply alternative methods, as the systems/tools do not offer those options. For example, SPOT, the main system used to record the pricing of the services where the users enter the values and pricing for each project, allows only discounting but no other pricing method as options related to offers. However, the costs and effort to make the changes in such a large company are very high and in some cases, the company's infrastructure might not be able to support those methods technically or financially.

Therefore, when developing a strategy, organizations must analyze their requirements and must select the pricing model that best meets their needs, which may mean using two or more models at the same time and in this case, the psychology can be taken into consideration. However, no single method completely meets all business unit requirements in terms of simplicity, fairness, predictability and controllability, or eliminates complaints from users. Since the company has a worldwide activity and it is admitted that psychology is a very important factor and there is certainly a direct connection between pricing and psychology. The key to moving to more advanced charging methods is by combining people, process, platforms, applications and data to create services the way that the customers view the world.

In conclusion, the thesis showed that the psychology of pricing is a correlation of psychological factors of the consumers with the pricing process. The new theoretical approach in combination with the practical example of the company showed that pricing is a multidimensional topic and companies cannot only be based on basic economic principles in order to set the best price for their product. The conditions of the daily life are very different that they were a decade ago so companies need to adjust their processes in order to be more realistic and satisfy the needs of the contemporary consumer. The need for those adjustments increases the necessity for further research to the ways that pricing can include psychology.

It is therefore important that companies, despite the nature of their product and scientists despite their field, cooperate in order to build more suitable pricing methods in order to reflect the current economic situation, to understand better the psychology and needs of the consumers and to create fair pricing models for future use.

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