

STUDY ON NEUROMARKETING: A NEW ASPECT OF MARKET RESEARCH

Ashok Kumar Parsoya

Department of Business Administration, University College of Commerce and Management Studies, Rajasthan, India

ABSTRACT

Marketing has long been thought to play a bigger role. Every time a product isn't sold or a customer isn't contacted. It's all about establishing a trustworthy and loyal relationship with customers while also providing a wonderful product. This research study worked on neuromarketing. Neuromarketing is a fantastic scientific marketing strategy that has created a lot of interest among marketers, researchers, and anybody else interested in learning more about consumer behaviour. Objectives of study is To understand neuromarketing and its role in the current era. To study the differences between neuromarketing and traditional marketing research methods. To study the challenges of neuromarketing. Companies that work in a competitive global environment strive to improve their market position and meet their marketing goals by conveying the significance of their products to existing and prospective customers. Companies now have access to get more information about how consumers' minds work through the neuro senses and neuromarketing tactics. The study has the following purposes; discuss the importance and potential contributions of neuromarketing, demonstrate the advantages of neuromarketing as a marketing research tool compared to traditional research methods, discussing on the ethical issues involved with neuromarketing research, and present the main neuromarketing techniques that are being used for the development of marketing research. Traditional and neuromarketing studies can both provide useful information on how customers make buying decisions, consciously and unconsciously mind.

KEYWORD: - Marketing, Strategy, Demonstrate, Traditional Decision

INTRODUCTION

Marketing has long been thought to play a bigger role. Every time a product isn't sold or a customer isn't contacted. It's all about establishing a trustworthy and loyal relationship with customers while also providing a wonderful product. This method will undoubtedly demonstrate that marketing can be improved and optimized at a rapid rate. Another aspect that contributes to the development of the marketing concept is creativity or innovation. Something fresh or revolutionary that has the potential to shift the perspective of a whole phenomenon is referred to as innovation. As a result, they involve all three primary roadblocks uncertainty, risk and complexity. Consumer behaviour is the analysis of how consumers make decisions about what to buy when to buy it, and how to do so. Study the consumer behaviour in individuals, groups, or organizations and all the activities associated with purchasing, using and disposing of goods and services. Consumer behaviour consists of how the consumer's emotions, attitudes and preferences affect buying behaviour. Some of the influencing factors which affect consumer behaviour are Psychological, Social, Cultural, Personal, and Economic. This study is based on consumers' actions during searching for, purchasing, using, evaluating and disposing of products and services they expect will satisfy their needs. It helps marketers in understanding the consumer decision-making process. The consumer decision-making process involves five basic steps. This is the process by which consumers evaluate making a purchasing decision.

- Problem recognition
- Information search
- Alternatives evaluation
- Purchase decision

➤ Post-purchase evaluation

in this, positive connections were found between the effectiveness of advertisements and their impact on customer buying behaviour.

This research study worked on neuromarketing. Neuromarketing is a fantastic scientific marketing strategy that has created a lot of interest among marketers, researchers, and anybody else interested in learning more about consumer behaviour. It gives insight into consumer behaviour helping companies improve their marketing efforts. The Neuromarketing technique has opened a new era of marketing in which more research and studies are undertaken to better understand consumers. Neuromarketing is a type of marketing that focuses on the secrets of consumer behaviour and choice. It is a huge marketing research activity that employs numerous brain-related approaches and strategies to assess how marketing is performing. It describes what happens in a customer's mind when they are exposed to a marketing stimulus and how the brain converts those reactions into consumer actions and decisions. It is currently one of the most often employed marketing tactics and approaches. The approach focuses more on the brain activity of consumers who make judgments about what to buy, why to buy it, where to buy it, how often to buy it, and lastly how often to use it.



