Using Neuromarketing to Create more Effective Messages in Sustainability Advertising Campaigns

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Abstract: Sustainability has become a hot topic in recent years, and it is essential for businesses to integrate sustainability into their marketing strategies. However, it is not enough to simply communicate messages related to sustainability in advertising. The challenge is to create campaigns that inspire consumers to act in ways that are better for the environment. Currently, many brands are trying to communicate topics related to sustainability in advertising, but not all campaigns will make people want to treat the environment better. It is knowledge from neuromarketing that allows us to better understand consumer motivations and behaviour. Thanks to this, brands can communicate their sustainability messages more effectively. In the article, we focused on a review of existing research that deals with the topics of sustainability in the context of advertising and consumer behaviour. We describe findings that help in the creation of advertising messages in campaigns that aim to motivate the consumer to be environmentally responsible. Neuromarketing research provides valuable insights into the emotional drivers of consumer behaviour, empowering brands to design effective sustainability campaigns. Companies can drive behaviour change and build a more sustainable future. Ultimately, the effective communication of sustainability topics in advertising not only benefits the environment but also helps companies build a stronger relationship with their customers, creating a beneficial scenario for all stakeholders. Our goal is to offer companies recommendations for a better understanding of their consumers and to be able to communicate sustainability topics more effectively so that they have a real impact.


1. Introduction

More and more companies are incorporating the theme of sustainability into their communication activities and advertising campaigns. This is because they realise that today's consumer does not look at a brand in the same way as they used to. They are no longer just interested in the lowest price. On the contrary, they also focus on what values a brand stands for. It is not just about the customer as such. The fact that companies are focusing on communicating themes such as sustainability, climate change or fairness in working conditions also helps them considerably in employer branding. This is evident in the Edelman Trust Barometer, which reports that up to 69% of respondents confirmed that they are more likely to be interested in a job if the company reflects their values, has a higher sense of purpose or is meaningful work that impacts society and addresses social issues.¹ Focusing on Corporate Social Responsibility increases customer retention, brand loyalty, improves brand image and brings more opportunities to attract investment (Murphy, 2022).² Thanks to advanced technologies that allow us to understand consumer emotions, we can communicate the individual messages of advertising campaigns more effectively. It is these tools and research in this area that can help us not to rely on creativity alone. Thanks to neuromarketing, we can find out the effectiveness of individual advertising campaigns before they are actually launched. This gives us the ability to create marketing campaigns more effectively, taking into account the consumer and the emotions that the advertising campaign will evoke in them. Although in the past marketers have relied on a creative approach to advertising as such, wanting to create interest, surprise or memorability in consumers, few of them have actually used insights from behavioural science that can be applied to the creation of advertising campaigns. A specific category is campaigns that are intended to communicate a societal problem. In our work, we further focused on campaigns that aim to communicate a sustainability message and encourage consumers to engage in more sustainable activities. Although many companies.

2. Literature review

Sustainable marketing is the process of communicating a company's commitment to the environment to customers, partners or employees. This can range from supporting organisations that are dedicated to sustainability to developing products that will have less impact on the environment. For example, many companies are starting to develop comprehensive plans to achieve sustainability. This is because they have found that their customers are changing, they are no longer just interested in the lowest price, and if they want to appeal to them and persuade them to convert, they need to look at this area too.

The goal of sustainable marketing is to promote a company's core values, which in turn will resonate with its customers. By doing so, businesses can build a relationship with their customers and gain lasting support. In the context of various environmental adversities, such as excessive air pollution, the climate crisis and biodiversity loss, for example, customers have become more interested in where their products come from, under what conditions they were produced, what they contain and the environmental impact of their production.

A number of companies have noticed that customer interest has changed precisely because of the urgency of solving these problems. However, if they were unable or unwilling to think about improving their product or production processes, they often resorted to so-called "greenwashing". This is false advertising designed to convince the customer that the company is acting in accordance with environmental values. It uses a variety of means to do this, but it is about misleading the consumer. If the consumer subsequently discovers that such advertising was merely deceptive and therefore greenwashing, their relationship with the brand is negatively affected.

