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THE CONCEPT OF ANCHORING AND PSYCHOLOGICAL PRICING IN THE CUSTOMER'S DECISION MAKING PROCESS

Abstract

This paper is about the anchoring concept and its implementation in creating the psychological prices which could determine the consumer decision making process. As a concept, the **anchoring** is a process that describes the use of irrelevant information as a reference for evaluating or estimating some unknown value or information or the tendency to rely too heavily on the first piece of information offered (the "anchor") when making decisions.¹ Anchoring or guiding the consumers through the decision making process can be achieved through different marketing practices. One of them is psychological pricing method and its effects that it has on the consumer's decision making process.

Psychological pricing attempts to influence a customer perception to make the product's price more attractive. There are several methods of psychological pricing in marketing practice i.e. reference pricing, bundle pricing, multiple-unit pricing, everyday low prices, odd-even pricing, customary pricing and prestige pricing.² Psychological pricing is a marketing practice that is considered to have a psychological influence on the decision making process of the consumer.³ The main goal of the paper is to determine the bond among the anchoring effect,

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¹ Thomas Gilovich, Dale Griffin and Daniel Kahneman "Heuristics and Biases: The Psychology of Intuitive Judgment", Cambridge University Press, 2002, pg. 121

² William M. Pride, O. C. Ferrell, "Marketing", Cengage Learning, 2011, pg. 641

³ William M. Pride, O. C. Ferrell, "Foundations of Marketing", Cengage Learning, 2010, pg. 302

achieved through the use of psychological pricing method in the consumer decision making mostly related on monthly incomes. In order to meet the goals, applied research shows the possible link between the anchoring, psychological pricing and the effect on the decision process of consumers segmented by their monthly income.

Key words: anchoring, psychological prices, decision making process, marketing practice, consumers

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1. The concept of anchoring

Today's world is a place with a lot of different information's. In order to make decisions, we are surrounded by a variety of information. Some of them are directly connected to the decision making process, other are remotely connected. Some information speed up the process of decision making, some make it more durable and hard to pin point the accurate decision. Information can also be misleading in the decision making process. If they are not accurate they can differ the process from its original flow, thus guiding it towards other decisions. The process of guiding the decision making process is the most relevant comparison to anchoring.

The term anchoring was basically used by Tversky and Kahneman in their published article "Judgment under Uncertainty: Heuristic and Biases" written in 1982.⁴ This article consists mainly of the first made experiment towards anchoring. Tversky and Kahneman used a wheel of fortune marked with numbers from 1 to 100⁵. The main participants in the experiments were college students. Tversky and Kahneman spinet the wheel making it stop at the random number or so the students thought. The wheel was actually rigged in order to simplify the experiment. The wheel was designed to produce only two numbers, 10 or 65.

The results that were gathered in the process were astonishing. The random chosen number (which was rigged) affected the answer of

⁴ Daniel Kahneman, Paul Slovic and Amos Tversky, "Judgment under Uncertainty: Heuristic and Biases", Cambridge University, 1982, pg. 333

⁵ William Poundstone, "Priceless", Hill and Wang, New York, 2010, pg. 12

the question “Is the percentage of African nations in the United Nations higher or lower than [10 or 65]?” depending on the number that came up on the wheel. The second question which followed showed the real impact of the experiment, i.e. the question stated “What is the percentage of African nations in the United Nations?” Whenever the wheel stopped on 10, the average estimate of the answer was 25%. But when the number 65 showed up on the wheel, the average guess was 45%.⁶ The only difference between the answers of the question was the different random number that turned up on the wheel of fortune, which the participants in the experiments knew to be meaningless.

Driven by the results from the experiment Tversky and Kahnemani theorized that an initial value (the “anchor”), guides the individual towards making a decision. The answer of the participants in the experiment was closer to the anchor than it should have been. The anchor stands as attraction that pulled the answers of the experiments participants closer to the number that turned up on the fortune wheel.⁷

Since the first experiment, psychologist and behavioral economist replicated the attempt of proving the influence of the anchor in decision making process. Psychologist George Quattrone tried a similar experiment concerning these two questions:⁸

- Is the average temperature in San Francisco higher or lower than 558 degrees Fahrenheit? And what is the average temperature of San Francisco?
- How many top-ten records did the Beatles release-more than 100.025 or less than 100.025? Now give your estimate of the number of top-ten Beatles records.

