

METHODOLOGICAL PROVIDING OF INNOVATIVE MARKETING RESEARCH TECHNOLOGY

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ABSTRACT

The article highlights description of the new direction of consumer behavior marketing research, namely neuromarketing, which is an innovative tool of modern marketing science for establishing communication links at the subconscious level between a manufacturing company and a consumer audience in order to activate decision-making services. The methodological platform of neuromarketing research is formed, the theoretical basis of neuromarketing research is developed and the portfolio of neuromarketing research tools is created.

Keywords: Innovation Technology of Marketing Research, Neuromarketing, Neuromarketing Research, Methodological Providing, Theoretical Platform, The Portfolio of Neuromarketing Tools.

1 INTRODUCTION

Commodity markets are constantly changing under VUCA-world conditions. Instability, uncertainty, complexity, ambiguity in the external environment require marketers to use the latest tools for conducting marketing research on consumer behavior. It is needed for effective strategies development according to the sale of goods and services in external and internal markets. Nowadays researchers, scientists and experts note that the use of traditional marketing methods does not provide the expected results, because they are not always effective and already quite familiar (Domareva, 2015).

Therefore, marketers-researchers concluded that in order to study more closely the market behavior of consumers, their intentions and preferences to buy the product, it is necessary to ensure the direct involvement of consumers in conducting relevant research. Modern rational and perspective innovative marketing research technology is neuromarketing in terms of achieving this goal. A considerable number of research conducted in this area indicates that neuromarketing is becoming an instrument of the future, the use of which opens wide opportunities for the country's marketing specialists.

2. ANALYSIS OF RECENT RESEARCH AND PUBLICATIONS

In recent decades, foreign and domestic scholars such as A. Smidts, H. Krugman, D. Lewis, S. Weinstein, C. Weinstein, R. Drozdenko, G. Zaltman, A. Traindl, M. Lindstrom, R. Dooley, P. Glimcher, P. Kotler, N. Skrygun, A. Krasilnikov, O. Evseytseva made significant contributions to the study of neuromarketing (Neuromarketing - Wikipedia, Fihun, 2014, 2015, Sapyan, 2018). The conceptual neuromarketing platform today is based on the works of foreign scientists such as G. Saltman, A. Traindl, M. Lindstrom, D. Lewis, R. Dooley (Neuromarketing - Wikipedia, Fihun, 2015, Skrygun, 2018, Krasilnikov, 2015). In order to increase the efficiency of modern marketing methods usage M. Borodin, N. Vasylytsiv, O. Kahn, A. Kopeyko, N. Skrygun dedicated their research to the study of consumer reactions to marketing stimuli by directly measuring the processes that occur in the human brain (Skrygun, 2018, Krasilnikov, 2015, Vasylytsiv, 2017, Borodin, 2017). Ethical aspects of the practical application of neuromarketing are highlighted in the works of I. Astahova, N. Poliakova, M. Chernova (Astahova, 2017, Chernova, 2012).

Analysis of the professional literature on the chosen topic of the study allowed us to conclude that, despite

the considerable amount of theoretical experience and the amount of applied research, neuromarketing is a fairly new field of marketing science. It requires appropriate theoretical and methodological support, that will increase the scientific level of neuromarketing research for business problems study. It is found that still not enough studied not only the essence of the definition of neuromarketing, but also some theoretical and methodological aspects of neuromarketing as an effective modern tool of “promotion too”.

Formulating the goals of the article. Considering relevance and development of this issue, the purpose of the article is to define the term of "neuromarketing", to develop a methodological platform for neuromarketing research, to formulate a theoretical basis for research.

3. RESULTS AND DISCUSSION

An important type of marketing activity of industrial enterprises, financially independent intermediary companies is traditional marketing research. In today's turbulent market conditions economic entities are forced to focus their activities on studying and meeting the needs of sectoral consumers in order to saturate the market with attractive, high-quality, competitive goods (services), which in general will have a positive effect on improving the economic situation in Ukraine's regions.