2.1 Sustainability advertising campaigns

Nowadays, when new businesses are being created in the market quite constantly, it is increasingly important for consumers if a brand behaves in a socially responsible way. As McKinsey points out in its study on sustainable packaging, although environmental impact is still not a major factor in consumers’ purchasing decisions, it is one of the things that can positively influence customers and encourage them to buy a product that, for example, uses packaging that is environmentally friendly (Feber et al., 2023). Millennials are becoming a major target group, with a purchasing power of up to $2.45 trillion. It is this group of shoppers that really care about what they are buying and where their money is going. More than 70 percent of them prefer to spend their finances at companies that support their interests (Patel, 2017). This is a major reason why companies should not only look at the environmental side of the products they provide, but also make sure that their marketing communications clearly communicate to consumers their interest in doing business more sustainably. This is what can help them to build a long-term relationship with their customers.

Advertising campaigns focused on sustainability have several benefits. As the Green Business Bureau reports, these include:

- Attracting customers from the ever-growing market of sustainability-minded consumers.
- Getting employees who are passionate about making a difference in the world.
- Building strong brand awareness.
- Shaping a corporate culture that is focused on a higher purpose.
- Winning more tenders, as larger companies or government organisations are increasingly looking for suppliers who have sustainability as one of their values.

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2.2 Applying knowledge from neuromarketing to the creation of socially responsible campaigns

The use of emotions in marketing as such is a fairly well-known topic. The use of such emotional appeals in marketing communication is a current trend and the authors consider them an important part of modern marketing practice (Horňák, 2015). The importance of using emotions in marketing is also confirmed by the study that emotions influence purchase decisions. They are also an inevitable part of all (not only purchasing) decisions. In his study, the author found that consumers use emotions (experiential and personal) more than information consisting of data and facts when evaluating brands (Murray, 2013). Next research confirms that people mainly use the criterion: "How will I feel when I do it" when making decisions (Damasio, 1998). Several researches have confirmed that if an advertisement evokes an emotion in the viewer, it is easier to remember.

Neuromarketing research is giving marketers new insights into how to communicate advertising campaigns more effectively. Often times, when marketing campaigns are implemented, they do not have the benefit that was originally expected, or even elicit the complete opposite reaction from the customer. We can apply the individual findings from the field of neuromarketing to the creation of campaigns, but at the same time, thanks to neuromarketing research, it is possible to verify in advance the effectiveness of advertising and the emotions it has evoked in the customer.

There are many specificities in campaigns that address sustainability. It's not just a matter of ensuring that campaigns are well-designed and evoke the desired emotion in the target respondent. It is also about influencing consumer behaviour to want to be interested in sustainability. Future Proof Insights conducted a study to, Evaluate the cognitive impact of Sustainability Messaging versus Traditional Promotional & Purpose-Driven Messaging for both Luxury & Commodity goods. This study compared three different versions of the advertising message, namely:

- Traditional Promotional: Typical creative or promotional advertising
- Sustainable: environmental related messaging
- Purpose Driven: Cause based marketing for topics such as Social Justice, Gender, Mental Health and more

![Image 1: While sustainable messaging works in general, traditional messaging approaches are over 10x effective.](image)

The traditional form of the advertising message was more than ten times more effective than a message that included information about the environment. It is important to note, however, that the study goes on to note

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that these results are individual for different categories of goods. Sustainability-focused advertising messages performed better for goods that can be described as luxury. 