The answers proved that the situation of anchor presence was real. The participants in the experiment were guided towards the answers that were close to the anchor suggested by the person conducting the experiment. This pioneer research in the field of the method of anchoring, opened new possibilities for researchers in field of psychology, marketing and behavioral economy. Many leading theorists, including Tversky, Kahneman, Richard Thaler, Dan Ariely as well as other scientist and professional marketing consultants published their research about the phenomena of anchoring.

⁶ Ibidem

⁷ Ibid, pg. 13

⁸ Ibidem

Today, the process of leading the individuals in the decision making process is present in every aspect of marketing. Many examples of its implementation can be analyzed in the consumer's behavior as well as in the decision making process from the aspect of marketing. Some of the practical examples of anchoring used in the decision making process are presented in the following text.

2. Practical implementation of anchoring

Consumers in the modern world are influenced by various forms of anchoring, especially in their decision making process of choosing the goods and services. Guiding can be in the form of making a decision by leading them to some specific product, segmenting the market and targeting various market segments. Anchoring can be made through prices, promotion of the goods, placement of the goods and also the product itself.

Psychological prices can also be described as a type of anchoring. Psychological pricing is defined as pricing that attempts to influence a customer's perception of price to make a product's price seem lower.⁹ When the prices are set with a 9 at the end¹⁰ they tend to lead the customer to an easier decision for buying. This anchoring method creates an illusion that the product or the service is cheaper. If we put 99 Euros for a price of the product X instead of 100 Euros, the price will be down for only 1 euro that is the same as you gave a 1 % discount. But the real truth is that this seems as a lot more discount from the original price, because of the count of numbers. If we have 2 numbered prices instead of 3 it automatically seems as a lot cheaper bargain even if it is cheaper for just 1%. This kind of anchoring method has psychological influence on costumers, thus making their decision seem much easier, and at the same time attracting more costumers to the shops.

From the marketing aspect, anchoring can be defined as a concept used in the marketing mix. Some of the examples that concern the phenomena of anchoring and its practical usage are presented bellow.

⁹ William M. Pride, O. C. Ferrell, "*Marketing*", Cengage Learning, 2011, pg.641

¹⁰ For example 99, 199, 1999 etc.

a. *Expensive tickets and products tend to represent quality*

Buying tickets for concerts, sport games, exhibitions, museums and other cultural manifestations is a common marketing behavior. Prices for the tickets usually depend on the popularity of the event and the simple economic law of demand and supply. Sometimes the event targets specific consumer group and this type of targeting are often determinate by the price. For example if a soccer match is played between two highly rated soccer teams the prices of the tickets will be set high. The real market price usually does not represent the verified demand or supply for the soccer game. This price is set to anchor the people into buying the tickets for the game, because of the popularity of the match. Consumers which are not acquainted with the popularity of the match as well as the teams would also have to buy the tickets for higher prices than they are willing to pay for such an event. The anchor gives the consumers notion of the popularity of the event and allows the organizers to set the prices high according to the popularity of the event.

Sometimes prices are also set higher and targets specific consumers group, no matter the popularity of the event. Expensive goods that are exhibited in the shop fronts specify the type of shop it represents, immediately anchoring the selected consumers. Placing very expensive goods on the shop windows, or promoting expensive goods could mean that more specific groups of consumers with higher income are targeted. Thus an anchor is provided for the targeted group, that at the same time helps to distinct the goods and lead the targeted group in their decision making process. The high priced products often tend to represent quality; this could be an anchor as well. So the consumers who would like to buy products with better quality or go to a popular and quality event often have to pay higher price because they are simply led to it by the phenomena of anchoring.

b. *Shop windows as an anchoring method*

The expensive goods that are exhibited in the shop fronts usually are not bought by the consumers. They are just anchoring them towards the other products which are also high priced. The intent with this kind of products is to give clue to consumers on the specific goods that are being sold there. That is to anchor the targeted group of consumers, not everyone. The expensive looking shop windows lure the customers in but just the specific type of customers. The targeted group with higher income will be anchored through the expensive shop windows, and also

the people with lower income are somewhat repelled by the shop window itself. This gives the shop owners of the shop a better chance of selling their products.

On the other side there are shops that need to attract and anchor as much customers as possible. Mass anchoring is often achieved by promoting cheap and quality goods. The most common type of mass anchoring is offering a rebates, discount and psychological prices. Rebates and discounts tend to lower the prices on the goods and services or to allow customers to buy more products for the same amount of money.

c. Choosing the right product

The influence of the product number in making a buying decision can also be considered as anchoring phenomena. Joel Hubert and Christopher Pluto at Duke University's school of business have researched this type of anchoring through an experiment made on undergraduate students.¹¹ The experiment showed that when faced for a decision of buying a product, the consumers with average level of income for products with similar characteristics will most likely choose the cheaper one. This stands for products with normal elasticity, not including luxury or indifferent goods and services.

