



NEUROMARKETING- CURRENT SITUATION AND AVAILABLE FUTURE TRENDS IN INDIA WITH SPECIAL REFERENCE TO JALGAON DISTRICT

**RAHUL MANGAL
KUMAVAT**

Assistant Professor
JSPM's JSCOE, Hadapsar,
Pune (MS) INDIA

**DR. PRABHAKAR
SAKHARAM MAHALE**

Professor
Arts & Commerce College
Bodwad, (MS) INDIA

ABSTRACT

To understand how the power of neuromarketing works, we need to review how the consumer buying process takes place, how consumers react while purchasing. Thanks to some Neuroscientific techniques which give us proper understanding about consumer bias. It uses eyeball tracking and facial tracking methods to identify their behavior, preferences and also their reaction while chasing any product. In recent years neuromarketing terms have developed so far all over the world. In India there are so many people still unaware about their own feelings related to the product they actually desire. This study will help to examine 1) how Indian consumers react with their desired product after getting it without having proper idea about it. 2) to identify how their preferences change from one product to another on which condition 3) how they react when they see a new advertisement product 4) to study this changing preferences and behavior related to the product. The result will show how neuromarketing will be helpful to identify the current and future available market research for industries in India.

Keywords- Neuromarketing, Trends in Jalgaon District, Market Research. Indian Consumer Behavior,

INTRODUCTION

The most common concept lies in Neuromarketing is that it is scientific method which uses brain science to map the consumer behavior in order to identify their buying behavior related

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to the product they desire by using some neural technique where consumer brain perform function of buying and selection of the related product. Brain is the most essential part of the human body which help human to react with any condition where brain controls all the necessary process of thinking, feeling, touch, vision which are very necessary to find buying activity in brain. From recent years there is fast growth seen in the marketing industries where most of them spending huge amounts just to get consumer actual demand and wants which is very essential for MNCs to maintain themselves for future purpose and make accordingly products desired by their customer. Neuromarketing doing this effortlessly just adding some brain mapping technique and you will get unbelievable result from your customer, where you will get 96 percent of accurate information related to consumer thinking and their buying and preferences whereas old marketing technique will help to acquire only 4 percent of information from consumer which making huge differences in current market situation where information is very essential to any MNCs. Possibility is that most of the neuromarketing techniques are getting cheaper day by day in accordance to use by most of industries. (Ariely & Berns, 2010) According to study about 95 percent of the people are making decision with their subconscious minds only 5 percent make with their conscious mind which makes huge differences in order to identify the actual desire. Indian consumers are basically emotional related to any product where their feeling influences most of their purchasing powers. Many studies have identifies that most of the new products are coming in market but fails within six month just because of changing consumer preferences and do not reaching their simple objectives. Most of the companies are failed to reach to the emotional quotient of the customer where they suffer from huge losses in which some of them are vanished from the market as soon as they arrived in market. This things can be happens with

the wrongs branding, wrongs advertisements, unable to identify what consumer prefers, and unable to catches the target audiences. This is the main reason where outsider companies are unable to survive in India. Where India is the emerging market for retails sectors for most of the companies who are trying to grab Indian consumer preferences.

This paper will help to identify the current situation and future trends available in Indian market. What actual thinking of Indian consumer works accordingly with the reference Jalgaon District?

Objectives

- 1) To identify the consumer psychology while purchasing any product
- 2) To identify the perception of the Indian consumer while purchasing of the product
- 3) To identify that consumer are satisfied with the purchased product



- 4) To identify how many times a consumer got the exact product which he was thinking about having.
- 5) To identify the future prospect and usefulness of neuromarketing for Indian consumer

Research Methodology

Research methodology is the specific procedures or techniques used to identify, select, process, and analyze information about a Research topic. Research is about using established methods to investigate a problem or question in detail with the aim of generating new knowledge about it.

