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## BRIEF HISTORY OF NEUROMARKETING

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### Abstract

*With the help of neuromarketing one can discover the desires, expectations and hidden restraints of the consumers' options, by transferring the technology of medical imagery, which causes a major change in the relationship of the company and their customers.*

*Neuromarketing also highlights a major fact: the consumer makes decisions to a mental, emotional and instinctive level. These researches were initially confidential, but they were made public beginning with the 1990s in the United States.*

*This paper is intended to present a few theoretical approaches to neuromarketing, a more precise definition of this new concept, as well as a presentation of the history of neuromarketing.*

**Keywords:** *neuromarketing, medical imagery, consumer's behaviour.*

### 1. Introduction

The elaboration of this paper was inspired by a hopeful conclusion, belonging to J. M. Keynes: “One can get very far only by making up new and improved models.; thus, progress resides in the improvement of the model.”

Such an improvement that opens new horizons to research can be named „methodological individualism”. It is a name derived from neuromarketing – it belongs to Ale Smidts, from Erasmus University of Rotterdam, in 2002 – inspired by neurosciences, and foreseen in the definition of neuromarketing given by Peter Drucker: „Apparently there will always be the need for sale”.

### 2. Literature review

The purpose of marketing is to render the sale superfluous, to know and understand the customer so well, that the product or the service matches perfectly and sells by itself. Ideally, marketing should have as result a customer prepared to purchase. The only thing necessary, at that time, would be the availability of the product or service.

Thus, *Peter Drucker* was a visionary of neuromarketing: *The main objective of neuromarketing* is decoding the processes that take place in the consumer's mind, in order to discover the desires, wishes and the hidden causes of their options, so that there is a possibility to get them what they want. This thing has been made possible by the use of medical imagery technology, which brings a major change in the relationship of the companies and their customers.

The „father” of neuromarketing, *professor Ale Smidts*, winner of the Nobel Prize for Economy in 2002, *the term of neuromarketing*, that was created in the same year, 2002, „designates the use of identification techniques of cerebral mechanisms to understand the consumer's behaviour, in order to improve the marketing strategies”.

### 3. Short History of Neuromarketing

Scientists are trying to clear up the processes that take place in the consumer's mind with the help of neuromarketing. This result was made possible due to medical imagery, that brings a major change in the relationship between companies and their customers.

Neuromarketing originates in neurosciences, and its objective is to understand the functioning of the human spirit by using interdisciplinarity:

- *Neuroanatomy* – characterizes the anatomical structure (morphology, connectivity) of the nervous system;
- *Neurology* – the branch that deals with the clinical consequences of the pathology of the nervous system, as well as their treatment;
- *Neuropsychology* – is interested in the clinical consequences of the nervous system pathology, the cognitive aspect, intelligence and emotions;
- *Neuroendocrinology* – studies the connections between the nervous and the hormonal system;
- *Cognitive neurosciences* – study the connections between the nervous and the cognitive systems. The cognitive reorganizes the different mental processes beginning with an analysis of the perception of the environment to motion orders (through memorization, reason, emotions and language). This definition goes beyond the frame of the human or animal frame, but it also encompasses the processes that take place inside the artificial systems, such as computers. The scientific domain that studies the various aspects of the cognitive is called *cognitive sciences*.
- *Neuroeconomy* și *neurofinances* are interested in the decision making processes of the economic agents and particularly in the study of the role and, respectively, the emotions and the knowledge inside them. These branches are connected to economy and behavioural finances.

*Neuromarketing* can consequently be defined as a new branch of marketing, based on the techniques resulted from neurosciences for a better identification and understanding of the cerebral mechanisms that fundament the consumer's behaviour, in the perspective of increasing the efficacy of the commercial actions of companies.

Since the beginning of the 1990s there have been huge progress, as attested by the contribution of the two doctors – the American Paul Lauterbur and the British Peter Mansfield - by their imagery technique of magnetic resonance.

Neuromarketing researches have been developed in the **United States** since **1991**. First, they were results of the research laboratories that were specialized in neurosciences, research that were requested by important companies.

Although this research was initially confidential, the collaboration with important companies (Coca-Cola, L-mart, Levi-Strauss, Ford, Delta Airlines etc.) interested in the results, developed more and more.

In fact, this matter was brought to attention at Baylor Medical School in Houston, that organized in April 2004 the first international symposium dedicated to the use of marketing in the neuronal imagery.

Various *entrepreneurs* have already situated to this area in the United States. For instance, Joe Rezman shut down his publicity agency to open Brighthouse Company in 1995, and respectively, BrightHouse Neurostrategies Group in 2001. This organization, that collaborates with a neurosciences laboratory from Emory University, is among the first to market commercial studies fundamented on neuromarketing.

There are also **European companies** that are researching this domain. In fact, one of them, Shopconsult, which collaborates with Ludwig-Boltzman institute, claims the paternity of the concept of neuromarketing.

Among the various research domains there are, obviously, the identification of cerebral mechanisms, meaning the purchase decision that particularly catches the salespersons' attention. So far here have been five *research centres*:

- Increase the brand preference;
- Improve the memorization of a publicity message;
- Maximize the impact of publicity;
- Improve TV commercials;
- Operationalize the branding.

Unfortunately, marketing people in *Romania* have found these techniques only in the specialized literature. „It is an extremely advanced study, and I do not believe that the local market is prepared for it. Moreover, we have to refer to the investment value – when the production of a TV commercial alone costs a couple of million euros, it is obvious they are using all the possible techniques to understand its impact” explains Alexandra Rusu, senior

partner at Marketing Consulting. Since there is almost no competition on the Romanian market, as compared to the situation of other countries, the resources assigned have almost the same level.

„Neuromarketing is an American fighter, and we have just discovered gun powder. We are rather in the embryomarketing phase” thinks Iulian Padurariu, managing partner at Trout&Partners. On the other hand, he affirms that one has to make an appointment for an echography one month ahead, so there is a lot to retrieve when it comes to the necessary hardware (CT scans etc).

### Examples of successful use of neuromarketing

The most recent research techniques prove to be extremely useful instruments in the competitive „jungle” of this century. This is why, players of various domains have been investing in neuromarketing:

- Representatives of **Procter&Gamble** affirmed that, due to neuromarketing, releasing Febreze has proved the biggest succes of the company;
- To **Motorola**, neuromarketing had important implications in positioning of the products. The company representatives say that one can get answers to questions that would have never crossed their minds;
- **Buick** used these researches to improve dealers’ experience with customers. Therefore, they managed to increase sales from 9% to 40% for every dealer;
- Using this technique, **Delta Airlines** managed to implement the idea that experience gained along the years proves extremely valuable.

The most recent exploitation of neuromarketing is the initiative of the video games producer THQ, who evaluated the players’ reactions to Frontlines shooter (that has not been released yet) by using scanning techniques of the brain waves offered by EmSense. FMRI based research (functional magnetic resonance imaging) is still an experiment. There are only a few technical details available to the public, but the future will provide more and more publicity studied in the laboratory and adjusted to human emotions depending on the results of a new

market research, where instead of filling up forms, scientists are scanning the brain activity of potential customers.

### 4. Conclusions and implications

Neuromarketing was born out of the need to sustain a decision by all possible means when the pressure is way over the possibility of a decident to fight failure. Coca-Cola, BMW, Procter&Gamble, Motorola are a few of the companies who have experimented neuromarketing for the past four years. They are leaders who cannot afford to fail, and who, at the same time, have the financial means to control it.

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