

Studiul motivațiilor comportamentului online al consumatorilor prin intermediul tehnicilor din domeniul neuromarketing

Using neuromarketing for understanding consumer behavior online

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Rezumat: Prevalența și importanța conceptului de e-commerce atrage din ce în ce mai frecvent atenția cercetătorilor către comportamentul online al consumatorilor. Deși există progrese semnificative aduse prin diverse metode și instrumente de studiu focalizate în acest domeniu, abordările specifice marketingului online apar fragmentare și divergente, lipsind un model acceptat la nivelul întregii comunități științifice. În acest context, articolul de față prezintă o serie de posibilități pe care noua știință a neuromarketingului le poate aduce pentru a genera un model mai complet și mai exact al studiului comportamentului online al consumatorilor.

Abstract: The prevalence and importance of e-commerce are drawing more and more attention on the research of online consumer behavior. Although there are significant progresses in a variety of research methods focused on that area, the new marketing tolls appear relatively fragmented and there is not a well-developed model accepted by the researchers for them. In view of this, this article reviews the possibilities of the new science of neuromarketing to offer a more comprehensive and complete model for studying consumer behavior online.

Cuvinte cheie: comportamentul online al cumpărătorilor, cercetare de marketing, neuromarketing, publicitate

Key words: online consumer behavior, marketing research, neuromarketing, advertisement

Introduction

Consumer is the pillar of any business. According to their objectives companies can decide which strategies to select for a good positioning on the market (Balaure, Adăscăliței, Bălan, Boboc, Cătoi, Olteanu, Pop, and Teodorescu, 2003). The understanding of consumer behavior on both online and traditional markets represents a real advantage to take the best decisions. Online environment is a real opportunity for businessmen and consumers, playing an increasing role in our lives. The online marketing campaigns are usually cheaper than in traditional markets and marketing process is faster (Orzan and Orzan, 2007).

The consumer behavior is a complex process, an important part of the marketing research domain (Cătoi and Teodorescu, 2001). To understand better the consumer it needs an in-depth analysis of factors like economic and social environment, culture, psychological and personal elements (Kotler, Armstrong, Saunders and Wong, 2002) and to use the most proper marketing research method.

Market research online is needed to ensure that companies produce what customers really want and not what companies *think* they want. Online marketing research is the process by which companies use the Internet to gather data to evaluate how well a product or service is selling to consumers. In addition to identifying potential areas for growth, online market research can help a company learn more about its target consumers. Online marketing research is a powerful tool. Marketing can be complicated and difficult to determine. This is why research becomes essential. Through marketing research, marketer can target the products or services better. There are many advantages to conducting periodic research and using the results to improve business online. An online marketing research study can be conducted by the company itself, or the company may choose to hire an outside company to manage this. An online marketing research program can include any number of methodologies.

There are two main approaches to marketing online:

- *Secondary research* - involves using information that others have already put together.
- *Primary research* - is research that companies design and conduct themselves.

Secondary research uses outside online information assembled by government agencies, industry and trade associations, labor unions, media sources or chambers of commerce.

Secondary sources include the following:

- **Public sources.** These are usually free, often offer a lot of good information, and include government departments sites, business departments sites, libraries online.
- **Commercial sources.** Commercial sources online include research and trade associations, banks and other financial institutions, and publicly traded corporations.

Websites of educational institutions. These are frequently overlooked as valuable information sources even though more research is conducted in colleges, universities, and technical institutes than virtually any sector of the business community.

Primary Methods. Several tools are available to the market researcher online. The most used are: questionnaires, interviews, surveys, and focus groups.

- **Surveys** are useful for getting a great deal of specific information. Surveys come in several different forms. Mail surveys are relatively inexpensive, but response rates are typically quite low. Online surveys are relatively inexpensive, but response rates are typically quite low. One potential benefit of online surveys is the use of “conditional branching.”
- **Interviews** involve in-depth questioning of an individual about the consumer’s interest in experiences with a product. It can use the real-time conversation services like Skype or gmail messenger. The benefit is that marketers can get into depth, but this method of research is costly and can be extremely vulnerable to interviewer bias.
- **Observation** of consumers is often a powerful tool. Looking at how consumers select online products and different features may yield insights into how marketers make decisions and what they look for. There are special tools like eye-tracking tools that observe what are the website features and zones which attract the most the consumer’s eyes.

- **Focus groups.** Web-based focus groups offer a fast, efficient and inexpensive way to conduct qualitative research online.