Neuromarketing helps to identify the consumer needs while tracking their brain responses by coordinating with neuroscience. Neuroscience has many research tools to find out the brain responses. Neuromarketing helps to identify the psychology of customers by collecting buying stimuli from the consumer brain. Neuromarketing uses brain mapping techniques to identify brain responses like fMRI, EEG, PET, SST, TMS, blood pressure, facial expression tracking techniques. In this paper we have used the survey method in which we have taken the survey of consumer located in Jalgaon district

Methods used to track the brain activity in regards to consumer buying behavior-

The brain is a part of the central nervous system that allows for the control of all mental and physical processes. It is an organ that is situated inside the skull. A human being, complete with feeling and thought 2014 (Minddisorders; Macmillan Dictionary);

The brain can be divided in several different ways. One can distinguish between the three brain regions of the forebrain, the midbrain, and the hindbrain. The forebrain is responsible for controlling and carrying out thought and speech, the midbrain for recognizing eye movements, and the hindbrain is in charge of all unconscious bodily functions like breathing and heartbeat (Oxford dictionaries, 2014). However, Renvoisé and Morin (2005) distinguish between the old, middle, and new brains instead of the three different types of brains. They contend that the decision-making process is handled by the old brain, thought is handled by the middle brain, and feeling is handled by the new brain. In order to understand the decision-making processes influencing consumer purchasing behavior, neuromarketing is concerned with the old brain when considering this division (Kampakoglou, 2012).

All consumer behavior is a function of the brain, an organ in and of itself. It's interesting that even though it only makes up 2% of the body as a whole, it uses up 20% of human energy. Another crucial fact is that, in order to maintain the tranquilly state, the human brain uses

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about 80% of its capacity unconsciously, leaving only 20% available for conscious thought (Morin, 2011). Given that humans are by nature hunters and collectors trying to survive, The "reptilian brain," which is primarily responsible for this function, was and still is used to scan the environment for potential threats. This part is able to process all visual stimuli without using the visual cortex, which is the biological justification for why people tend to prefer visuals over verbal cues or experiences over explanations in general (Morin, 2011). Given that the brain is one of the most intricate and interconnected biological organs ever created, with countless cells that are connected to one another, it should be clear that translating and interpreting the activity of the brain is a very difficult process (Purves, Fitzpatrick, Augustine, & Katz, 2008). Despite the fact that it is known that the decision to buy does not represent a binary social response, which means that one cannot predict that There are still high hopes for neuromarketing capacity to observe and analyses the entire brain in order to uncover novel, unexpected findings that provide fresh insights into the field of neuroscience (Lee, & Kacen, 2008; Hubert, & Kenning, 2008). One will undoubtedly make a purchase after using a specific advertisement.

Information in General Regarding Neuromarketing Technical aspects

Understanding the relationship between marketing efforts and consumer responses is the main objective of using neuromarketing techniques (Kumlehn, 2011). It is anticipated that doing this will enable an objective evaluation of brain activity in addition to the subjective self-assessment techniques (Hubert, & Kenning, 2008). The different techniques that are available in this field include body language. Eye tracking, Empathic design, Facial Coding, fMRI, EEG, MEG, galvanic skin conductance, and heart rate are among the more sophisticated methods (Calvert & Brammer, 2012), with the most sophisticated methods being EEG and fMRI brain imaging (Kumlehn, 2011). These technicalities are techniques designed to provide a closer look inside the brain, the "black box" (Kenning et al., 2007). The main benefit of using these more established techniques is that the data can be collected without conscious manipulation by participants, allowing for the documentation of unconscious bodily processes. As a result, neuromarketing metrics can be used in addition to self-report metrics. However, one must always remember that neuromarketing measurements typically take place in an artificial setting rather than a familiar one, which could skew the results of the tests (Dimoka, Banker, Benbasat, Davis, Dennis, Gefen, & Weber, 2012). Neuromarketing are techniques are used to sense the actual stimuli from brain for buying behavior which also recognize some facial expression also to sense properly with brain mapping techniques some of them are as follow

1) Facial Expression-



A specific type of body language known as "facial expression" links a person's emotions to their facial expressions in a predictable way. Dan Hill is a significant proponent of this approach. He created 24 different muscle movement combinations that can be linked to seven fundamental emotions. The technique is said to be universally applicable because, according to researcher Darwin, people from various cultures actually share the same natural facial expressions.