Consumers’ views on sustainability often differ from their actual purchasing behaviour. Although people often state in surveys that they care about protecting the environment and prefer products or companies that share their values, a study by researchers at Sungkyunkwan University confirms that people are not always willing to give up their convenience at the expense of sustainability. When shown a green logo that represented a company that cared about sustainability, research participants demonstrated higher ACC and higher SLP and lingual gyri activity. This indicates that participants showed greater cognitive resources and more time in managing green logos. However, this may play a role in building a stronger bond with the company. Based on these findings from the study conducted, the following recommendations were formulated for the marketing campaigns:

- Emphasize subtle priming marketing techniques to foster relational reasoning and empower consumers to make independent product choices.
- Sustainability campaigns should educate the public about the environmental risks faced by all living beings, including humans, instead of indiscriminately pressuring consumers towards sustainability.
- Marketers should showcase additional advantages of sustainable products to meet customers’ needs and desires effectively.

Exploring the emotions that people experience in individual advertising campaigns and their impact on viewers’ overall attitudes or decisions can be very useful. This also applies to advertising campaigns that focus on the topic of sustainability. The consultancy Kantar has compiled an extensive database of ads that address social and environmental issues. Since 2016, the number of such ads has tripled, but consumers themselves are often not convinced of the credibility of the ad. As many as 64% of people believe that brands are only engaging on these issues for profit. In collaboration with Emotion AI company Affectiva, they conducted research to provide a comprehensive view of consumer reactions to the topic of sustainability. They compared successful ads that addressed various environmental ones to unsuccessful ones. The less successful ones are often more concerned with describing the problem than solving it. However, by examining emotions when viewing the ads, it was found that the more effective ads were those that evoked more positive emotions in people. Although they also contained a proper need to address the environmental issue, these ads contained a more optimistic call to action. Thus, advertisers should consider incorporating humour and optimism (Pang, 2022).

Image 2: Ads that are more powerful in communicating socially responsible themes evoke more positive emotions in consumers

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9 People Care About Sustainability... But Do Shoppers? [online]. [2023-04-10]. Available at: <https://www.futureproofinsights.ie/2023/03/30/people-care-about-sustainability-but-do-shoppers/>.


The integration of communication into sustainability and fashion industry awareness has become essential. The promotion of sustainable brands and fashion businesses through marketing communication serves as the primary prerequisite and means to encourage a shift in thinking and alter individual purchasing habits. Precisely because brands want to communicate more also the topic of sustainability it is very important to do it right. Many methods of communication are more likely to create fear or hopelessness in consumers, which is not desirable in this case, as advertising may not be that effective. Kantar and Affectiva based on research have identified five key psychological factors that contribute to the success of sustainability messages in advertisements:

- **Nature Connectedness**: Capture viewers’ ability to connect with the natural world by incorporating elements that resonate with their relationship to nature.
- **Implementation Intentions**: Include a clear roadmap towards sustainability within the ad, effectively communicating a credible strategy for achieving goals.
- **A Sense of Control**: Empower viewers to consciously make changes in their daily activities to adopt a greener lifestyle, tapping into their intrinsic motivation for personal growth.
- **Mitigating Present Bias**: Overcome the tendency for people to view sustainability as a future problem rather than an immediate concern by using ad creative that highlights the relevance and urgency of the issue.
- **Social Learning**: Portray sustainable brand behaviours by understanding and modelling the behaviours, emotions, and perspectives of others, fostering a sense of social influence and positive role modelling.

### 3. Methodology

The aim of our paper was to compile a set of recommendations, based on the analysis of secondary sources, to help make the communication of the message of sustainability advertising campaigns more effective. In the context of modern technology and the constant advancement of opportunities in research, we mapped the opportunities available to brands in leveraging insights from behavioural science and neuromarketing. Secondary research consists of analysing data that has been collected for other purposes in the past. The data that we have mentioned in this paper was mainly collected from rolled research conducted abroad, but we have