The purpose of marketing research is to provide businesses with reliable and certain information about the market, the structure and dynamics of demand, the tastes and desires of consumers, the creation of an assortment that meets market requirements and that satisfies demand better than a competitor's product. Systematic marketing research enables the formation of an information base for effective management of industrial enterprises. That is why the representatives of large and medium-sized business in Ukraine actively order from specialized companies, consulting firms to conduct marketing research, as evidenced by the dynamics of the market volume of marketing research, which is presented in Table 1.

Table 1
Analysis of dynamics of marketing research market volume in Ukraine

Year	Marketing research market volume			
	USD million (according to the exchange rate of the corresponding year)	the rate of change of the indicator to the previous year, %	UAH million	the rate of change of the indicator to the previous year, %
2003	14,6	-	77,3	-
2004	19,5	133,56	100	129,37
2005	24,8	127,18	127	127,00
2006	33,5	135,08	169	133,07
2007	41,5	123,88	212	125,44
2008	55	132,53	275	129,72
2009	45	81,82	304	110,55
2010	40,5	90,00	324	106,58
2011	44	108,64	354,6	109,44
2012	56,95	129,43	449,24	126,69
2013	60,8	106,76	487,1	108,43
2014	42,44	69,80	509,29	104,56
2015	35,9	84,59	767	150,60
2016	32,33	90,06	865,14	112,80
2017	35,35	109,34	992,07	114,67

Source: compiled by the authors considering (Liluk, 2018)

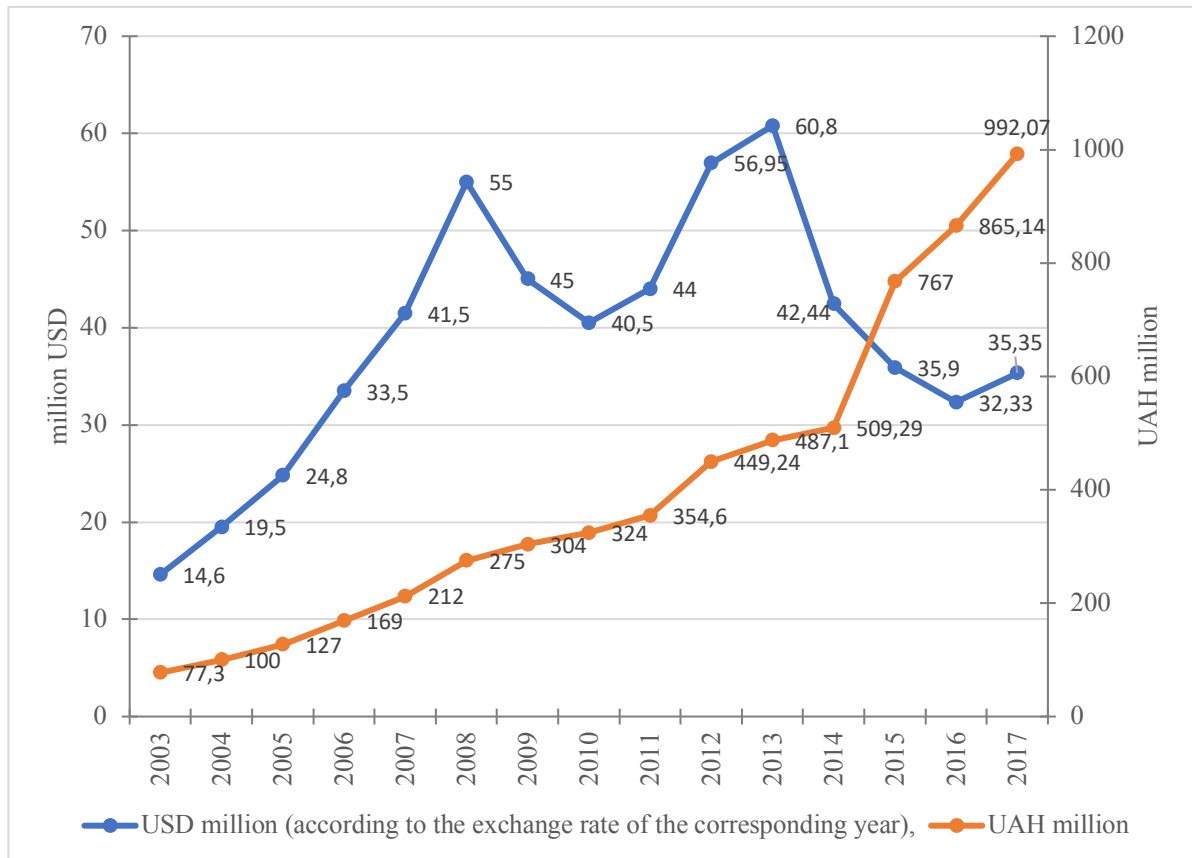
The corresponding graphs are presented to visualize the obtained results of the analysis of the dynamics of the desired indicator in absolute dimension (Fig. 1).

