

Prospective Trends In Neuromarketing Tools Of The Food Industry In View Of Digitalization

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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. The methods of neuro-marketing research are divided into two categories: socio-psychological and instrumental. Several benefits of neuro-marketing research have been highlighted, in particular, the possibility of obtaining specific information about peculiarities of consumer buying behaviour and scientific substantiation of consumer reactions to various incentives are included in the key ones. The disadvantages of such studies are also given. Prospects for the development of neuro-marketing methods and tools are considered.

Keywords: *Neuro-marketing, Neuro-marketing Methods, Neuro-marketing Investigations Social and Psychological Instruments of Neuro-marketing, Subconscious Emotions, Neuro-marketing Researches, Emotions, The Consumer, Public Policy.*

INTRODUCTION

In the modern world, it is becoming increasingly difficult to analyse huge flows of information, especially when it comes to marketing, as today consumers are more demanding and less prone to manipulation. Therefore, the goal of this work is to consider the current direction of studying consumer behaviour – neuro-marketing.

Neuro-marketing (sensor marketing) – is an integrated approach that explores and studies the human brain to further influence its consumer behaviour. The term "Neuro-marketing" it was introduced in 2002 by Eil Smidts at the University of Erasmus of Rotterdam. Its goal is to study and understand the reaction of consumers to various stimuli, to persuade the consumer to purchase before he realizes that it is really necessary for him. Neuro-marketing helps marketers determine what attracts the target audience more and affects consumers' sub-consciousness better. So as the answer to the question "Do you like this product?" is not always true. Neuro-marketing can tell the marketer what the consumer reacts to, whether it was the colour of the packaging, the sound the box makes when shaken, or the taste of some new dish.

REVIEW OF LITERATURE

In the early twentieth century, scientists such as J. Saltman, W. Scott, W. Wundt S. I. Kubiv, P. Rose, P. Vinsent, S.V. Krikavsky, A. Yu. Gorbunova, L.F. Romanenko began to consider the field of neuro-marketing. To date, the essence of scientific and practical principles are considered by such scientists as O.D. Boyko, A.A. Kopeyko, E. Yu. Kahn, N. P. Reznik,

S. d. F. Teston, S. K. Gupta and others. It is worth noting that a considerable amount of non-fiction material on this topic exists on the Internet, but there are doubts about the accuracy of such

information, as well as a lack of fundamental work. Despite the recent emergence of the concept of neuro-marketing, many studies have been conducted based on which the results allow to obtain objective information and to solve marketing management problems based on it.

Given that neuro-marketing is a component of marketing and strategic management between the needs of people, demand, quality of products of competitors with the needs of the enterprise, its main purpose is to develop a marketing strategy to achieve the marketing goals of the enterprise. However, the development of a basic neuro-marketing strategy of the enterprise depends on the corporate mission and the established goals of the firm.

METHODOLOGY

The information base of this work was theoretical research of neuro-marketing scientists, thematic sites, results of neuro-marketing researches presented by the companies-clients, materials of foreign conferences. The research of this approach, general scientific and specific methods have been used, in particular: dialectic method of studying the effect of neuro-marketing tools on the food industry. When conducting the research basis of the research with following general scientific methods: analysis and synthesis, system analysis, generalization. The theoretical basis of the work was the theory of marketing, cognitive psychology and neuroscience.

RESULTS

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. 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. 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 neuro-technology 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 [3].

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 [2].

Aroma marketing studies the effect of scent on human behaviour. This type of neuro-marketing has a great impact on people's feelings and decision making. Brands with smell are much

better perceived and remembered. The room that smells good will be remembered for a long time. Also, with the help of aroma, people can make an impression on certain products. The experiments show that the aromatization of retail space can stimulate sales dynamics by an average of 15% [1].

Audio marketing is a type of neuro-marketing that studies the impact of sound on consumer behaviour. Measured ringtones have been shown to contribute to impulsive decision making about unplanned purchases. A person can spend 35-40% more money than he planned on spending a heartbeat [2].

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 [1]. 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 Coca-Cola. 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 Cokeness – 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.

The smell can be called the best and shortest path to our heart. It gives us a variety of emotions, feelings and memories. To improve sales, many companies use aroma marketing, in

particular fast-food restaurants. For example, the smell in the area where McDonald's is located can be heard from afar.

Music surrounds the modern man everywhere. It is carefully selected in all establishments, shops, restaurants. Properly selected music evokes the right emotions and desired consumer behaviour.

Taste is one of the common effects. Tasting events are used by many companies. What allows them to increase the demand for their product against the background of their competitors.

When selling and promoting a product, the effect of touch is very important. After all, the client needs to fully assess the goods [1].

