

THE IMPACT OF ADVERTISEMENT ON CONSUMER'S PERCEPTION

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Abstract: Marketing can be described as a tool for companies to influence the consumer's perception to the desired direction. The current market situation is characterized by dynamism, growing consumer power, and intense competition. The consumer perception and behavior are changing and therefore need to be constantly monitored and measured. The aim of this article is to scan and measure consumer's perception while watching a video advertisement. During this experiment, an eye-tracking technology was used, which allows capturing a consumer's gaze. The central part of the research is to measure the brain activity of a consumer based on the EEG (Electroencephalography). EMOTIV Epc+ is a 14-channel wireless EEG, designed for contextualized research and advanced brain computer interface applications. An advertising campaign from four different mobile operators was used for this purpose. In the conclusion of this article, consumer's perception of different advertising campaigns are compared and evaluated.

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Introduction

Neuroscience is a branch of life sciences, which examines the workings of the nervous system of animals and humans, its development during life, and examines individual neurons, parts of the nervous system, their interconnections, methods of creating neural networks, their cooperation and their relationships to the surrounding (Hudak & Madlenak, 2016). The field of neuroscience also includes cognitive neuroscience, which examines the procedures in the human brain during cognitive processes. These processes include for example perception, thinking, remembering, recalling from memory, learning, etc.

Determining how a person processes various sensations is also a valuable knowledge for the field of marketing. It is of great benefit if entrepreneurs who are trying to offer their products to potential customers know how these customers will react to advertising stimuli and other marketing tools. The use of knowledge and methods of neurology in the field of marketing gave birth to a new discipline – neuromarketing.

Analysis of the problem

There are several definitions of marketing, and it can be characterized from various perspectives: it can be a system of activities of an entrepreneur, or it can be defined as a complex of elements of business activities, which are mutually interconnected, or a business philosophy (Corejova & Rostasova, 2015).

However, what all of these definitions have in common is the customer and satisfying his or her needs. Therefore, it is preferentially focused on the demand side and customers' needs (Jankalova, 2014). This emphasis results in the mission of marketing in the business environment – it has a particular function, specifically to reconcile opportunities in the market and enterprise resources (Madlenakova et al., 2016). Certain tools are required in marketing so that its role in the business is fulfilled. The marketing theory speaks of four essential tools, so called 4P, which are product, price, place, and promotion.

Marketing communication is a permanent part of the marketing mix. It is defined as a targeted delivery of content and necessary information to potential customers/recipients (Kolarovszki et al., 2016). It is often understood in a very narrow view only as “advertising,” which is caused primarily by the fact that advertising is the most common tool used in marketing campaigns. Marketing communication can be understood as a marketing tool that comprises all means that serve to inform and convince customers and directly or indirectly points out the products they sell.

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Advertising is one of the forms of marketing communication. With advertising, it is possible to efficiently share the necessary content to the target groups en masse. It can inform, convince, and remind the brand or increase the product awareness.

The goal of advertising is to influence the purchase decision making of the consumer. Psychology, which examines human behavior, emotions, and motivation to act, plays a significant role in advertising.

When designing advertising, regarding psychology, one needs to look at the environment, in which the product is promoted (for example the role of media) on the one hand, and the content of advertising itself on the other. How do the media affect the impact of advertising? By creating an environment, in which the product is offered – for example, a source, which is perceived as untrustworthy has the same impact on the information it provides, and in the end, the information also appears untrustworthy. In addition to its credibility, the attractiveness of the source, etc. are also important (Chynal et al. 2016).

It is also possible to encounter several types of advertising and advertising media (Madlenak & Hudak, 2016). The most visible and probably most popular medium is the TV. TV as a medium for advertising is especially suitable for an introducing of a product; it allows using picture, sound, music, and movement (Madudova & Kolarovszki, 2016). Thus, the marketing message can be made very emotional and impressive by means of TV. A TV spot can portray essentially any creative idea.