Thus, during the period 2003-2017, the volume of marketing research in the country increased from 77.3 million UAH to 992.07 million UAH. This is evidenced by the data that characterize the rate of change of indicators calculated to the previous year. A graphical representation of them is shown in Fig. 2.

The current challenges of the international economic environment necessitate the use of more sophisticated

consumer research tools, which is realized through neuromarketing as a marketing research technology. Before considering the issues that are determined by the purpose of the work according to neuromarketing research, it should be noted that the concept “neuromarketing” has recently emerged in the global economy.

Figure 1
Expert evaluation of UAM of market volume dynamics
of marketing research in Ukraine

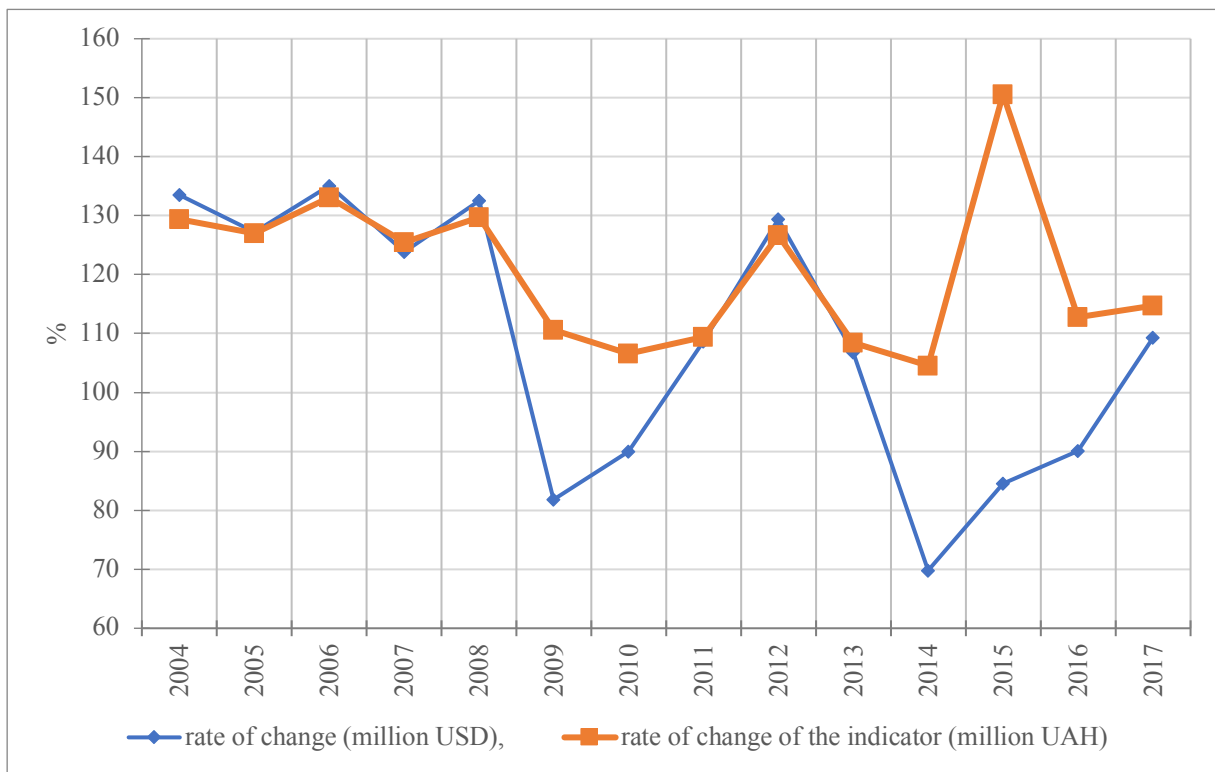


Source: compiled by the authors considering (Liluk, 2018)