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 [2]. 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.

And we firmly believe in its correctness. In reality, everything is completely different. Many decisions affect our decisions factors: biological, psychological and external. Thus, classical marketing and psychology were combined in neuro-marketing – the study of brain activity as a result of a reaction to a stimulus.

Every modern marketer needs to know what neuro-marketing is and what methods should be used for active business development.

It is possible to build communication and make an advertising move so that it remains in the human mind for a long time, thanks to neuro-marketing. When the psychology is clear, the "weak point" – the human brain – responds. For a modern marketer, to study neuro-marketing is to study the effect on the consumer's subconscious.

So, the essence of neuro-marketing is to get the most realistic and truthful results of a study of consumer behaviour. To do this, experts use direct interaction with the human brain using the following tools:

1. Functional magnetic resonance imaging (fMRI), due to which they monitor brain activity at the time of showing one or another component of the company's marketing campaign.

2. Electroencephalogram (EEG), which allows you to measure the rhythms of the activity of brain neurons when changing the emotional state of the consumer.

3. Ad tracking is a system for tracking eye movements and points of focus.

With the help of such studies, it is possible to determine the associations and emotions of a person who is faced with a marketing stimulus. Smell, sound, taste, touch are important channels of communication during the sale, as the perception of the product depends on the experience of the sensations received. The main task of neuro-marketing is to determine the emotional activity of the consumer and to influence him with various visual and auditory methods to activate the desire to buy a particular product.

However, there are also drawbacks to such learning methods. First of all, this is the high cost of conducting a study. Thus, conducting experiments is expensive and short in time, which leads to

small samples and, to incompletely reliable information as a result. Also, only one neuroimaging technology, such as fMRI, can be used overnight. This leads to an incomplete understanding of the relationship between various physiological processes and consumer behaviour. The same applies to devices with non-neuroimaging, such as EEG, the results of which are considered individually. Also, these devices are limited in their ability to study the brain.

Thus, the direction of neuro-marketing is still subject to criticism not only because of the novelty of the research but also because of non-compliance with ethical standards, as some population groups believe that companies specifically activate their desire to make purchases in their bodies. Awareness and understanding of learning objectives, transparency of marketing strategies created based on experiments and legislation to accompany research in this area are all current issues that require attention and support from both consumers and marketers.

CONCLUSIONS

People do not always realize and correctly formulate their preferences and needs. Often a person does not understand the real motives of his action and the choice of the consumer does not depend on rationality, but rather on subconscious motives. Neuro-marketing technologies will help you choose the right smell or the appropriate musical accompaniment that encourages you to buy because it is they that can reliably show the real reactions of the human subconscious [1].

Therefore, neuro-marketing is an area in which psychology merges with the art of sales and emotions come to the fore. Exposure is through taste, hearing, touch, smell and sight. Statistics say that with the use of neuro-marketing tools and techniques, sales of goods increase to 45%. The results of neuro-marketing studies show the hidden needs of a person and help explain his behaviour in different situations, remove negative influences and minimize the risks surrounding him. Researchers believe that "we can use neuroscience research to see how a person reacts online at the level of brain activity. This means that the question is not whether to use neuro-marketing, but how to use it" [2].

In our opinion, the goal of neuro-marketing is not to deceive the buyer, not to manipulate the consumer, but to influence his brain and subconscious. Neuro-marketing does not control human behaviour, it uses hidden factors that can affect the choice of the buyer. "He studies and tries to predict the behaviour of a person, a group of people and entire organizations in a market economy (which is one of the most important areas of human activity)" [3].

But excessive pressure is regarded by the consumer as a repulsive factor, therefore, neuro-marketing is also considered as an unethical science due to the invasion of a person's personal space.

REFERENCES

- 1) Bosak O.V. Investigation of the influence of neuro-marketing tools on consumer behaviour. Financial space. 2013. №4 (12). Pp. 76-80.
- 2) Woodward V.V., Bilous A. Ya. Neuro-marketing – the newest tool for influencing consumer behaviour in the imperfect market economy of Ukraine. Innovative economy. 2013. №7. Pp. 210-212.
- 3) Moskalenko O.D., Zozuliov O.V. Features of neuro-marketing and actuality of use of iteration in the testing of web pages. URL: <http://ir.kneu.edu.ua/handle/2010/24414> (accessed: 03/11/2019).
- 4) Lavinsky D. Pareto Principle: How To Use It To Dramatically Grow Your Business // Forbes – 2014. Electronic resource: <https://www.forbes.com/sites/davelavinsky/2014/01/20/pareto-principle-how-touse-it-to-dramatically-grow-your-business/#17394f613901>
- 5) Coleman J. Never Lose a Customer Again // Portfolio – 2018 – Pp. 27.
- 6) American Airlines. Customer loyalty program. Electronic resource: <https://www.aa.com/i18n/customer-service/support/customer-service-plan.jsp>.
- 7) Blank, S. Why startups are agile and opportunistic – pivoting the business model. [Electronic resource] / Steveblank.com.
- 8) Rode, V. Corporate Branding for Start-Ups: The Crucial Role of Entrepreneurs: Corporate Review / V. Rode, C. Vallaster. – 2000. – 121 p.

