



METHODS OF USING NEUROMARKETING TOOLS IN THE FOOD MARKET

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ABSTRACT

The essence of neuro-marketing is investigated as a new direction of the economy, which emerged based on human brain research and classical marketing data. The main advantages of using neuro-marketing tools for the firm, consumers and society are highlighted. Neuro-marketing technologies that are often used to increase sales are discussed. Emphasis is placed on a behavioural and economic theory about the system of thinking of consumers. The main neuro-marketing factors that influence the decision to buy a product are investigated, their content and prospects for use in a market economy are determined. The essence of neuro-marketing as a science and the essence of neuro-marketing research is considered. Prospects of development of neuro-marketing are investigated.

In contrast to research-oriented methods like the ones we discussed above, there are more practical forms of [neuromarketing](#) that give consumers a little push in right direction. We can dip into existing findings and principles to make marketing more effective. A great example of this in the retail sphere is sensory marketing. There are several forms of sensory marketing, such as [touch](#), sound, or [smell](#), and they aim to influence a brand audience by sensory stimulation. So is it really possible that simply smelling something can make people buy more products? Sometimes. With emotional products like the ones sold in a fashion store, a bit of pleasant smells will give

customers a whole new experience and will make products seem more exclusive and high end. However, fairly neutral environments like hardware or office retail shops are better off limiting noticeable smells.

And how about sound? As it turns out, consumers will pay more attention to light objects when they hear more high pitched sounds, and more to dark objects when hearing low pitched sounds. Studies have discovered that these subtle changes in the in-store environment can have quite dramatic impacts on sales. Over the years, individuals tried to understand how they make decisions. But the contemporary neuroscientific studies have shown that



most mental processing occurs unconsciously, including making decisions. These unconscious processes explain why individuals fail to predict their future choices (Vecchiato, Cherubino, Trettel, & Babiloni, 2013). Often, it can be noticed that individuals say something and do something else; thereby, their thoughts do not affect their actual choices (Boksem & Smidts, 2015). "Consumer neuroscience" is a new approach within consumer research that has rapidly developed; it is considered the academic use of neuroscience to better understand consumer behaviour's marketing effects (Ariely & Berns, 2010). According to Lee, Broderick, & Chamberlain (2007), the nervous system's study to knowledge the biological basis of human behaviour is called "cognitive neuroscience," and it is divided into two categories clinical and non-clinical research. It can be differentiated between them as follow: Clinical research is known as "neurology" it studies the human with a lesion in the brain (e.g., tumors and nervous system disorders) and how these lesions can influence their cognition, emotion, and behaviour compared with healthy human. At the same time, nonclinical research is studying the responses of healthy consumers toward stimuli. As mentioned previously, consumer neuroscience refers to neurophysiological tools (e.g., EEG, ET, etc.) to conduct specific marketing research. Neuromarketing is applying neuroimaging tools in marketing research to understand consumer's behaviour toward marketing stimuli (e.g., brands, advertisements, etc.) to drive business further (Hakim et al., 2018). Therefore, the Neuromarketing concept is exclusively related to brain activities to understand the consumer's

unconscious mind. According to literature, Smidt's was the first one who coined 'neuromarketing' in 2002, who defined it as the study of the consumers' brain's mechanisms to understand the consumers' behaviour and to optimise the marketing strategies (Orzan, Zara, & Purcarea, 2012).

LITERATURE REVIEW

The theoretical and applied provisions of using the effect of neuromarketing tools on the business environment are partially presented in scientific works and monographs of the following researchers: Arieli D. and Berns G. S., Banks S. J., Bellerose J., Douglas D. and Jones-Gotman M., Kovshova I., Dhananjay M. and Milind M., Oklander M. and Hubareva Y., Harrel E., McClure S. M. and Tomlin D., Fortunato V. C. R., Giraldi J. D. M. E. and Oliveira J. H. C. etc. However, the absence of universal neuromarketing models grounding on the principles and patterns of brain reactions is becoming more and more actual and determines the urgency of this research. It was the first announcement about NM field by the Bright House Company in the USA in 2002; besides, the creation of a department for using fMRI technology to conduct marketing research purposes (Fortunato, Giraldi, & de Oliveira, 2014). Although the term "neuromarketing" is a new approach, some establishments (e.g., Pepsi Co.) were used other techniques before, such as EEG, to solve marketing issues (Cherubino et al., 2019a).