The anchoring element can be seen when we add another product to the decision making process. So when potential buyers will be faced with the decision of three similar products with three different price values, they will most likely choose the one with the price in between the lowest and the highest. When faced with this kind of choice the quality of the product comes as second in terms of decision making. The first anchor is the price range. Choosing the middle priced product between the three possibilities makes people feel "safe" and gives them a feeling as though they had made a "compromise".¹² The retail and whole sellers usually anchor the potential buyers by giving them more choices and at the same time by using the price range as bait. The costumers react accordingly, most likely choosing the goods with middle pricing range. Thus the sellers use their chance by putting a much bigger trade margin

¹¹ Hubert Joel and Christopher Pluto, "*Market Boundaries and Product Choice: Illustrating Attraction and Substitution effects*", *Journal of Behavioral Decision Making*, 1983 pg. 38 and 39

¹² *Ibidem*

on these products and making a solid profit by using the anchoring method.

d. *Tom Sawyers method*

Tom Sawyers method was firstly explained in a paper by Dan Airly, George Loewenstain and Drazen Prelec.¹³ The paper alludes to the classic story of Mark Twain's popular character Tom Sawyer and a story where the Tom is set to do an irksome chore of whitewashing a fence. In the story, Tom would rather prefer of doing something else but he is stuck with the chore and has to do it. In order to escape the obligation given to him he is pretending to have so much fun in order to anchor his friends into doing the chore. The master plan of Tom succeeds thus creating another possibility in the decision making process. Tom managed to anchor his friends into doing something that they believed was interesting, and Tom could gain free time for playing. This type of anchoring is the base of today's multimillion dollar worth business like Facebook.¹⁴ Facebook is founded on the premise that the free users worldwide will do all the work (posting pictures, journalism, political commentary etc.) for free, and meanwhile some "Tom" is enjoying his free time making a lot of money.

On practical point of view the Tom Sawyers method of anchoring is mostly used in marketing practice. The real estate agents use the method of anchoring in order to make the decision easier for the buyers. They tend to show the estate in broad daylight instead of night time so that the estate seems more beautiful. Also stories of previous owners could enhance the quality of the neighborhood, all in order to make the sale.¹⁵ They are presenting the estate in the most perfect form in order to ease the decision making process for the buyer, just as Tom Sawyer did to his friends.

e. *Anchoring services*

Anchoring services can come in many types or kinds. Supermarkets place their complementary products on separate parts of the market so that customers can view and maybe buy some other

¹³ Dan Airly, Geroge Loewnstain and Drazen Prelec, "Tom Sawyer and the Construction of value", Boston Working paper 2006, No. 05-10

¹⁴ William Poundstone, "Priceless", Hill and Wang, New York, 2010, pg. 195

¹⁵ Alen Marcus and William H. Dare, "The Effects of Charm Listing Prices on House Transaction Prices", *Real Estate Economics* 32, 2004, pg 695-713.

products in the process, and the first three registers that are closest to the entrance usually don't work. That is because the customers will have to cover more territory in order to get to the register, and in that process a simple decision of buying another product can be made.

Not just supermarkets but also every service or shop can give additional services in order to influence the decision making process of buying for the customers. The stores often offer variety of coupons and take one get one free campaigns. This anchors the customers to buy often unwanted products in order to get one free or to get a free coupon which can be used for further services or discounts. This type of anchoring may also be seen in telemarketing where you order product and get the other product for free. These types of products don't necessary have to be complementary, their sole purpose is just to anchor the decision of the customer towards buying.

There are also other types of anchoring services, servicing and granting a guarantee can be considered as one of them. When the buyer offers a guarantee or a service they usually like to make the decision of the buyer more risk free. If the product malfunctions in any order or the buyer doesn't get what he hoped for then he has the right to return or get the product serviced.

3. The link between the psychological prices, anchoring and consumer's monthly income

The research conducted in order to determine the link between psychological prices and the anchoring on the consumer segment based on the monthly income of the consumers, was carried out on a sample of 60 persons divided by 30 persons into two groups. Each of the groups was not aware that a research had been conducted. These 2 groups were chosen as a sample according to a previously conducted survey about the amount of their monthly incomes, into three groups: persons with low incomes, persons with high incomes and persons with normal incomes. Each of the two groups had the same number of persons with identical monthly income grope, i.e. 10 persons with low incomes, 10 persons with normal incomes and 10 persons with high incomes.