The concept of neuromarketing was developed by psychologists at Harvard University in the last century, the methodology of neuromarketing was patented by Professor Gerald Zaltman under the name ZMET (Neuromarketing - Wikipedia, Fihun, 2014). The term "neuromarketing" was coined by Professor Ale Smidts in 2002, and the first international conference devoted entirely to neuromarketing research was held in 2004 in the United States. It can be argued that formally neuromarketing is a fairly new science that delves into the scope of marketing, neuroscience, psychology, neuroscience of emotions, consumer choice, motivation and thinking.

The use of neuromarketing helps with scientific precision to determine what color, word, image, sound, smell and taste have a significant effect on the subconscious mind of a specific target audience and maximize its attention (Bosak, 2013). The new way of influencing on consumers opens up great opportunities to the experts-marketers of business structures to actively carry out effective advertising campaigns, promote innovative goods, form and develop a corporate brand. That is why neuromarketing today is of great interest on the part of both the marketers themselves and the consumer segments of the commodity markets. However, it should be noted that each science requires appropriate methodological support, forms its conceptual apparatus and it is based on a specific theoretical basis. In modern science it is possible to distinguish different variants of structural understanding of methodology. The philosophical encyclopedic dictionary states that methodology is “the set of approaches, methods, methods, techniques and procedures used in the process of scientific knowledge and practice to achieve a predetermined goal” (Encyclopedic Dictionary of Philosophy, p. 374). The category "method" is interpreted as "a systematic way of achieving a theoretical or practical result, solving problems or obtaining new information on the basis of certain regulatory principles of cognition and action, awareness of the specifics of the studied subject area and the laws of the functioning of its objects" (Encyclopedic Dictionary of Philosophy, p. 373). According to the scientist V. Yurynets, the methodology of scientific research means a set of principles, categories, means, methods and forms of organizing and conducting scientific knowledge of the problem (Yurynets, 2011, p. 13).

Figure 2
Dynamics of the change rate in the market volume
of marketing research in Ukraine



Source: compiled by the authors

The author's version of the methodological platform, presented on Fig. 3, is based on:

a) principles of unity of theory and practice, systematicity, objectivity, abstraction, theoretical and empirical knowledge;

b) forms of organization and scientific knowledge of the problem - internal (conducting neuromarketing research using only company's resources), external (ordering conducting of research from specialized organizations), mixed (partly the work is done by the same company, partly - by request);

c) research methods - partial (for certain sciences: marketing, psychology, behavioral economics, neuroscience), special (for a specific science: marketing), empirical, theoretical, qualitative processing data. The substantive content of the components of the methodological platform of neuromarketing research is shown below within the scope of the information volume of this work.