Neuromarketing is a mind-screening strategy it shows how consumers' thoughts react to a particular advertisement, product packaging, product pricing, product designing, product quality, product durability, etc. Brains' responses are crucial for companies since they provide business owners with a clear picture of customers' needs and wants. Neuromarketing is the branch of neuroscience research that aims to better understand the consumer through his cognitive processes and has application in marketing, explaining consumer's preferences, motivations and expectations, predicting his behaviour and explaining successes or failures of advertising messages "Applying the

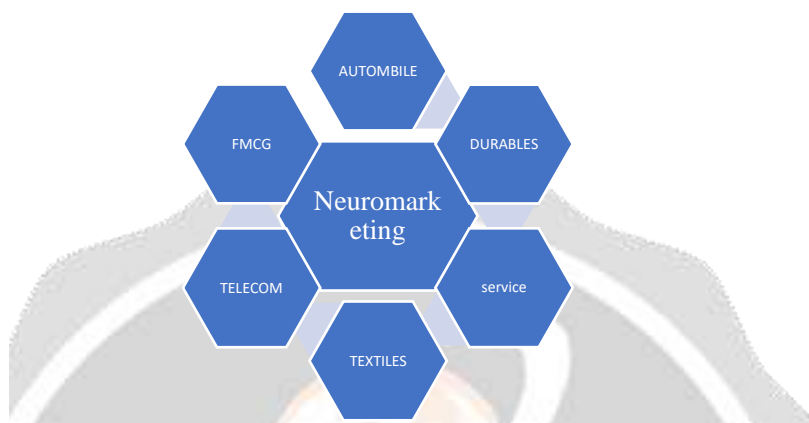
methods of neurology lab to the question of the advertising world" (Thomson, 2003) Brands can use mind imaging to track every brain activity, such as visual acuity, pupil dilation, gestures and facial expressions, heart rate, and emotions, and gain valuable consumer insights. Retailers use the scan results to generate more appealing or compelling marketing for customers. Marketers frequently recruit neurologists or other scientists to assist with the testing and interpretation. There are such normal techniques used in neuromarketing which are **Eye-tracking, facial coding, Pupillometry, Biometrics, Electroencephalography, Functional magnetic resonance imaging, and skin conductance response**. These tools allow researchers to track things like where people are looking, what emotions they are experiencing, and how their bodies react physiologically. The aim of neuromarketing is a key for suppliers to use alongside current approaches to better picture a customer's profile. Neuromarketing research elucidates the psychology behind influencing consumer behaviour, allowing marketers to have a better understanding of how to advertise specific items or brands.

NEUROMARKETING

The confluence of two fields of research, Neuro and Marketing, is referred to as neuromarketing. The word "neuromarketing" cannot be traced back to a single person because it emerged organically in 2002 by Dutch marketing professor 'Ale Smidts' just roughly 17 years ago, hard research and experimentation in the field were established in the 1990s. The term "neuromarketing" was introduced by different authors in 2002 but research in the field can be found from the 1990s. 'Gerald Zaltman' is associated with one of the first experiments in neuromarketing. The First Neuromarketing Experiment first recorded neuromarketing experiments were done at 'Baylor College of Medicine' in 2003 and were published in Neuron in 2004 by a Professor of Neurosciences. The study was an extension of a 1975 challenge experiment that had participants take a blind taste test between Pepsi and Coca-Cola.

As a result, neuroscience can be used in marketing to better understand consumer buying decisions or perceptions. It will provide marketing researchers with a greater knowledge of customer minds and the significance of consumer emotions in decision-making.

MAINLY NEUROMARKETING PERFORM IN THESE FIELDS



TOOLS AND TECHNIQUES

➤ **OUTSIDE REFLEX**

Body language, facial coding, eye contact, and empathic design are all popular outer reflex methods. They gather information which is made in traditional ways for the brain. As they perceive they get originated in the human brain. Emotional responses like Goosebumps and sweat are the outside reflexes which are measured with a lie detector.

