NEUROMARKETING – A BUDDING TECHNOVATIVE MARKETING STRATEGY

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ABSTRACT

Consumer characteristics are always unique and unpredictable. Cognitive and psychological processes influence consumer responses to the marketing program. Cognitive processes also include cognitive biases which restrict the consumers to make a clear decision about what they actually require which could delight them in their very first purchase. Identifying and analyzing these sub-conscious needs has made the marketers to lead their research towards the newly emerged marketing strategy which is known as “Neuromarketing”. The term itself shows that it deals with neuroscience or human psychology and marketing. This article will focus on the benefits of neuromarketing strategy on the various phases of business processes. Neuromarketing investigates the instinctive levels of consumer brain that motivates them to make the purchase decision. The study proves to be a dynamic business strategy which provides an in-depth insight on consumer understanding which will help to ensure that right products are marketed to right consumers. Hence, this particular scientific technique probe the cognitive thought process as consumers today is keener on their choices. They are likely to choose those products and services which are suitable for their environmental impact. Thus, marketers have to concentrate on mass market rather than segmented market.

Keywords: Consumer Buying Behaviour, Neuromarketing, Scientific Tools, Cognitive thought process,

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1. INTRODUCTION

Consumers are the prime determinants of the success or failure any product or brand. Their basic psychological process plays a vital role in preferring an item in the first go. It heavily lies in the hands of the marketers to understand every fact of consumer behaviour. The
consumers are exposed to a large number of brand communications a single day which makes the decision or selection procedure a hard task. They cannot possibly attend to all these. Hence, most of these stimuli would be screened out. The marketers thus have to work hard to attract consumers notice. They have to put attention to explain which stimuli people would be concentrating more on. According to the previous studies conducted, they are:

- More likely to notice those which relate to the current need.
- More likely to notice those situations that they can anticipate
- More likely to notice those stimuli whose deviations are large in relation to normal size of the stimuli.

Hence, marketers need to use recapitulation technique for selective retention of their brands and also to make sure that their message is not overlooked.

According to the cognitive psychologists, consumers gather the information from their experiences that they encounter in their life. People learn to act from their previous experiences and learning is produced through the interplay of drives, stimuli, cues, responses and reinforcement. The learning theory states that “the marketers can build demand for a product by associating it with strong drives, using motivating cues and providing positive reinforcement”.(Philip Kotler and Kevin Lane) Marketers role in identifying the behaviour, preferences, attention, perceptions and habits of the consumers need to be analysed. The later said variables are the result of certain processes in the brain which are explained and justified by the neuromarketing technique.

Neuromarketing works at various levels namely commercials, advertisements, product design, packaging, pricing, store design etc. to better understand the impact of marketing stimuli and also to measure audience responses to accelerate the decision making process. It signifies the importance of emotion that is relevant in human decision making. At strategic level, the majority of concerns working under Neuromarketing are highly active in market research domain. Thus, Neuromarketing depends largely on human interactions like consumer experiences on the quality of the product and services provided to them. They hence bring in some heuristics on how to provide better quality in all terms to delight the consumers.

2. OBJECTIVES OF THE STUDY
The main objectives of this article are listed below:
1. To introduce the concept of Neuromarketing.
2. To understand the benefits of neuromarketing strategy on the various phases of business processes.

3. BACKGROUND OF “NEUROMARKETING”
The term Neuromarketing is a combination of two major fields namely Neuroscience and Marketing. This particular term was first used by a German professor from Erasmus University Ale Smidts in 2002. Neuromarketing focus on studying the sub- conscious mind of consumers. It is the process of studying the consumer behaviour from the brain perspective. These techniques are also being used by the market researchers to extract information for managerial decisions. They use latest and scientific brain scanning technology to know how the consumers make their purchasing decisions. Hence, Neuromarketing can be defined as “the application of neuro scientific techniques to analyze and understand human behaviour in relation to markets and marketing exchanges”(Wilson, Gaines and Hill 2008).

Neuromarketing is an emerging field of marketing. The scientific part of the technique completely concentrates on the human brain. Here the brain is classified as New brain, Mid brain and the Old brain. The Old brain which is also known as the reptilian brain due to its...
similarities with reptiles is the lowest evolved part of the brain. Mid brain is known as the center of all feelings and emotions. Their major role is to interpret and transfer the so called feelings and emotions to other parts. Last part of the brain is the Old brain which is known as the decision making center. It is where the buy button is located. This particular part is responsible to decide how to react to the information. Thus, these three parts play a vital role in influencing the purchase decision of a consumer.