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also drawn from research that has been conducted in the past at our university. This gave us the opportunity to look at the current situation from a broader perspective. However, the data we decided to analyse could not come from Slovakia alone, as it is not currently possible to collect enough sources, either in the form of research or literature, to be able to provide a sufficient number of recommendations applicable to marketing practice. Neuromarketing research is mostly conducted outside Slovakia, and thus for the relevance and topicality of our paper we had to use foreign sources. On the basis of the description and subsequent analysis of individual findings based on neuromarketing research in the context of advertising campaigns focused on sustainability, we were able to identify the advantages as well as the weaknesses that can be encountered in the development of marketing communications for brands. We drew data not only from international written sources, but also through expert lectures and interviews with people working in this field, who were able to provide us with valuable information for the purpose of improving our work. By summarizing the data obtained from the qualitative content analysis, we arrived at the possibilities of using neuromarketing, which thanks to such a summary overview, it is much easier to apply these findings to the process of creating marketing communications. As we have already mentioned in the thesis, consumers are increasingly concerned about the values to which a brand ascribes and its overall impact on society and the environment. This is also the reason why we have chosen a specific type of advertising campaigns for our work, namely those focused on sustainability. As we expect this topic to be increasingly relevant in the context of a brand’s potential differentiation from its competitors, we see our work as a possible contribution to the design of more effective advertising campaigns. A disadvantage of secondary data may be its lack of timeliness for the period. Especially in a field such as neuromarketing, it is very important to examine information for the current period. However, we have tried to avoid this by obtaining information from as up-to-date and relevant sources as possible. We have supplemented these with our own knowledge from practice, which we have acquired while researching the topic or working directly with the individual tools such as eye-tracking, facial recognition, and galvanic skin response measurements. We have conducted number of academic research studies to gain an understanding of consumer behaviour in the neuromarketing laboratory at the Faculty of Media Communications of the University of St. Cyril and Methodius in Trnava. Thanks to that we could better analyse and understand the profound effects of colours, movements, contrasts, and emotions in shaping individuals’ behaviour and decision-making processes. In this way, we wanted to bring the readers closer to the current state of the possibilities of using knowledge from neuromarketing in the implementation of marketing activities. We also conducted a content analysis of the ways in which the different tools used in neuromarketing are used in message development in advertising campaigns aimed at sustainability, and by deduction we arrived at our own findings.

4. Discussion

The topic of sustainability has recently become very popular not only among the general public, but also in the communication of brands and companies. Companies have long been focusing on how to build a positive image of themselves in the eyes of their customers. Price and availability are no longer the only factors. Increasingly, brands need to pay more and more attention to the environmental impact of their business. Not only do regulations come from the legislative framework, but often brands are faced with the fact that it is their customers themselves who care about the brand behaving responsibly. So, their role is also to create communications that sufficiently describe how the brand feels about sustainability. With the coming climate crisis, we need to make sure that we communicate more and more to our customers the importance of making informed purchases. Although many surveys show that people care about the environmental footprint of their brand, this is not always true. As we described in the article, sometimes it is very difficult for people to give up their own comfort. So how do you encourage people to prioritise products or services that care about the environment? How to motivate them to care about this issue themselves? The need to involve emotions in advertising campaigns has been described in many research studies. Also, in this paper we have mentioned several studies that discuss the need to use emotions in marketing. With the advent of technology, opportunities are opening up for brands to get to know their customers even better. It is neuromarketing research and the application of its findings that can help brands create more effective advertising campaigns that will motivate people to choose products or services more responsibly. As we stated in the article, it is still not a purely automatic choice for most people. On the contrary, considering the choice of a particular product that is eco-friendlier in nature requires a lot of concentration. That is why some people end up opting for a different product. This may also be due to an automatic perception of a high price. Attitudes towards sustainability vary not only across countries but also across age generations. It is the knowledge we have gained from secondary studies and scientific sources that can help brands to focus on how to reach their customers in the right way when formulating their advertising messages. It is neuromarketing that offers us proven insights into how people...
make real choices, what they experience and what they think. At the same time, these technologies offer marketers the opportunity to be more responsive to our target audience, specifically at the level of communicating with the individual. By adapting communication to current trends and verified information from research, companies are able to choose not only the appropriate moment, but also the form in which to communicate their message.