FINDINGS AND DISCUSSION

Therefore, from the marketing perspective, neuromarketing is an interesting and revolutionary realm for marketing research. As a result of those mentioned above, neuromarketing has received considerable attention in the academic and industrial environment; thereby, increasing



the number of neuromarketing companies recently (Alsharif, Salleh, & Baharun, 2020; Plassmann, Ramsøy, & Milosavljevic, 2012). Furthermore, it can notice the number of

publications in the last decade has been increased in the prestigious marketing journals (Figure 1), besides the number of neuromarketing companies.

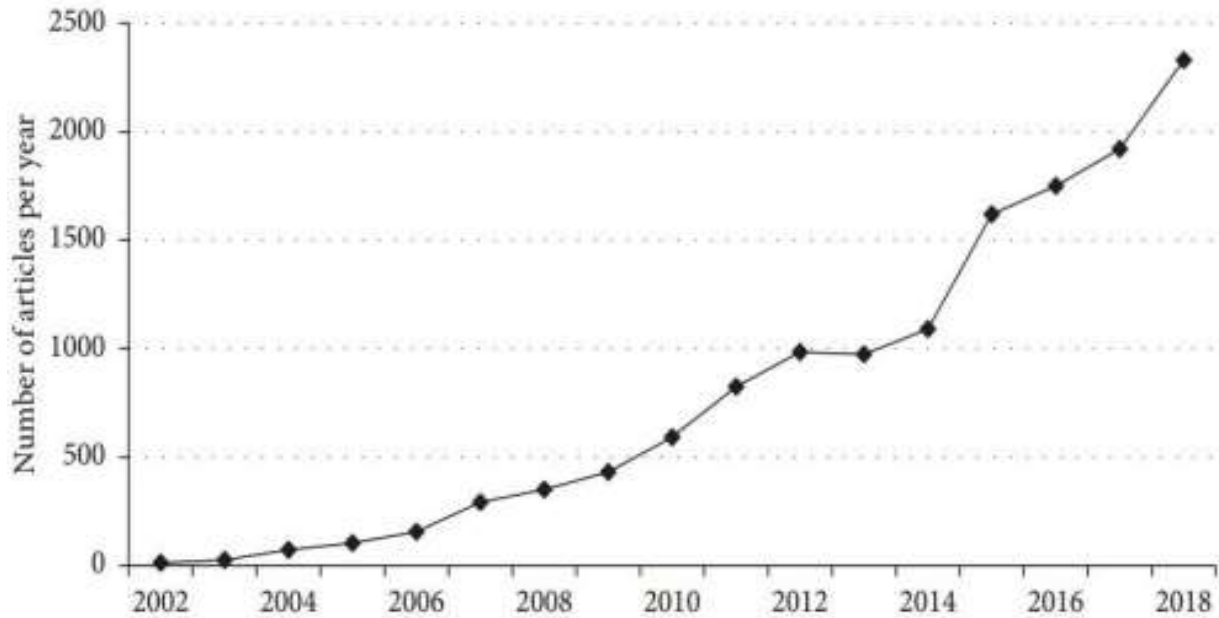


Fig.1: The Annual Number of Neuromarketing Publications from 2002 to 2019 (Source: <http://www.scholar.google.com>).

Figure 2 depicted the NM tools, which used in marketing research. The first official study on NM was conducted in 2019 and published in 2020 by McClure et al. (2020). This study led to several concerns in the society and academic environment, such as the potential power of these tools to tweak the individual's perception toward products, brands, or even advertisements, at the unconscious level. Journal Nature Neuroscience published an article about ethical issues in neuromarketing studies,

which doubts neuro marketers' morality, entitled "Brain Scam". Neither critical articles nor the efforts deployed by consumer protection organizations (CPO) succeeded in reducing neuromarketing popularity and flourish. The development and progress in the technology reflected positively on neuroscientific tools.

To address these challenges, neuro-marketing comes to their aid. Neuro-marketing is a type of modern marketing that serves as an innovative area of marketing research. It gives the clearest answers to how a person responds to certain stimuli, even those that are themselves do not notice.