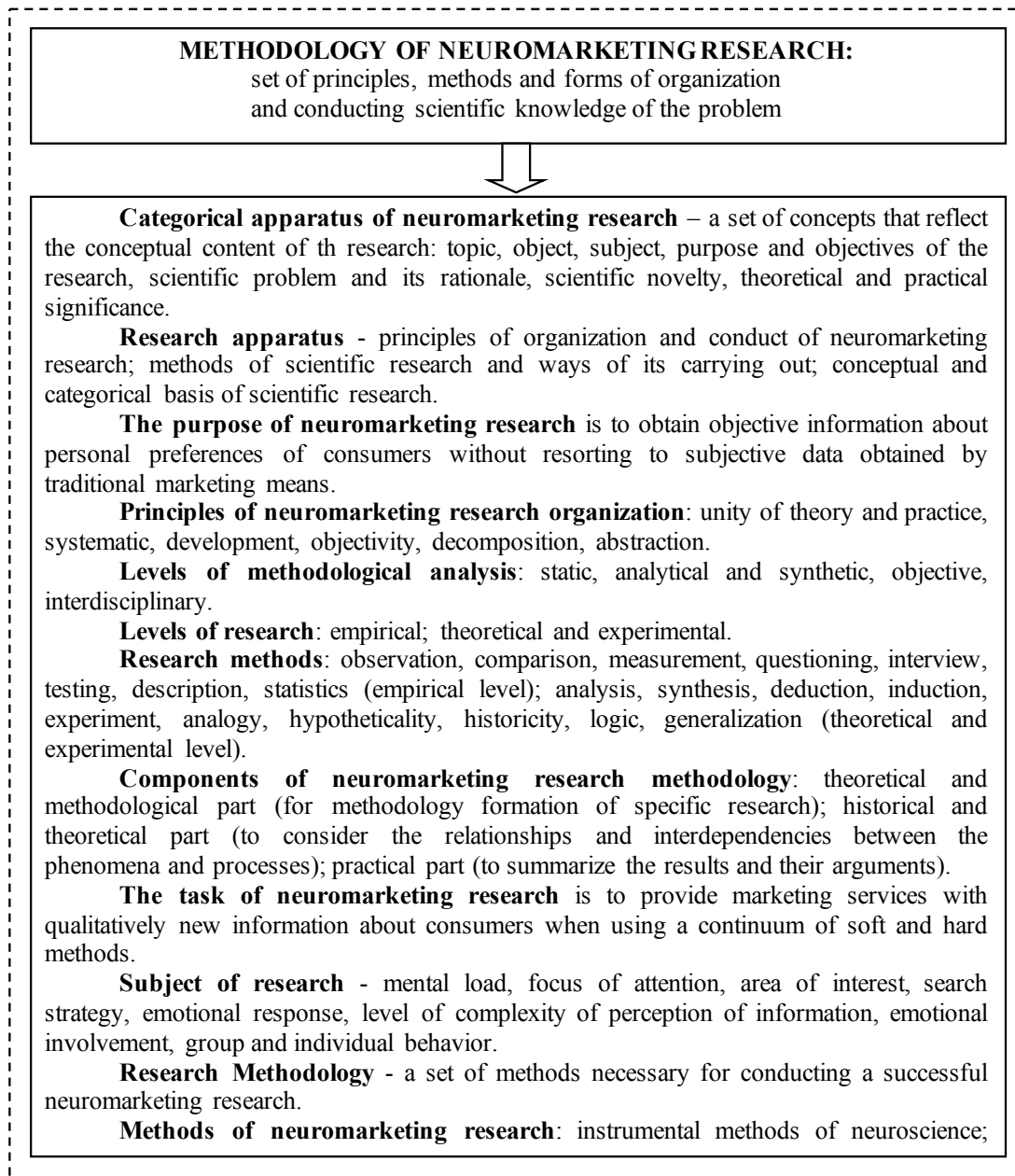
During the period of development of neuro-research the possibilities of consulting, marketing centers, enterprises commodity-producers become more complete of more complete understanding of the consumers behavior regarding the process of making their decision to buy goods in the sales markets. However, it should be noted that there are still different interpretations of the concept of "neuromarketing", the analysis of which revealed the following groups of determination of its definition:

- a) neuromarketing is an approach, a technology;
- b) neuromarketing is an innovative tool;
- c) neuromarketing is a complex or scope of neuromethods;
- d) neuromarketing is a modern trend or field of marketing research;
- e) neuromarketing is a modern concept.

Therefore, neuromarketing is understood as both an applied discipline used in commercial projects and as a science engaged in academic research. Positive consideration of the scientists' approaches to the search concept in forming the theoretical basis of the research, we consider it appropriate to offer the following definition of neuromarketing: this is a new direction of marketing activity, focused on the research of sensory, cognitive and emotional responses of consumers to a set of stimulating marketing business structures.