Why neuromarketing can be an effective tool for Online Marketing research

The traditional methods of the research groups where consumers answer questionnaires proved to have the results influenced by the way the questions are being formulated and often don't reflect the objective consumer perception. For decades, marketing research methods have aimed to explain and predict the effectiveness of advertising campaigns. For the most part, however, conventional techniques have failed miserably. Since emotions are strong mediators of how consumers online process messages, understanding and modeling cognitive responses to selling messages has always been a methodological challenge.

In this challenging context, the emergence of neuroimaging techniques has offered exciting methodological alternatives. Such techniques finally allow marketers to probe the consumers' brains in order to gain valuable insights on the subconscious processes explaining why a message eventually succeeds or fails. They do so by removing the biggest issue facing conventional advertising research, which is to trust that people have both the will and the capacity to report how they are affected by a specific piece of advertising.

The key question is how to understand the online consumers so well that the product matches perfectly their needs. The brain is the most reliable source to answer to these unanswered questions. Understanding human decision making is the holy grail of both marketing and sales. Scientists have begun looking at how the brain is wired to help understand some of these questions.

By studying the brain it is possible to find out the connection between how the brain activates to different online stimuli and the functional patterns of the neural activity. Dr. Eric Kandel, neuroscientist and winner of the Nobel Prize asserted that "Understanding the human mind in biological terms has emerged as the central challenge of science in the twenty-first century" (2006. p.3). The high impact of neurotechnologies can change the human beings' "lives, families, societies, cultures, governments, economies, art, leisure, religions" (Lynch and Laursen, 2010). One of the biggest challenges of an online business is to discover how to get closer to the customer

in an environment with strong competition and lots of online marketing stimuli. To achieve this, every day the online players try to improve the impact of their business by using complex marketing campaigns. A trillion dollars is spent worldwide on marketing campaigns every year (Pradeep, 2010) and an increasing share on Internet.

The marketer needs to have a clear image about consumer's reaction to the external stimuli. By asking customers about their preferences it is not the right method to find out the true answer because "what people say they do and what they actually do are different" (Lindstrom, 2010).

The term of neuromarketing was coined by the Nobel prize winner, Ale Smidts, in 2002 and designates the study of the cerebral mechanism to understand the consumer's behavior in order to improve the marketing strategies (Boricean, 2009). Neuromarketing holds the promise of understanding behavior by understanding the brain through scientific research, medical knowledge and technology, and applying this understanding to marketing.

Neuromarketing provides qualitatively different information which can be used like "honest" indicators compared with the traditional methods. A sustainable advantage of the neuromarketing techniques is that it differentiates from the traditional ones by accessing both the conscious and unconscious minds of the customer.

The human brain is the most complex part of our body. It processes about 11 million bits per second, but our conscious brain can only process 40 bits of information per second. The rest of information we take through our senses is subconscious mind (Pradeep, 2010). In the early 1980s the neuroscientist Benjamin Libet suggested by his researches that „what we think are conscious decisions, to act are actually just recognition of what the unconscious brain is already doing" (Carter, Aldridge, Page, Parker and Frith, 2009).

The researches on the consumer's conscious and unconscious minds revealed that our purchase decisions are not as rational as we consider to be (Lindstrom, 2010). We are more emotional and more similar to our ancestors than we think. Business people who make their strategies based on complex assumptions are missing that we are driven by simple and emotional impulses (Hill, 2010).

The Neocortex and the Limbic system share their deductions and discoveries with the Primitive Brain. With this information the Primitive Brain manages the decision making process (Renvoise & Morin, 2005).

Emotions and feelings precede our thoughts and the Old brain drives the online customers' decisions. The Old brain is influenced by six primary factors:

- *The 'Old Brain' is self-centered* - it is concentrated on its survival and well-being. When using a virtual car in Second Life our Old Brain “protects” us from damages even the driver is just an avatar. Our mirrors neurons help us to connect emotionally to these virtual realities (Lindstrom, 2010).
- *The 'Old Brain' seeks contrasts* - “Before/after, with/without, slow/fast all allow the Old Brain to decide” (Renvoise & Morin, 2005). The Old Brain can be influenced by the color's contrast of a web page or small font letters inside a phrase with big font letters makes it sensitive.
- *The 'Old Brain' is tangible* - it likes what is familiar and definite like: “100% money back” (www.ebay.in) or “25% or more off select gifts for Mom” (www.amazon.com).
- *The 'Old Brain' remember beginning and end* - a online written message should concentrate the key terms for the beginning and the end: “NeuroFocus clients include Fortune 100 companies across multiple categories, including automotive (...), and motion picture industries. The Nielsen Company is a strategic investor in NeuroFocus. “ (www.neurofocus.com)
- *The 'Old Brain' is visual* - The power of a picture or video is well-known on Internet. YouTube transformed a website with videos in a successful business. Dan Hill raises in his *Emotionomics* book that “Two-thirds of all stimuli reaching the brain are visual (Zaltman, 1996)”, “Over 50 per cent of the brain is devoted to processing visual images (Bates and Cleese, 2001) “and “80 per cent of learning is visually based” (American Optometric Association, 1991)”
- *The 'Old Brain' responds to emotions* - A kind baby face or a nice sound when looking at a video influence our behavior.