Objectives and Methodology

The goal of this article is to identify, measure, and compare the impact of visual advertising on potential customers. The research object was the advertisement of mobile network operators active in Slovakia. Currently, there are four mobile network operators in the Slovak market offering various service packages. These operators have their own frequencies assigned, and they are building their own networks. In addition to providing services under their own name, the operators are offering mobile services, which give the impression that there are other operators. These services, so called “children” of big operators, are Funfón of the Orange Corporation and Juro of the Telekom Corporation. In addition to these, there is also Tesco mobile – a virtual operator, who does not own a mobile network, but it has signed an agreement with a registered provider of services. Tesco mobile has a signed agreement with O2 – it uses its network, but offers services under its own name.

Figure 1: EEG and eye tracking testing



Source: EPOC (2017)

For research needs, advertising sets were selected, which were used by the four mobile operators for the Christmas season in 2016. The Orange Slovakia Corporation introduced a campaign, which should point out, jokingly, that older generations are not familiar with the modern technologies and also to introduce products the corporation is offering. This advertising presents a multi-generational family

and a situation, in which the grandson explains to his grandmother everything the corporation is offering. The campaign of the Telekom Corporation is in a futuristic style, and the main topic is “Christmas at Sagan’s in 2061”. Similarly as with Orange, it uses the presence of well-known celebrities in advertising – Peter Sagan and his wife. During the Christmas of 2016, O2 introduced a campaign to the audience, in which the main advertising message is “with us, you can choose yourself.” All of the spots have the same element – a family member buys a present he/she likes and puts it inconspicuously under the family tree. Advertising of the Swan Corporation (the mobile operator 4ka) are quite atypical for the Christmas period. The TV spots are shorter and do not have a story; they have only a central idea, e.g. product offer at half the price.

10 respondents participated in the test; 3 women and 7 men. The respondents were presented with the videos (advertising campaigns of individual operators) consecutively. While they were watching these spots, the respondents had an EEG neuro headset on their heads – a device with electrodes that captures their brain activity (Plochl et al., 2012). We have also tracked their eye movement using an eye camera (Soussou et al., 2012). EEG measurements were supplemented with the testing of the respondents using the eye camera to help us identify more easily, what the respondents were focused on (Figure 1).

The EEG neuro headset was the EMOTIV - Brainwear® - wireless devices, which hold electrodes measuring brain activity. Data collected from each electrode were transformed into cumulative characteristics using software – these are depicted with curves of various colors, whereby each color represents a certain emotion linked to current perception:

- Excitement (entertainment/fun) is divided into immediate and long-term. Short-term entertainment (depicted by the orange curve) captures surprised reactions or reactions to specific events, ideas or proposals.
- Long-term excitement (black curve) measures the overall mood, as it accumulates over time.
- Engagement/boredom (red curve) measures the level of focus and immersion in the activity.
- Frustration (blue curve) measures negative emotions linked to the performed activity.
- Meditation/relaxation depicts the measure of how good (calm) the person feels, and it is depicted by the green curve.