Body Language It is an important part of communication. Body language like a Functional magnetic resonance imaging (fMRI) scanner provides a window into the brain's emotions. Communicational signals and Nonverbal emotions are communicated through muscular contraction and relaxation in body language. It also involves intentional and unconscious bodily motions, gestures, and posture.

Facial Coding It is the process of recognizing and categorizing facial expressions that are connected with human emotions. Facial expression patterns and Specific stimuli are recognized, decoded, and used in marketing. The art of interpreting facial emotions has become a science. Neuromarketing techniques may be used to "read faces" with unparalleled precision, just as they can be used to monitor eye movements and brain activity. It works like this- when we smile, show rage, or make any other type of facial expression, we engage our muscles. These minute muscle movements can be reliably quantified using sensors, allowing people to discern expressions and feelings they aren't even aware of. A little smile or grin does not reveal the full extent of a person's emotions at any particular time, but facial coding aids marketers in reading and interpreting minor reactions that reveal information about people's thoughts. They are sometimes even capable of foreseeing future actions.

Eye Tracking The subconscious brain's reactivity to stimulation is shown by eye-tracking. This procedure is dependable. The data gathered by eye tracking is utilized to create successful advertising and websites. Eye-tracking as the name implies involves following the eye movements of participants in a study. It's a technology that lets your company view through the eyes of potential customers, not only in labs but in real-world circumstances as well. Because contemporary eye-tracking devices are small and light, study participants can wear them while shopping or watching television.

Pupillometry is a simple procedure that examines the size of a person's pupils to determine whether they are dilated or not. This statistic is significant because people's pupils dilate when they are looking at something they enjoy. This is useful in marketing since it can be used to improve a variety of things, from websites to packaging, in addition to indicating whether or not people appreciate a product. Fortunately, Pupillometry is a

comparatively low-cost procedure. It can also be combined with other neuromarketing techniques like eye tracking.

➤ **INSIDE REFLEXES**

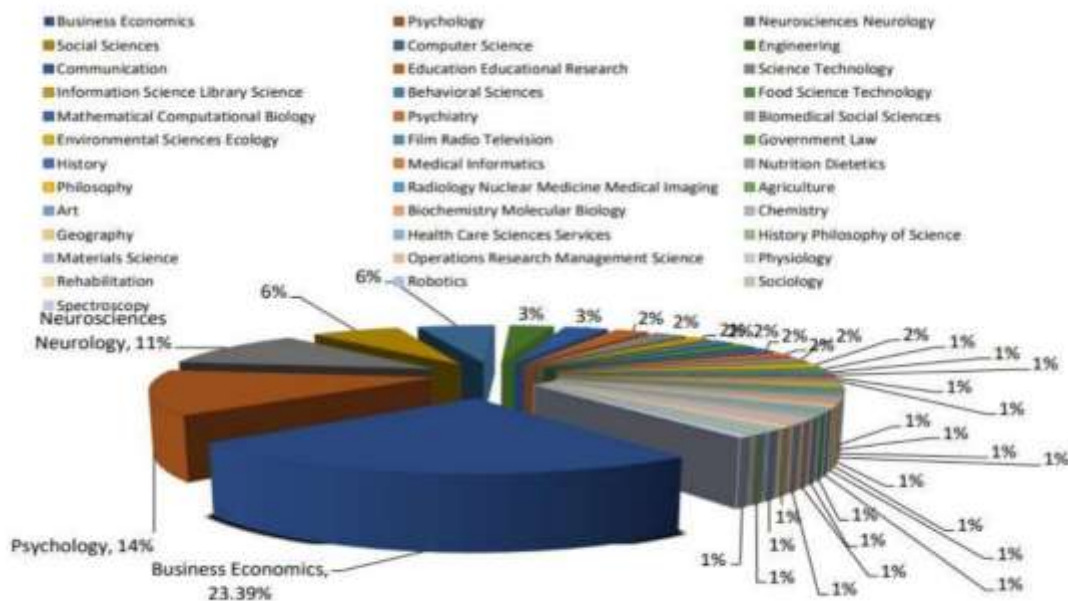
The inner reflex method allows looking into the brain. It is accomplished by the use of a variety of procedures including brain scans. It has the most influence in advertising when it comes to packaging. During the duration of advertising, it influences the emotional attachment of a person to the product and creates a psychological effect on a potential consumer.