The research was about the decision making process for buying one same T- shirt. The first group (group A) knew that the price for the T-shirt was 199MKD, and the second group (group B) was told that the

price of the T-shirt was 200MKD. Both groups were asked the same question: how many of them would buy the T-shirt? The answers of this question are presented in the Table 1.

Table 1 Results of the first question – Will you buy the T-shirt at the given price?-

	Group A Low income	Group B Low income	Group A Normal income	Group B Normal income	Group A High income	Group B High income
Yes	7	2	6	4	8	9
No	3	8	4	6	2	1

Source: Gathered data from the conducted experiment

The gathered data presented in the table shows the linkage between the psychological pricing methods and contribute on anchoring into buying the T-shirt. In group A, 21 person or 70% of the participants in the survey, said that they would buy the T-shirt at the price of 199MKD. On the other side, 15 persons or 50% declared to buy the T-shirt in group B at a price of 200MKD. But there is an exception in the results of the question. Most of the participants in the survey with high incomes, would like to buy T-shirts of 200MKD, which could be estimated that the persons with higher incomes are less influenced by the phenomena of anchoring through the method of psychological prices.

Following the first question, the inquired persons were asked about – How much do you think this T-shirt is really worth? The persons were asked to name the real price for the T-shirt. The results of the second question are presented in the table 2 below.

Table 2 Results of the second question – How much do you think this T-shirt is really worth?-

	<99MKD	100- 200MKD	201- 300MKD	301MKD>
Group A	11	15	3	1
Group B	3	4	16	7

Source: Gathered data from the conducted experiment

From the presented data, it is clear that psychological prices have anchored the potential consumers into thinking that the T-shirt's real value is less than 200MKD. Almost 90% of the inquired persons from the group A (where the price for T-shirt was hypothetically 199MKD) were anchored by the psychological prices into answering that the real value of the T-shirt is equal or less than the given one. The impact of the psychological prices as an anchoring method, led to believe that the price of the T-shirt is lower than presumed. The answers of the group B, with a hypothetical price of 1MKD higher than the group A, have been totally opposite. Persons in group B presumed that the original price of the T-shirt was higher than 200MKD which was the price given to this group. Near 77% answered that the original price of the T-shirt was higher than 200MKD.

The analyzed data confirmed the anchoring effect of the psychological prices. Regarding the results of the research, it can be presumed that the psychological prices had an anchoring effect on potential consumers. More so it made them believe that the price of the T-shirt was cheaper than it seemed. Despite the price being just 1MKD lower in group A than group B, affected the decision making process and anchored the opinion that the price was much cheaper.

Of course, we have to bear in mind that these factors are not isolated in their influence in the decision making process. There are also other factors such as personal tastes and preferences, culture and other non pricing factors which could also have an impact on the consumer decision making process.

Conclusion

Anchoring can simply be described as a process which influences the decision making. It is a process where the consumer relies on irrelevant information or tendency on relying on first piece of information which significantly influences the consumer's decision making process. Anchoring can be achieved through various forms in marketing practices: from pricing strategies and exhibitions of the products in offering additional services and benefits for purchasing the product. Psychological pricing as a pricing strategy could be connected with the anchoring concept. Through psychological prices, consumers can easily be guided into making the decision of purchasing products or

services. This paper elaborates and analyses the possible link between psychological pricing as a form of anchoring and monthly income of the consumers. In analyzing the theoretical concepts and the empirical results of the research, the conclusion is that the consumers with higher monthly income are not influenced in their reaction by the psychological pricing in the decision making process. On the other hand, consumers with lower monthly incomes react more on psychological prices for the same types of products. Also, psychological pricing can lead the consumers to consider the product cheaper than the given price. At the same time, other consumers that were not subjected to psychological pricing method were not anchored into believing that the product is cheaper than the original offered price, thus gave the product higher price. Thus, there are a lot of no pricing factors i.e. other factors not related to prices, which could also determine and influence the consumer decision making process.

Despite of the estimated relation between the anchoring and the psychological pricing method especially on the consumers with a different income levels, these are not only or separated factors which could influence the consumer decision making process. There are a lot different factors which could also have an impact in the decision making process.

Regarding that, the paper gives some indications on the possible links and factors which could determine the effects that psychological pricing and the anchoring concept have on the consumers decision making process (positive or negative) in the consumer decision making process. From marketing aspect, this concept could be also a solid base for further researches, project and analyses in the future.

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