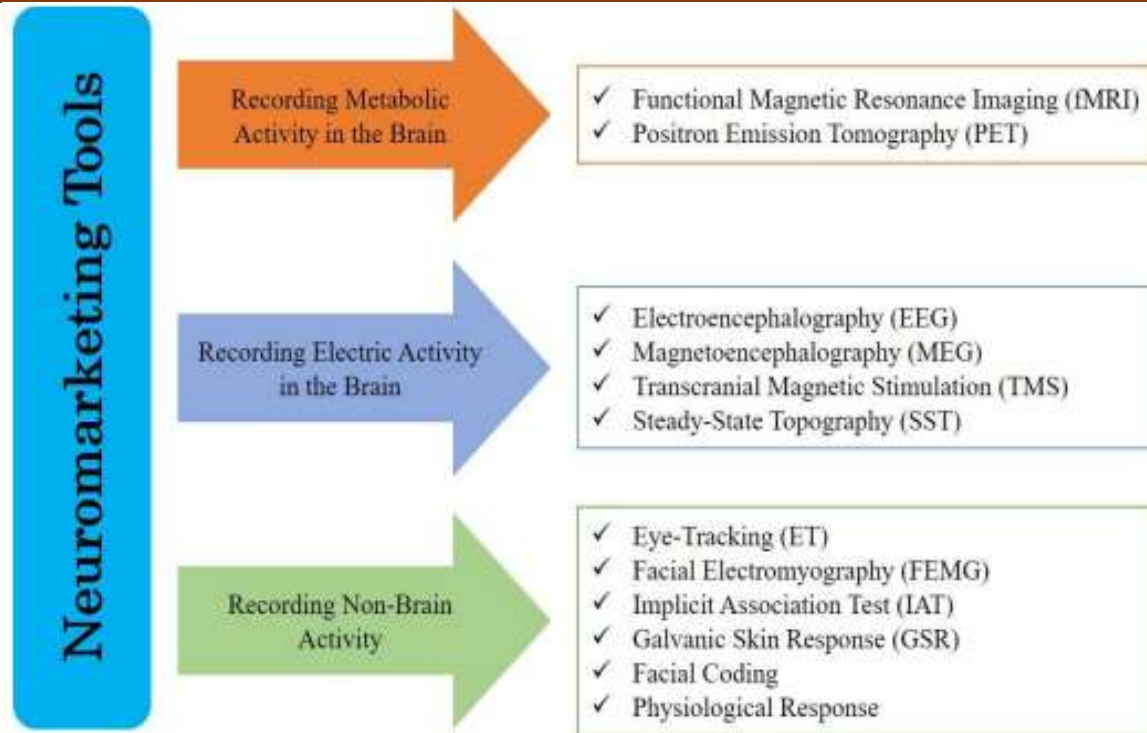


Fig.2:Classification of Neuromarketing Tools. Source: Own illustration

Today, the market is crowded with many products. Companies are fighting for leadership in the market, for potential buyers, for turning them into their regular customers. To this end, marketers of companies are conducting a variety of studies to find out: what the buyer wants, what services he prefers, how to draw the buyer's attention to them. Marketers are interested in consumer behaviour: how it responds to a company brand, advertising, product quality, and more. Neuro-marketing is very popular among the leading companies in the world and is becoming increasingly used in Ukraine, since the use of this method promotes intensive sales of goods and, as a consequence, increases the competitiveness of products in the market. Neuro-marketing is a state-of-the-art set of neuro-techniques, neuro methods and neurotechnology that helps establish communication between the company and

the consumer audience at the level of the subconscious and to intensify the purchase of goods and services. The first studies on neuro-marketing were conducted in the 1990s. Scientists at Harvard University. As a result of the research, the concept of neuro-marketing emerged as a result of the combination of the science of the human brain and the economy. In the course of the concept, it was found that the consumer makes decisions not only based on rational one's judgments but also based on emotional reactions that he may not always be able to contain. Essentially, neuro-marketing examines a person's brain to most effectively influence consumer behaviour, namely: thinking, memory, emotional reactions. In the process of research fix various physiological reactions of the individual. In particular, the pulse rate and breathing, the movement of the pupils, the humidity of the hands, that is, the change in the activity of different areas of the human brain. This is done to predict consumer choices, determine the