EEG Electroencephalography (EEG) is a Neuro-research technique that measures brain activity. It is an electrical picture of the activity of the brain. Electroencephalography creates a data record of the electrical signals of the activity of the brain using electrodes. Brain activity can be used to measure the relative attraction of a product to a buyer. Because of its millisecond temporal resolution, EEG can detect brief bursts of brain activity. And Another issue is the lack of accurate spatial resolution (approximately one centimetre).

Functional Magnetic Resonance Imaging (fMRI) An MRI scan is performed to know the blood oxygen levels. fMRI is a neuromarketing technique for examining changes in brain activity between various brain areas. The advertising stimulation increases the flow of oxygenated blood to certain brain areas. This is assessed and compared to the baseline to determine the amount of activation caused by the advertisement stimulus.

Sensory Marketing Neuromarketing includes many practical and functional uses, such as sensory marketing, in addition to the methodologies outlined above. We can influence consumers without them even realising it by using neuromarketing breakthroughs. Sensory marketing can take several forms, including touch, sound and smell. However, they are all centred on persuading the audience to think of a specific brand when they are exposed to sensory stimuli. The use of sensory marketing is exemplified by smell. Supermarkets, for example, boost the fragrance of fresh bread to draw customers to the bakery aisle and encourage them to buy. Sounds are a valuable resource as well. It's been proved, for example, that when consumers hear high-pitched sounds, they pay more attention to lighter-colour objects and when they hear low-pitched sounds, they pay more attention to darker objects.

Managers should also challenge this new marketing phenomenon in order to make the brand image into the subconscious brains of customers. In these firms, the Neuromarketing professionals created FMRI, EEG, Eye Tracking, GSR, Empathy Design, and Cognitive Analyses techniques to get customers' interest using neuroscience. (Priyanka Singh)



Source:

https://www.researchgate.net/publication/364113599_NEUROMARKETING_HUMAN_BEHAVIOUR_A_STUDY_OF_CONSUMER_PSYCHOLOGY

This pie chart shows the percentage of neuromarketing technology used in various sectors to better understand consumer behaviour and psychology. (Dr. Mehrbakhsh Nilashi)

PROS AND CONS OF NEUROMARKETING

➤ **PROS:**

Obtaining a complete picture from your customer's Traditional advertising research studies can provide so much insight into consumer attitudes. Whether we're thinking about surveys, reviews and testimonials, phone calls, or social media comments, it all contributes to an exterior image of how customers see your company. One of the advantages of neuromarketing is that it allows you to tap into consumers' inner reactions to your brand. Certain trends can be readily established, which can help you stay ahead of competitors in the long run.

Improving your information by using psychological reactions When you read a book or watch a movie, there are always certain parts that trigger different reactions in you. Neuromarketing allows companies to explore those reactions based on the content they provide their customers with. Whether we are talking about the landing pages of your website, informative blog articles, social media posts, email marketing campaigns, images, or videos – they all have triggers that can help you establish what creates a reaction for your target audience. As a result, companies are better equipped to adapt existing content and create more effective future content, specifically aimed at pleasing their audience.

Collecting concrete and credible facts We frequently hear stories about how people respond to various companies, logos, well-known products/services, and so on. These are, however, your automatic responses, which took years of research to develop and sustain. Neuromarketing enables marketers to tap into consumers' subconscious reactions, allowing businesses to focus on influencing such reactions.

Getting value for money Modern digital systems and applications have significantly reduced the research cost while improving the results' quality. Online application tools, which can be utilised by even the most inexperienced market researchers, now give quality and experience of insights previously unavailable to professional market research firms, and at a cheaper cost.