Ukrainian scientist O. Huhul thinks that the purpose of neuromarketing research is to obtain an objective assessment of the neurophysiological manifestations of the respondents' reactions, and the object of neuromarketing is to study the unconscious sensorimotor, cognitive and emotional reactions of a person to certain external stimuli (Huhul, 2014).

Figure 3
Methodological platform of neuromarketing research



Source: compiled by the authors considering (Encyclopedic Dictionary of Philosophy, Yurynets, 2011, Huhul, 2014)

According to the recommendations (Chernova, 2012), the most significant goals of modern neuromarketing research include the following:

- a) search for the neurobiological basis of consciousness formation;
- b) the study of brain structures to open up the possibility of conscious communication management;
- c) study of the basic reactions of the nervous system, arising both in the process of selection and consumption of the product / service, and in communicative influence on the consumer;
- d) a description of universal decision-making mechanisms by humans;
- e) determination of psychophysiological and neuro-visual correlators of consumer behavior.

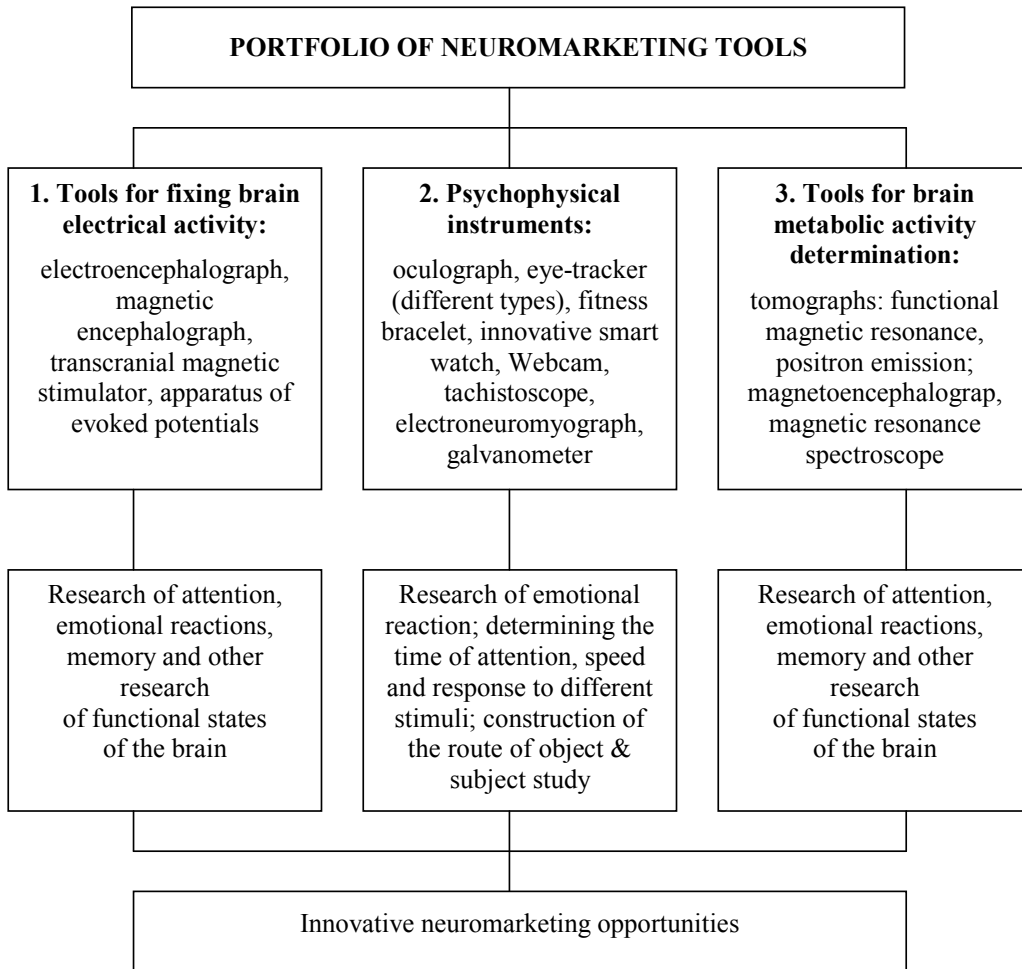
The basis of innovative neuromarketing technology is the synergy of marketing and neurophysiology. Hereby, the task of neuromarketing is to provide marketing services with qualitatively new consumer information using a continuum of soft methods (psychology, sociology, behavioral economics) and hard methods (neurophysiology, neurobiology) under the process of marketing research conduction for human neuroreactions determination that it is needed to make influence on consumer behavior in the market (Neuromarketing -