2) **Body Language-**

Keep in mind that outside reflexes are bodily activities that are difficult to suppress and primarily reflect an individual's emotions. Similar to an fMRI scanner, an analysis of these biological reflexes, such as body language, can provide access to the brain. The primary distinction is that with body language, one is more focused on the nonverbal communication, specifically the tightening or loosening of muscles. Since a tremendous amount of communication is actually expressed through body language, the amount of communication that occurs through this is frequently underestimated. As a form of nonverbal communication, body language includes gestures, mimicry, posture, and other physical movements that can be expressed consciously or unconsciously.

2) **Eye ball tracking-**

The eye tracking technique, which provides inside information about internal brain activity that is a non-suppressible reflex, is the final example of the outside reflexes we have discussed. Since it was used in the 1980s for relatively simple methods, the method itself is not new to the world. These days, the entire eye-tracking procedure is computer- controlled, expanding the range of potential outcomes. Since it is simple to track what a person actually sees and what he or she pays special attention to with these things, the method is relatively simple to apply to advertisements, mailings, websites, and online games.

These outside body expressions are used to evaluate or track the brain responses to sense their behavior. With the help of this body movement modern marketer can easily track them and also inner brain responses with the help of neuroscience which is using some brain mapping technique to identify their sense for buying behavior

1) **EEG**

Electroencephalography, also known as EEG (Postma, 2012), is the electrical reproduction of brain activity. Even though the EEG technique is an older one, it is still regarded as a suitable method for determining changes in the electrical field in particular brain regions (Ariely, Berns, 2010; Morin, 2011; Camerer, Loewenstein, & Prelec, 2004; Madan, 2010). It uses a

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variety of electrodes that are affixed to the skull and detect electronic signals that correspond to the state of the brain at the time (Postma, 2012; Morin, 2012; Ariely, & Berns, 2010; Madan, 2010). Typically, a 20 to 40 minute short period recording can be made. Neurons are the cells that control all of our cognitive reactions. As a result, each human being is able to control more than 100 billion objects, all of which are connected to trillions of synapses (Morin, 2011)

2) **FMRI**

The term "MRI" stands for "magnetic resonance imaging," which essentially refers to a device that uses magnets to create an anatomical representation of the brain (Postma, 2012). Blood oxygen levels are measured using an MRI scanner, which can indicate increased brain activity in specific regions (Ariely, & Berns, 2010). This is how the measurement operates: The magnetic field can detect the amount of blood oxygen in the brain. Because the brain needs oxygen to function, if neural activity in a particular area of the brain is increasing, the oxygen-rich blood also increases.

The so-called "fMRI" is a subfield of MRI and the newest and most widely used brain imaging technique in the field of neuromarketing used to investigate differences in brain activation (Postma, 2012; Dimoka et al., 2012; Madan, 2010; Vecchiato et al., 2011). The f stands for "functional," indicating that it is a process rather than a snapshot being observed.

3) **MEG**

A comparable non-invasive method to examine neural activity is magneto encephalography. This procedure, which is closely related to the EEG method, has recently attracted more and more attention. The MEG method records the magnetic fields of neural activity, whereas the EEG method conducts local voltage fluctuations on the scalp. This technique is frequently used in neurosurgery because it makes it possible to identify recovery processes following injuries, which ultimately improves the outcome of treatment. Highly sensitive SQUID-detectors are used in the practical measurement, and interference fields are being eliminated (Braun, 2007).

These techniques are used to identify the hidden brain information which is true in relation to their preferences while buying. this information will be useful to sense the factor influencing brain buying behavior. also these are costly technique of neuromarketing as the marketing revolution going on this are getting cheaper day by day so that other than MNC organization can also use them for their marketing purpose and to identify consumer needs.