➤ **CONS:**

Moral Concern Some people believe that neuromarketing penetrates clients' minds. Neuromarketing, on the other hand, does what a trained professional does. It merely 'learns' your habits and generates intelligent outcomes.

Expensive technology Neuromarketing is not only expensive but also consumes a huge amount of time in studying and understanding how people react to marketing practices. Furthermore, neuromarketing makes use of sensors and magnetic fields, which prove dangerous to the health of the subjects. It relies on the process of priming, which enables the brain to recall a particular topic, which is again a concern of privacy.

Knowledge and skill efficiency the better the quality of thoughts you may achieve, the more particular knowledge you have. It used to be that having a scientific education was required to evaluate the waves and charts provided by neuro-tools. It is no longer necessary because reports have become more understandable. However, figuring out what all these plots, data, and analytics signify will require some effort.

Privacy All of the discussion surrounding the GDPR (General data protection regulations) demonstrates that individuals want more control over the information they disclose. As a result, we should seek to improve data protection technologies and methods. And it's not just the information we get through neuro-tools. It's debatable if providing an incentive to make customers happier by improving the product and purchasing experience is a crime. In any case, expect people to continue to regard attempts to hack into customers' minds as infringing on their privacy rights and personal life.

COMPANIES THAT ADOPT NEUROMARKETING TECHNICIS

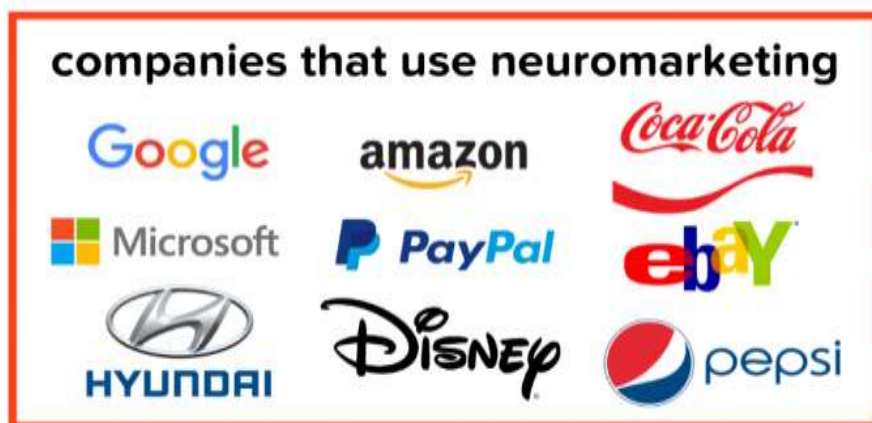


Figure: 1.2 Companies who adopt Neuromarketing

Source: <https://www.bing.com/images/search>

Hyundai A well-known example of the use of neuromarketing in design is Hyundai and their prototype tests. Hyundai evaluated the design using the EEG approach. Hyundai uses EEG to identify preferences and what kind of stimulation might lead to a buying decision while allowing people to explore automobile prototypes. Hyundai later made external design changes based on the findings.

Yahoo employed neuromarketing to evaluate a 60-second television commercial. The advertisement showed joyful, dancing persons from across the world and was a part of Yahoo's new branding effort, which aimed to attract more users to the search engine. Before showing the commercial on TV and online, Yahoo conducted some EEG testing. The advertisement performed well in the neuro-tests, demonstrating activation in regions governing memory and emotional thought.

Paypal Bay's PayPal uses neuromarketing to encourage more e-commerce customers to use its online payment service. PayPal observed that advertising emphasising USPs like speed and convenience elicited a considerably stronger reaction in the brain than those highlighting functions like safety and security. These findings were utilised by PayPal while developing new advertisements for their online payment service.