5. Results

The paper provides a brief insight into the importance of emotions in marketing. Primarily, however, it looks at how brands can communicate more effectively in sustainability advertising campaigns thanks to findings from neuromarketing, i.e. how people actually make purchasing decisions. As this is a great help that has benefits not only in marketing but also in other areas, such as changing people's behaviour to be more concerned about the environment, there is a need to continuously engage in finding out new information about this area. It is understanding customer emotions that offers brands the opportunity to implement marketing activities more effectively. The effectiveness of various neuromarketing techniques in sustainable advertising is critically evaluated, considering the implications for promoting environmental behaviours and fostering emotional connections with environmental issues. The limitations of the study are also discussed, along with potential avenues for future research. Overall, the results demonstrate the potential of neuromarketing strategies in enhancing the impact of environmental campaigns. The findings provide valuable insights for practitioners and researchers interested in leveraging neuroscience-based approaches to drive positive environmental changes and encourage pro-environmental actions in society. The findings suggest that adding neuromarketing techniques in environmental campaigns can lead to improvements in behavioural change, engagement, and message recall. We think that neuroscience-based approaches have the potential to create more impactful and persuasive campaigns that resonate with audiences on a deeper level. However, while the results are encouraging, we are sure that further research is needed to fully understand the underlying mechanisms and to explore how to optimize these strategies for different environmental issues and target demographics.

6. Conclusions

Neuromarketing is increasingly being talked about nowadays, not least because artificial intelligence has made many of the tools used in this type of research much more accessible to the general public. However, it is still a topic that is not relevant in every country, mainly because of the lack of financial resources, technology or qualified research staff. By using insights from neuromarketing or behavioural science, many brands are able to make their marketing communications more effective and achieve higher conversions. However, neuromarketing does not only offer the opportunity to increase companies' profits. In our article, we looked at how neuromarketing insights can make advertising communications that convey a message of sustainability more effective. Although surveys often claim that people make decisions based on how a company treats the environment, many studies have shown that this is not yet true. While people may be interested in supporting a brand that presents itself as more sustainable compared to its competitors, they may be deterred from making a purchase by the perceived higher price tag associated with a greener product. These attitudes vary not only across countries, age groups of consumers but also across the category of goods they buy. It is therefore very difficult, if not impossible, to come up with miracle recommendations to make such specific communication more effective. Brands therefore need to know very well the situation in their market, their consumers and their attitudes towards the environment. In this article, however, we make some recommendations that may work to improve advertising communications that address sustainability. These include, for example, how to work with people's emotions to ensure that they have the most positive experience possible from a given advertisement. While there is a need to express concern about the current climate crisis we are facing, there is also a need to provide people with solutions on how they can make a difference. It is this motivation that will evoke positive emotions in them, so that they are more likely to make a purchasing decision that is kinder to the planet. The importance of talking and educating about the climate crisis is used by many brands as it is one of their values they want to present. However, it is important that they do it in the right way.

7. Limitations and Future Research

Research paper Using neuromarketing to create more effective messages in sustainability advertising is not without its limitations. While the findings have provided promising insights into the potential of leveraging neuroscience-based strategies, it is essential to critically examine the boundaries of the study to interpret the results accurately and to know, how effectively communicate environmental messages.
The study primarily focused on short-term emotional engagement and changes in human behaviour. Long-term effects of neuromarketing strategies on sustained pro-environmental behaviours remain unclear, and future research should explore effects over time.

While neuromarketing provides valuable insights, its usage raises ethical concerns, such as for example manipulation, regarding privacy, and informed consent. It is essential to continue addressing these issues to ensure responsible and transparent application of neuromarketing in environmental and sustainable campaigns.

A comparative analysis will offer insights into tailoring strategies to optimize campaign outcomes for specific environmental issues and target audiences. Future research should compare the effectiveness of different neuromarketing techniques.

Cross-cultural investigations are crucial to understanding how neuromarketing strategies may vary across different societies. Cultural nuances should be considered when designing effective campaigns for specific targets.

In conclusion, while this study provides interesting insights into the potential of neuromarketing in advertising, there are inherent limitations which is important to take into account.

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References


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