Research Problem

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When marketers try to know what their consumers actually demand all the time there is a lack of precision in traditional marketing techniques to predict human behavior. While purchasing neuromarketing helps us to identify the human conscious needs when consumers don't even identify them. This research is helpful in finding Neuromarketing usefulness for identifying Indian smart buyer genuine needs and also their working with modern marketing concepts with the help of E-commerce websites. In this research the work is taken on the buying tendency of the consumer and also their will to contribute in neuromarketing methods.

Hypothesis-

- 1) **H0:** There will be no increase in the awareness of Neuro marketing among consumers.
- 2) **H1:** There will be a significant increase in the awareness of Neuro marketing among consumers.
- 3) **H02:** There will be no increase in the perspective of neuromarketing among consumer.
- 4) **H2:** There will be increase in the perspective of neuromarketing among consumer.
- 5) **H03:** There will be no increase in the satisfaction of consumer after neuromarketing application.
- 6) **H3:** There will be increase in the satisfaction of consumer after neuromarketing application.

Review of Literature-

- 1) **Ariely & Berns, (2010);** Kenning & Plassmann, (2008); Lee, Broderick, & Chamberlain, (2007); Plassmann, Ambler, Braeutigam, & Kenning, (2007) reviewed numerous paper and concluded, the start of the field of purchaser neuroscience has generated wide-ranging, ongoing debates of whether or not this hybrid subject blessings its parent disciplines (client psychology and neuroscience).
- 2) **Zaltman, (1990)** Harvard professor advanced first-class-recognized era of neuromarketing, as soon as it changed into patented below the name of Zaltman Metaphor Elicitation technique (ZMET). The essence of ZMET reduces to exploring the human subconscious with in particular decided on sets of photographs that cause a nice emotional response and activate hidden snap shots, metaphors stimulating the acquisition. Graphical

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collages are built on the bottom of detected pix, which lays inside the basis for commercials. Advertising era ZMET speedy gained recognition among lo ads of main agencies-customers inclusive of Coca-Cola, popular vehicles, Nestle, Procter & Gamble.

4) **Renvoise, P., Morin, and C. (2007)** .In this book the work is focusing on the brain Research. The study discusses about how to get messages from brain about buying of a particular product or services where selling business got toughen by time here the neuroscience has come over with the neuromarketing as a new branch in marketing to increase the selling and influencing effectiveness with the latest brain research and revolutionary marketing practices. Author Patrick Renvoise and Rhristophe Morin teach highly effective technique to help and deliver powerful, unique and memorable presentation that will create potential buyer.

5) **S, Jayakrishnan (January 12, 2011)** The work in this paper is focusing on Neuromarketing, Functional Magnetic Resonance Imaging, EEG, and Caudate Region, Old brain, Reptilian Brain, Neurosense, Neurofocus, sales brain, Rural Market, Opinion Leaders, Packaging aesthetics and brand association where it states how human brain influences our purchase intention. Neuromarketing can help better understanding for rural consumer in their purchase intention. It contain about Indian rural market-why they are different also what difference Neuromarketing can make in rural market in India. The work in this paper concluded that Neuromarketing can provide valuable insight about consumer behavior which will help to develop product and services as consumer can demand and expecting more evolution in this area for rural area and urban areas consumer for related product and services.

Interpretation of data

In this research work the data is collected by

- 1) By Observation.
- 2) By Questionnaire.
- 3) By survey.

Research Data

Structured questionnaires are prepared for data collection. there are about 20 questions of questionnaire are prepared for data collection to identify the awareness about the neuromarketing among the citizen in Jalgaon district

1) Primary data:

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Citizen In Jalgaon District	Response
Male	56
Female	44
Total	100

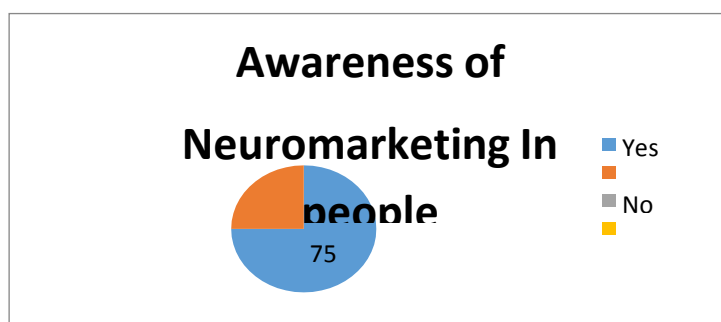
2. SECONDARY DATA: -

This paper reviews the literature on the basis of secondary data collected from various references which already exist in published form such as articles, books, newspaper, national/international journal, magazine, etc.