Wikipedia, Fihun, 2015, Huhul, 2014, Kurban, 2019, Gumenna 2018).

In the work (Gumenna, 2018) scientists O. Gumenna and K. Honcharova consider as an instrumental tool of neuromarketing a series of neurological and physiological research for measurement of nervous and metabolic activity changes of a brain.

However, in our opinion, it is advisable to introduce the concept “portfolio of neuromarketing tools” (Fig. 4), which considers a set of tools - medical devices for measuring changes in the reaction of a human body (skin temperature, sweating, blood pressure, pulse rate, facial expressions, eye movement, nervous and metabolic activity of the brain) to certain marketing stimuli in order to obtain the specific information that is needed by marketing specialists of companies to make scientifically sound innovative decisions regarding increase of promotion system efficiency of the goods and activation of demand for the goods.

Figure 4
Portfolio of neuromarketing tools



Source: compiled by the authors considering (Fihun, 2015, Chernova, 2012)

Formed theoretical basis for the study of neuromarketing (author's vision) is presented in Fig. 5.

The main concept of neuromarketing is the research of statistics of human psychophysiology, because humans perceive environmental stimuli primarily at the level of neurophysiological signals (Sapyan, 2018). For these reasons, the purpose of neuromarketing in accordance with (Dershen, 2018) is determined not only to find ways to identify consumer preferences without using subjective methods of obtaining the necessary information, but also to formulate advertising messages in such a way as to entice the consumer to purchase before he or she realizes them and has developed its position.