Coca-Cola is a strong believer in neuromarketing and has built its own lab. They can use brain activity measurements on volunteers to identify which commercials are likely to provide the best outcomes. Because neural activity provides impartial findings, this is a much more successful means of creating a marketing strategy. If a corporation asked a client if they liked an advertisement, the customer might not tell the truth. Perhaps they don't want to upset the corporation by saying they appreciate an ad even when they don't. However, by monitoring brain activity, marketers may obtain accurate results every time.

Facebook While customers may not always want to be honest with a firm that has angered them in the past, they are not necessarily suppressing the facts on purpose. People may be unaware that they are reacting to stimuli in an unconscious manner. Facebook examined how its advertising system affected perceptions and emotions that the test subject may not have been aware of. This is an efficient method for determining what will and will not work for your company.

Google uses neuromarketing technologies to go into our minds, according to the survey, viewers found overlays "compelling and engaging," creating high levels of attention and emotional involvement across different brands and forms of content. The advertising received a 6.6 on a scale of 1 to 10 for effectiveness, indicating "a high effect."

TRADITIONAL MARKETING VS NEUROMARKETING

Traditional marketing normally includes offline and online advertising materials. Traditional marketing strategies attempt to comprehend a customer's decision-making method from a conscious perspective, whereas neuromarketing seeks to comprehend customer behaviour. Neuromarketing works by identifying automatic reactions that are shared by the prospects or buyers. However, Traditional research is still required to fully comprehend a target population. Neuromarketing aims to acquire insight into unconscious emotions and decision-making to better understand

consumer behaviour, Because the human brain processes 90% of the information that enters it unconsciously, neuroscience provides us with significant insight into instinctive human responses that influence customer behaviour. On the other hand, Traditional marketing research approaches, collect data about what people think, feel, and believe through consumer surveys, focus groups, and external observation. These older methods are more effective at revealing conscious decision-making. Common types of traditional marketing strategies include billboards, direct mail, print ad, event marketing, broadcasting, print media, and some of the neuromarketing types are Eye-tracking, facial coding, Pupillometry, Biometrics, Electroencephalography, Functional magnetic resonance imaging, and skin conductance response.

E.g., Coca-pervasive Cola's use of the colour red is one of the most recognised instances, but many other firms have employed the colour to great effect. Colours have been separated into subgroups by neuromarketing professionals that specialise in colour and advertising as a reference to how they might be used effectively.

CHALLENGES OF NEUROMARKETING

➤ **Scalability**

Scalability is one of the most important problems of Neuromarketing. To satisfy their global research needs, neuromarketing studies adopt lab-based EEG and fMRI approaches that are too labour-intensive, slow, and expensive to measure. Only the largest companies with the largest funds have been ready to bear the cost of extensive Neuromarketing.

➤ **Ethical regulation**

There is still no clarity on ethical guidelines for neuromarketing research. Furthermore, there is a lot of misconception regarding what can and cannot be done in terms of detecting customer behaviour. So, if a business wants to know which product marketing is more successful for their target buyers, or which form element of their product has a stronger link with the emotion of happiness, that is why using this subconscious knowledge is a breach of trust in consumers. Organisations should examine some of these fields When investigating neuromarketing which is Manipulative, invasion of privacy, exploitation of the vulnerable, rules and regulations, and breaks autonomy.

➤ **Trustworthiness**

Some promoters of Neuromarketing damaged the field's image in the early days by making overstated, untested, and scientifically irresponsible claims. One of the most important aspects of prospect interaction is data collection. To identify and understand prospects, marketers have a large and growing source of data that is based on neural senses and is therefore many times unreliable. Marketers use neuromarketing strategies to obtain information from individuals so that they may work with them more effectively.

➤ **Complex and variability in nature**

There is the issue of unpredictability and variability in the collection of data. Neuromarketing studies are mostly used in scientific research. When conducting an experiment, there are several aspects to consider. This is especially true in the field of neuromarketing, where you are ultimately trying to understand how the human mind works for commercial interests. What we know about individuals (targeted prospects) is that the outcomes are highly variable.