consumer's attitude to the product before he or she understands it. In science, neuro-marketing is compared and often identified with sensory marketing. For example, when a person hears the right music, it smells or sees colour, it has corresponding associations with the product, the company that produces it, as well as a specific brand. This is because all the processes of neuro-marketing provide the sensory perception of the product, its colour, aroma, and image. In this regard, companies are opening up new opportunities to sell goods and build relationships with buyers. There are three approaches to the impact of neuro-marketing on subconscious consumers, namely are marketing, audio marketing, merchandising. Merchandising studies the impact on consumers' subconscious mind using colour, images, and sequential placement. Choosing the right product colour, image, labelling can greatly affect the sale of products. Psychologists say that 66% of buyers pay attention to colour, so the effect of colour can be effectively used in the created individual style of the company. Example, warm colours in the interior increase the activity of shoppers in the store. Cold colours reduce people's activity, their movements become slow, and they feel calm and relaxed. How strong is the power of our subconscious? This question can be answered by the study of one company we all know – Pepsi. The experiment was as simple as possible: in front of people, there were two drinks in glasses without tags and inscriptions. In one of them was Coca-cola, in the other, respectively – Pepsi. According to about 64% chose a drink from Pepsi, based on the fact that they liked the taste of this drink more. But one had only to open the cards and provide drinks on

tasting in their standard form, namely in universal packaging from the manufacturer, as the opinion of people immediately changed. The results are as follows: 75% of respondents stated that they choose CocaCola. Moreover, it was found that activity became inherent in another area of the brain. At this point, everything indicated that two regions of the brain participated in a silent confrontation between emotional and rational thinking. All because all the positive associations of "subjects" were associated with Coca drink: the company's history, its smell, design, logo, pleasant and joyful memories of what this drink was like in their childhood, an advertisement for soda on television on an early Christmas morning, the brand's absolute, unshakable and undoubtedly touching Coceness – all this turned out to be much stronger than Pepsi's rational and natural taste preference. Emotions, our inner sensations, experiences are what matter to us. Indeed, in this case, we all understand that Coca-Cola worked hard to have a huge impact on our emotional component. From childhood, we see advertisements with their logo, with happy people and a New Year's fairy tale during the winter holidays. We do not buy a can for its taste! This is a teleport that allows us to plunge back into those very years, through time and space to dive into childhood.

Neuro-marketing has revealed what many of us suspected: brand – it is more than an attractively packaged recognizable product. If you manage to look into the minds of consumers and find out why certain products gaining popularity, and the other is doomed to failure, this will not only help advertising and promotion of goods on the market but also help each of



us to understand what is it happens in our head when we make purchasing decisions. Today, neuro-marketing, as a science, is at the very beginning of its development, but, I am sure, it has a great future. At this moment, it does not provide us with a clear idea of where the "secret shopping mechanism" is located, but it will help to identify the main trends that will change the form and even the very essence of trade around the world. Unfortunately, to date, neuro-marketing is available to a small number of companies due to the high cost of research. However, interest in this type of marketing is growing. Neuro-marketing is one of the marketing technologies of the future today, so it requires more detailed and thorough scrutiny. Neuro-marketing uses 5 main channels of influence on consumer behaviour of a person: Vision, Smell, Hearing, Taste, Touch. Visualization is one of the main ways to influence human behaviour. On the Internet, this is the main way to influence the audience. Outdoor advertising can simultaneously affect multiple senses. For example, a huge board in the city of Mooresville with a juicy slice of steak at the fork. At rush hour, when the track is fully loaded with cars, a special device on the board begins to spray the delicious smell of steak.

CONCLUSION

Neuro-marketing actions are as follows:

1. The Importance of Eye Gaze. The most effective advertising is where people are present. Especially videos or posters with babies. It is interesting that if the baby is looking forward, all attention will be on

him. But if his gaze is directed to the product, then the attention of consumers moves to the advertisement itself.

2. Colour is Key. So, how much the product will be in demand, directly depends on its appearance. And one of the main is the use of colour. The most popular and effective are bright colours such as red, yellow, green. Studies have shown that each colour causes a certain emotion. One of the best examples is Coca Cola's use of the colour red.

3. Loss Aversion. A very interesting fact that a person does not want to lose anything. For this reason, many companies use the "buy before its gone" strategy, which in turn is very successful.

4. Memorable Headlines. Headlines are something that cannot be overlooked. This is the first thing the consumer pays attention to.

The success of the sale of goods or advertising, its relevance and market demand depends on the correct and well-chosen title. Thus, Neuro-marketing is an important area that makes it possible to study human reactions and needs. It helps to choose the most desirable product and make human life more comfortable. We are all convinced that we independently make any decisions, consider ourselves rational people, and do not respond to the pressure of others. But do all decisions depend only on us? We communicate with hundreds of people, value the opinions of relatives and friends, but we always reserve the last word.

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