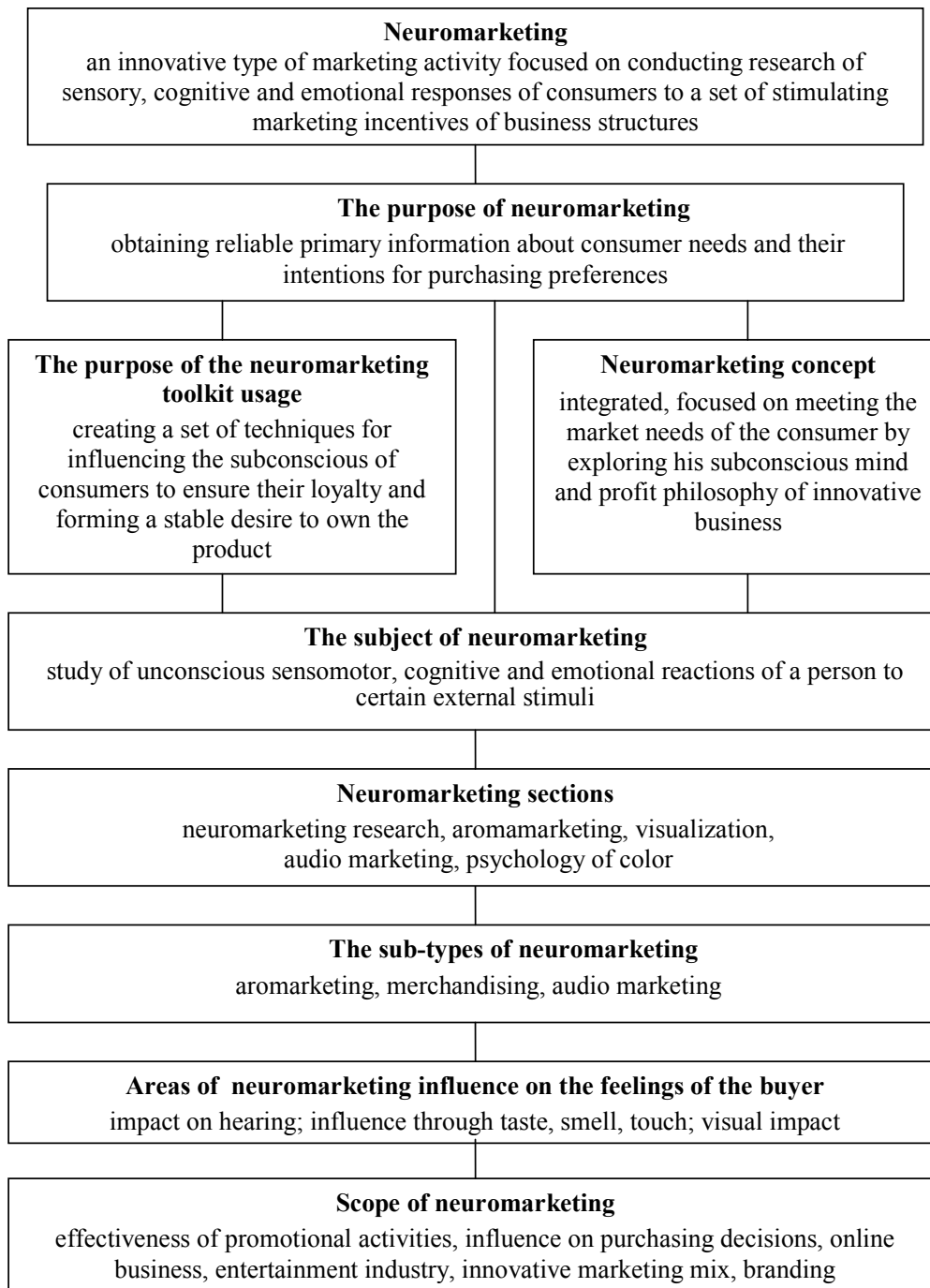
The purpose of using neuromarketing tools from our point of view is to create a set of techniques to influence the subconscious of consumers to ensure their loyalty and to create a stable desire to own the product. It can be argued that neuromarketing, as an innovative marketing technology, is aimed at providing the marketing services of enterprises with innovative, qualitatively new primary information about consumers in terms of their purchasing preferences, preferences, motives for making decisions on the purchase of goods.

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It can be confirmed that neuromarketing, as an innovative marketing technology, is aimed at providing the

marketing services of enterprises with innovative, qualitatively new primary information about consumers in terms of their purchasing preferences, preferences, motives for making decisions on the purchase of goods. The use of such relevant information in the marketing activities of industrial enterprises can cause increment of their level of competitiveness in commodity markets (Sokolova, 2011). In our opinion, obtaining synergetic effect from the application of new innovative marketing technology in the commercial activity of economic entities is possible if the strategy of their relationship with consumers in marketing policy, which is part of the system of adaptive management of innovation processes in industrial enterprises (Stoian, 2018, Babenko, 2017).

Figure 5
Theoretical basis of neuromarketing research



Source: compiled by the authors considering (Sapyan, 2018, Skrygun, 2018, Bosak, 2013, Dershen, 2018, Oklander, 2014)

Because neuromarketing integrates neuroscience and marketing, this is why the application of its methodological tools in practice allows us to determine the consumer's attitude to the product before he or she becomes aware of it, and even more to influence it. This is the main difference between innovative neuromarketing technology and traditional marketing: it does not require the collection and analysis of data about the subjective preferences of the buyer, but it does increase the sales of goods. It should be noted that, despite the significant advantages of the new technology of market research, the question of the necessity of evaluating the moral and ethical aspects of the use of neuromarketing methods based on neuroimaging using the tools of marketing neuron and human psychology. We hope that this problem will be solved in the near future, because the rapid development of the business urgently requires the use of the latest innovative methods, approaches, techniques, tools, technologies, which is the key to the growth of the market of marketing research in the country in the perspective.

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