Statistical analysis is significantly used in brain research. Different procedures can provide varying levels of significance, and depending on the procedure, you may reject one hypothesis while accepting another.

OBJECTIVES OF STUDY

- To understand neuromarketing and its role in the current era.
- To study the differences between neuromarketing and traditional marketing research methods.
- To study the challenges of neuromarketing.

REVIEW OF LITERATURE

Pluta-Olearnik, M., & Szulga, P. (2022) Described the significance of the emotional factor in both consumer decision-making and assessing the impact of marketing initiatives. This article aims to describe the present state of the application of neuromarketing and its techniques in the analysis of consumer behaviour, as well as to demonstrate how emotions and the unconscious portion of customers' brains play a crucial role in consumers' purchase decisions. It is an interdisciplinary review article highlighting new opportunities for researching observable consumer behaviour and their brains encompassing decision-making processes.

Frederick, D. P. (2022)The authors highlighted the idea of Neuromarketing and its impact on customer decision-making. The research examined the advantages of various neuromarketing approaches on numerous market input devices. This research was based on available literature and research studies. The study shows the importance of neuromarketing principles and concepts for introducing neuroscience into marketing and understanding customer behaviour, which could aid in the development of innovative neuroscience-based marketing techniques, also this study focuses on customer perception and conscious or subconscious purchasing decisions and it covers the ethical concerns with neuromarketing.

Gogoi, P., & Mochahari, S. (2021)In this study, the authors examined the awareness of neuromarketing as a method for analysing consumer behaviour among indigenous North-Eastern companies in India. In this study, the data was collected from a questionnaire from new start-up companies in northeastern India. The research will assist local entrepreneurs and marketers in learning about Neuromarketing and improving their tools and strategies for researching consumer behaviour. The author concluded that neuromarketing is a phenomenon that cannot and will not go unacknowledged, with the rate of increasing competitiveness in global businesses.

Mansor, A. A., & Isa, S. M. (2020)This study focused on the rapidly emerging topic of neuromarketing and aims to clarify the fundamental concepts of neuromarketing in order to ensure that its latent practical utility can favourably contribute to the field of marketing. This study will help researchers in developing more effective approaches to providing better and more efficient services to consumers by utilising scientific methodologies to analyse how consumers respond to marketers. The study's findings show that by using event-related potential (ERP) and eye tracking, automotive businesses can better understand their customers' conscious and unconscious thinking and design relevant marketing campaigns.

Kumar, A., Gawande, A., & Brar, V. (2020)In this review paper, the author explained the deeper concept of neuromarketing, as well as its current state of potential and problems in Indian marketing. This review has focused on how neuromarketing can be used to increase sales. The author interacts with five marketing specialists and they stated that neuromarketing has lots of potential in India. In the conclusion, the literature review has focused on the uses of neuromarketing in telecom, medical tourism, and retail marketing, all of which have effectively used neuromarketing concepts to increase sales.

Lichev, G. T. (2017) This study explained to better understanding towards the role of psychological factors in affecting customer behaviour. This study was multidisciplinary, the objective is to find reference points for developing a comprehensive theoretical research model that will be empirically evaluated and used to effect positive changes in the activities of commercial organisations in Bulgaria. In this paper it is concluded that raising the issue of psychological factors in determining customer behaviour attempts to increase interest in significant and timely issues and it is done in three ways: for the scientific community (experts in the economy of commerce and marketing), for the general public (Bulgarian consumers), and, most importantly, for practical business operation in Bulgaria (commercial companies). This could help in raising awareness of the situation and carrying out the difficult process of changing the mindsets of businesses and consumers.

Kumar, Harit. (2016)This study identified the essential function of neuromarketing techniques in understanding of customer buying behaviour. It focused on the potential application of Eye Tracking as a neuromarketing approach for market research. This study is conceptual in nature and is based on literature reviews. The findings of this paper suggest potential applications of Eye Tracking in marketing techniques such as segmentation, targeting, and positioning. neuromarketing techniques, particularly eye tracking, will be used in marketing research in the current and future scenarios.