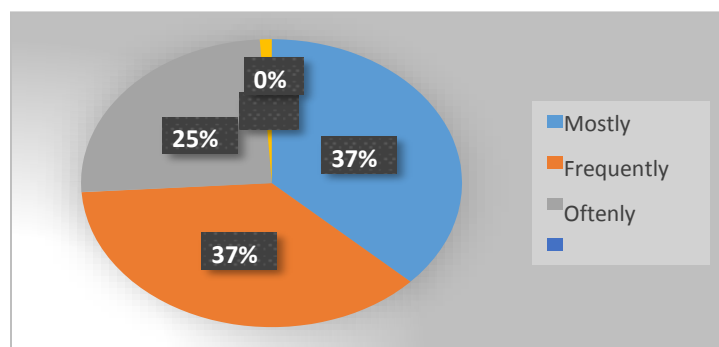
Data Analysis-

Data identified on the basis of question prepared and share on Google form among the people in Jalgaon district

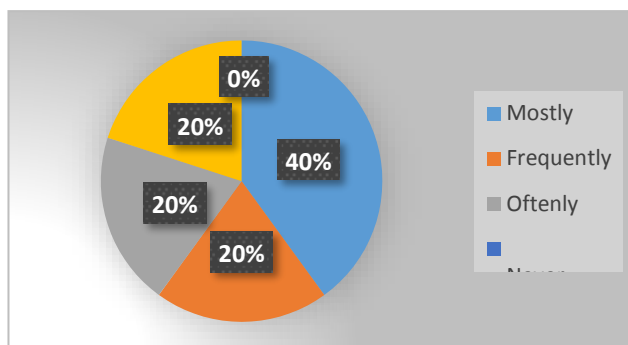
Awareness of Neuromarketing among people of Jalgaon District.



People have found Neuromarketing a helpful tool to satisfy their needs and also they are interested in contribution in Neuromarketing study to satisfy their own needs



Mostly people are unaware of their purchase and sometimes they purchase some others goods instead of their choice in that case consumer got diverted by the salesman and it doesn't given value for their money



Finding

There should be more study and more techniques are needed to identify the human mind behavior while purchasing any product or making purchasing decision. It is necessary to use neuromarketing on ground level to study more about neuromarketing tools.

The demographic finding reveals that in this research the female respondent were the majority with age between 30-45 having mostly private company employees and freelancer with average salary which influencing their buyer behavior. In this research we have found that consumer feeling that they get diverted while purchasing their choice of product also they having problem with selection of product which will give value to their money. If we provide help to consumer about their actual need that will give them satisfaction after purchase. In this case consumer will contribute in Neuromarketing for helping themselves for goods/services selection. As we have available many Neuromarketing tool to sense consumer need which are costly to use in ground level.

CONCLUSION

In this paper we have provided the brief overview of Neuromarketing also explained their technical tools in details and this technique help to identify the basic factor which influencing the consumer behavior. This paper provided the exact working of neuromarketing with the help several question provided in questionnaire which help to identify the exact need of neuromarketing on the ground level also it help to determine the purchase behavior of the consumer on the basis of responses. We have found that if as marketer are already spending lots of amount to track consumer interest and also neuromarketing is helping factor in their search but if we use it on ground level for consumer interest sensing it will be really very



helpful for every marketer. Ethics should have to be managed as it is directly tracking human mind so it is also mandatory to control neuromarketing in terms of ethics

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