- 9) Ries, E. The Lean Startup: How Constant Innovation Creates Radically Successful Businesses. / E. Ries. 2005. – London: Penguin.
- 10) Koulopoulos, T. M. Innovation with Result: The Look Beyond the Obvious. / T.M. Koulopoulos – São Paulo: Editora Senac. – 2011. – 238 p.
- 11) Balabanova L.V. Management of the marketing potential of the enterprise: teaching / L.V. Balabanova, R.V. Mazhinsky. Donetsk: DonDuet. – 2005. – 145 p.
- 12) Auckland M.A., I.A. Zharskaya. Consumer Behavior: A. Handbook / M.A. Auckland, I.A. Zharskaya. – K.: Center for Educational Literature, 2014. – 208 p.
- 13) Pavlen A.F. Marketing communications: the modern theory and practice: monograph / A.F. Pavlenko, A.V. Voychak, T.O. Primak; Kyiv nat. econom. Univ. – Kyiv: KNEU, 2015. – 404 p.
- 14) The emergence of marketing / [Electronic resource]. – Access mode: https://spravochnick.ru/marketing/evolyuciya_marketinga.
- 15) Kotler F. Marketing Management: trans. with English, ed. 12th. / F. Kotler, K.L. Keller. – St. Petersburg: Peter, 2008. – 820 p.
- 16) History and stages of marketing development / [Electronic resource]. – Access mode: <https://marketing-now.ru/osnovyi-marketinga/istoriya-i-etapyi-razvitiya-marketinga>.
- 17) Neuro-marketing is a business tool: new horizons or another illusion? [Electronic resource]. – Access mode: <https://lpgenerator.ru/blog/2015/08/11/nejromarketing-kak-instrument-biznesa-novye-gorizonty-ili-ocherednaya-illyuziya>.
- 18) Marketing 91. 2019. Top 10 Sportswear Brands In The World – Best Sportswear Brands. [Online]. Available at: <https://www.marketing91.com/top-10-sportswear-brandsworld>.
- 19) Chaffey D. Digital Marketing Excellence and Digital Marketing: Strategy, Implementation and Practice. In 2004 KPIs by Dr Dave Chaffey. Smart Insights. [Online]. Available at: <https://www.smartinsights.com/goal-setting-evaluation/goals-kpis/definitionefficiency-and-effectiveness>.
- 20) Case-3-coca-cola-mcdonalds [Online]. Available at: <http://strategic-partnering.net/case-3-coca-cola-mcdonalds>.
- 21) What is trade-marketing [Online] Available at <https://blog.hubspot.com/marketing/what-is-trade-marketing>.
- 22) Trade-marketing [Online]. Available at: <http://fmcgclub.com/events/trademarketing-forum>.
- 23) Reznik N.P., DemyanYa. Yu., Tokar Ya .I., Sandeep Kumar Gupta and Anatoliy D. Ostapchuk; Mechanism of Investment Maintenance For The Sustainable Development of The Agricultural Sphere, International Journal of Innovative Technology and Exploring Engineering; ISSN: 2278-3075, Vol-8 Issue -11S, 2019, Pp 112-116.
- 24) Reznik N.P., DemyanYa. Yu., Tokar Ya .I., Sandeep Kumar Gupta and Anatoliy D. Ostapchuk; Mechanism of Investment Maintenance For The Sustainable Development of The Agricultural Sphere, International Journal of Innovative Technology and Exploring Engineering; ISSN: 2278-3075, Vol-8 Issue -11S, 2019, Pp 112-116.
- 25) Sandeep Kumar Gupta, Rainu Gupta, Vivek Srivastava and Ram Gopal "The Digitalisation of The Monetary system in India: Challenges and Significance for Economic Development ", Journal of Emerging Technologies and Innovative Research, ISSN: 2349-5162, Vol 6, Issue 3, 2019, Pp 01-04.
- 26) Sayonara de Fátima Teston, Sandeep Kumar Gupta, Transforming Leadership and Rural Successors, XXV Scientific Initiation Seminar, Integrated Teaching, Research and Extension Seminar and University Exhibition, Universidade do Oeste de Santa Catarina, Brazil, ISSN 2237-6593, October 2019.