DISCUSSION AND CONCLUSION

Companies that work in a competitive global environment strive to improve their market position and meet their marketing goals by conveying the significance of their products to existing and prospective customers. Companies now have access to get more information about how consumers' minds work through the neuro senses and neuromarketing tactics. The study has the following purposes; discuss the importance and potential contributions of neuromarketing, demonstrate the advantages of neuromarketing as a marketing research tool compared to traditional research methods, discussing on the ethical issues involved with neuromarketing research, and present the main neuromarketing techniques that are being used for the development of marketing research. Traditional and neuromarketing studies can both provide useful information on how customers make

buying decisions, consciously and unconsciously mind. More trustworthy findings should be available in the future through advanced neuromarketing research. Consumer surveys, focus groups, and outside observation are all common methods which are used in traditional marketing research to learn what consumers think, feel, and believe. These traditional techniques are effective at exposing conscious thought processes, and other hand the modern marketing approach which is neuromarketing is used conscious as well as the unconscious mind to read potential buyer perceptions and behaviour.

REFERENCES

Pluta-Olearnik, M., & Szulga, P. (2022). The Importance of Emotions in Consumer Purchase Decisions—A Neuromarketing Approach. *Marketing of Scientific and Research Organizations*, 44(2), 87-104.

Frederick, D. P. (2022). Recent Trends in Neuro marketing—An Exploratory Study.

Gogoi, P., & Mochahari, S. (2021). AWARENESS OF NEUROMARKETING AMONG THE SELECTED INDIGENOUS STARTUPS OF NORTH EAST INDIA. *Journal of Contemporary Issues in Business and Government Vol*, 27(2).

Mansor, A. A., & Isa, S. M. (2020). Fundamentals of neuromarketing: what is it all about?. *Neuroscience Research Notes*, 3(4), 22-28.

Kumar, A., Gawande, A., & Brar, V. (2020). Neuro-Marketing: Opportunities and Challenges in India. *Vidyabharati International Interdisciplinary Research Journal*, 10(2), 214-217.

Choudhury, Raja. (2020). NEUROMARKETING & HUMAN BEHAVIOUR (A STUDY OF CONSUMER PSYCHOLOGY).

Lichev, G. T. (2017). Psychological factors in determining consumer behaviour. *Eastern academic journal*, 1, 8-16.

Kumar, Harit. (2016). NEUROMARKETING: A NEW AGENDA FOR MARKETING RESEARCHES WITH PARTICULAR REFERENCE TO EYE TRACKING.

Fortunato, V. C. R., Giraldo, J. D. M. E., & de Oliveira, J. H. C. (2014). A review of studies on neuromarketing: Practical results, techniques, contributions and limitations. *Journal of Management Research*, 6(2), 201.

WEBSITES

<https://www.pnewswire.com/news-releases/google-uses-neuromarketing-insights-to-revolutionize-seo-according-to-business-marketing-expert-rhondalynn-korolak-197968681.html>

<https://www.straylight.se/tbt-remembering-five-of-the-best-known-cases-in-neuromarketing/#:~:text=TBT%3A%20Remembering%20five%20of%20the%20best-known%20cases%20in,television%20commercial.%20...%205%205.%20Pay%20pal%20>

<https://www.neuralexperience.io/what-companies-use-neuromarketing/>

<https://futureside.com/neuromarketing-how-much-marketing-has-changed-and-its-future-benefits/#:~:text=As%20the%20term%20implies%2C%20neuromarketing%20uses%20consumer%20behavioral,companies%20get%20a%20full%20image%20of%20their%20customers>

<https://www.researchgate.net/profile/Sharad-Agarwal-8>

<https://www.eminentseo.com/blog/what-is-neuromarketing-vs-traditional-marketing/>