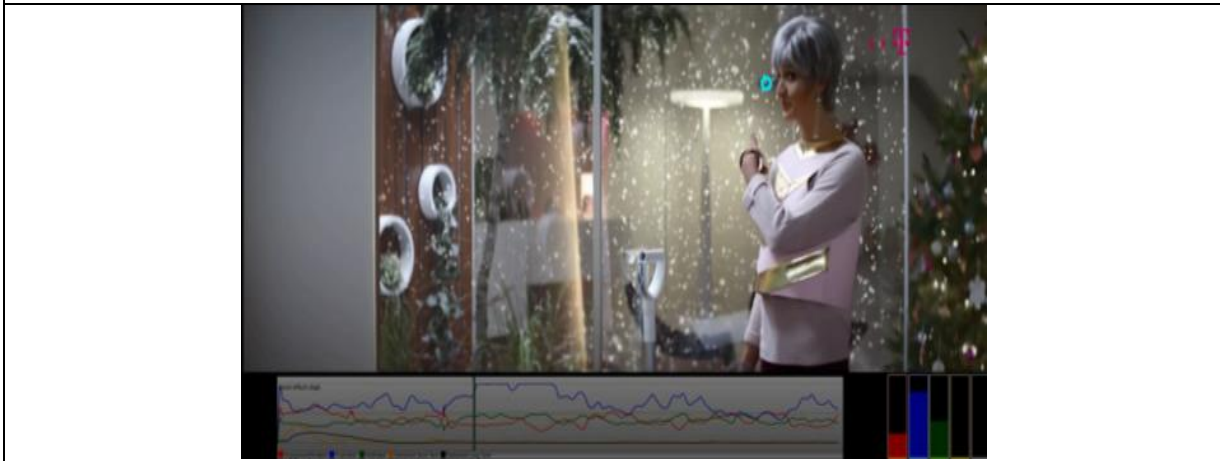
Results and Discussion

In addition to the EEG measurements, we have also conducted a measurement using the ETG eye camera during the text, through which we were able to analyze where the tested respondent is looking at the moment, and what elements interested him or her in the spot. By combining the ETG measurements for individual campaigns into general statements, we can state, that the audience (respondents) are focusing mainly on persons, found on the screen, and especially on their face. If there is a significant element suddenly in the spot, then this element will get the most attention, although sometimes only for a short while. For very dynamic spots and with a great number of significant elements at the same time, watching the spot is slightly chaotic; as if the audience does not know where to look first. With a traditional setting the audience is accustomed to (like the environment in the Orange and O2 spot), this setting is almost ignored and the attention is focused on the story, the plot or an object, found in the foreground, and vice-versa, with an unconventional concept (Telekom) the environment itself captures the audience.

Elements, which had the greatest impact on respondents or entertained them or interested them the most have been identified in the EEG research. When all tested campaigns are evaluated, it can be said that the respondents were interested primarily in spots or elements, which are humorous, and which they have not seen before – i.e. they are optimal. However, at the same time it is necessary to be aware that these ideas need to be within certain bounds, and ultimately they have to “meet the taste” of their target customers.

The respondents appreciated verbal humor the most, which in the tested spots was found in the Orange Corporation spot. If the word play is accompanied by an interesting story (in this case the differences between the generations), it evokes an even better impression in the audience (potential customers). Futuristic elements in the campaign of the Telekom Corporation attracted most of the respondents, but not all of them were intrigued in a positive way.

Figure 2: Negative emotion (frustration) from advertisement (Telekom advertisement)



Source: Author

Another element used in the campaigns was the presence of well-known celebrities in the spot – as already mentioned in the previous sections, in this case, the customer’s sympathies with given person play a major role here, but the author of the spot cannot influence them (Figure 2). A risk with the celebrities can also be the fact that oftentimes they do not act very naturally in the spots and interviews or scenes look unnatural and forced.

Figure 3: Example of Eyetrack and EEG measurement - Celebrity placement (Orange advertisement)



Source: Author

The plot of the advertisement, which should inspire the main idea, i.e. the operator’s offer, took attention away from it instead of drawing attention to the offer. In this case, a better linking of the story and the advertised information, or placing this information not at the very end, but in the middle of the advertising spot could be proposed. It would also be suitable if the offer would be presented or at least hinted several times during the spot – so that it would not be too distracting, but also to create an interest in offered products.

Conclusion

The analysis of the mobile network operator market covered four mobile operators operating in the Slovak market. Each of the operators introduced a Christmas advertising campaign in 2016, which had a particular theme and presented its current offer. Except for the Swan Corporation, all operators bet on traditional Christmas motifs, although each one interpreted them differently. The paper also states how the neuromarketing options were used in the world. Research carried out using EEG and supplemented by eye tracking using the ETG technology discovered that respondents had different impressions from the spots – they depended on the presented spots, but also on their current mood or taste. Elements were identified, which affected several respondents the same way (humor, faces, and story). A big negative of the presented TV spots was the fact that the respondents almost did not perceive the advertising information given operator shared using the campaign. Therefore, advertising

information should be shared in a more creative way, so that the story and elements of the spot would have a clear connection to the offer.

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