Neuromarketing techniques can be used for improving the impact of the online advertisement

Neuromarketing techniques can be successfully used in an online ad campaign. Before launching the most captivating online ad a company could develop a few advertisement versions and measure the customer's reaction to them using neuromarketing techniques. By checking second by second of each ad the company can diagnose which of the core elements of the ads are effective and which of them are not and which of them should be removed or changed.

Using neuromarketing marketers can answer to the following answers:

- Which are the most and less attractive parts of the ads?
- What are the attention differences between online customer categories for each ad?
- Which parts of the online ads are the most emotionally engaging and memorable and grab the consumer's attention?
- Which Ad features value the most and which the least?
- What does the online customer remember about each Ad: brand, different features of the product, people faces and their nonverbal communication?

It is necessary to determine the effectiveness of Ads by measuring the following three metrics:

- *Attention*: provides information where you look at and the intensity of it. By using the EEG sensors it is possible to measure the electrical brainwaves and detect when customers are conscious and think about an Ad feature. Because the human beings don't know what stimuli caused our attention, this attention parameter is essential in any neuromarketing research.
- *Emotional engagement*: allows understanding of the degree of emotional engagement and what type of emotions and feelings cause each part of the online Ad. Traditional methods like the questionnaire or focus groups ask consumers about their feeling, which alter these emotions. The emotions and feelings are the precursors of customer's behavior and purchase intent.
- *Memory retention*: identify if the online Ad activates the brainwaves which indicate when the memory process is active. To remember about the Ad's

product or brand is the key factor of the consumer's decisions, attitude and behavior.

Three other metrics can be additionally used to check the effectiveness of the three Ads: Purchase intent, Novelty and Awareness (Pradeep, 2010). To measure the consumer's attention, emotional engagement and memory retention to different Ads it needs a full coverage of the brain and some complementary tests:

- *EEG* - records the electrical activity from different parts of the brain. Using an advanced EEG it is possible to measure 64 different sectors of the brain, 2000 times a second. That allows understanding of precognitive, subconscious mind, before the conscious mind to be distorted by factors like culture or level of education.
- *eye tracking* devices monitors eye movements studying how consumers interact with text or visuals. It is important to know where the customer looks at and if the visual signals and symbols deliver desirable and useful messages and experiences. A search for Visual Marketing on Google produced about 46 million hits in November 2006. Web design companies, online advertising companies associate themselves with Visual Marketing and many times use "Visual Marketing" in their name (Wedel & Pieters, 2008).
- *Galvanic skin response*: measures the electrical conductance of the skin, which varies with its moisture level.

The results can be:

- selecting the most effectiveness ad to be launched
- reducing the costs of launching more ad versions at the same time
- minimizing the negative effect on the advertised brand, company, product by choosing the right ad
- understanding the target customer's behavior
- using the research in other similar marketing campaign of the company.

Having a subconscious response to the Ads stimuli it is possible to understand how the customer's brain activates when seeing the Ads and to predict their behavior or expectations.

Conclusion

The brain has billions of neurons and constitutes the densest information network in the natural world. Additionally all the external factors, the personality and character of each customer, the level of education, the age or gender make every person to be unique.

Marketers can better answer to questions like:

- How visible is a specific brand?
- How much can we use traditional approaches?
- Are companies using the write words on their websites or TV Ads?
- Which design standout?
- Which TV commercials talk to customers?
- How does the brands compare?

By applying neuroimaging techniques to marketing research allow us to have a much insight into how consumers behave during their modern life, getting answers which remained elusive until now (Lee, Broderick & Chamberlain, 2006). The goal of neuromarketing is “not to change the behavior of the consumer, but to change the behavior of business in how it relates to the consumer”, said Clinton Kilts, a scientist at Emory University in Atlanta who has been pioneering the research.

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