Neuroscience facilitates pure scientific technique to measure the brain activity of a person as it is one of the complex organs in the human body. The major technologies used in mapping of human brains to product stimuli are FMRI (functional magnetic resonance imaging), EEG (electro encephalography), MEG (magneto encephalography) and Eye Tracking. These techniques could penetrate to the human brain and guide the consumers in changing their preferences or purchase behaviour. It also leads to better product development and also developing creative and effective commercials which would create a long-term impression about the product in the mind of the consumers.

4. REVIEW OF LITERATURE

Cristina de Balanzo Bono and Nuria Serrano Abad (2011) explored the relevance of the unconscious in the behaviour of the consumers by providing innovative findings of cognitive neuroscience and biometric technique. Recent studies on emotion, implicit memory and creativity were inculcated, focusing on their implication in the advertising process. The results suggested that the new knowledge should be used to validate, revise or compliment existing knowledge and measurement methodology or tools. The capacity of the brain to receive and manage infinity of stimuli, internal and external, conscious and unconscious should redefine many points of departure in relation to both creative strategy and the reception of the message by the target audience.

Bijal Mehta, Rasananda Panda (March 2016) theoretically investigated the contour between the proximate and the ultimate level of consumer decision making. According to the authors, neuromarketing is growing rapidly as a promising research tool. Different streams have varying thoughts on this technique, its relevance and its ethical usage can be a possibility of reaching a contour whereby the most critical element namely price (from both economic and a marketing perspective) can be decided suitably by the marketers based on the responses received from the consumers on promotional, product and distribution stimuli during experiments.

Emily Glaenzer, Colby College (2016) investigated the radical link between the brain and the mind. This particular study conducted, served as a beneficial guide to understand the impact of neuromarketing and the ability to which neuromarketers are able to understand how factors regarding product, price and promotion which may affect a consumer’s decision. Neuromarketing combines neuroscience, genetics, economics and psychology to understand how specific neuron activation may lead to large scale market behaviour. Neuromarketing can effectively support traditional marketing claims and aid marketers in understanding how to market products towards the consumers more effectively.

Joe, Plummer, Bill, Don – March 30, 2007 developed two new definitions for attention and engagement. According to him active attention is a conscious rational construct and is defined as the amount of conscious ‘thinking’ going on when an advertisement is being processed. Engagement is a sub-conscious emotional construct and is defined as the amount of ‘feeling’ going on when an advertisement is being processed. He presents evidences to show that these two constructs operate independently of one another. His research suggested that if the advertisers wish to build strong brands then emotional engagement is more important. If advertisers wish to communicate rational news and information, then their
advertising has to achieve reasonably high levels of attention to instill these into the consumer’s memory. Hence, according to the author if they need to build a strong brand then they need to achieve both engagement and attention.

Dr. Ritty Francis, Reena. R, November 2016 focuses on acquainting the readers with the brand new concept of neuromarketing and its prominence for companies and consumers. The authors adopt a case study approach to highlight the various neuromarketing techniques used by the companies. They also discuss the limitations of this concept in marketing arena. In this study it was found that the increased use of neuromarketing techniques for the evaluation of customer preferences and decision making process is considered to be an advantage for customers and marketers simultaneously. They found that ninety five percent of all the thought occurs in our sub-conscious minds which traditional research methods can’t measure. Carrying out these kinds of studies is also found to be expensive, but these researches can scale up the performance of companies and help them to reach comfortable results.

Steven Bellman, Robert. F Potter, Shiree Treleaven Hassard, July 23, 2011 carried out a pre test/post test experimental design to determine whether using popular mobile phone apps affects brand attitude and brand purchase intentions. The results of the tests conducted showed that using these apps has a positive impact and an increasing interest in the brand along with the brand’s product category. The apps with an informational user centered style were more effective at shifting purchase intention, as they most likely concentrate on the user by encouraging making personal connections with the brand. The study suggests that the most successful type of app is the one that is the most intensive to produce. It was also found that designing an informational app that consumers find useful in their daily lives is a lot more difficult task than building an experimental app by creating or adopting an interactive game. Hence, the study confirms that using these apps has appositive persuasive impact, increasing interest in the brand and also the brand’s product category.

Prof. (Dr.) Manish Madan, Ankita Popli attempts to identify the preferences of the Indian consumers. They identified the key variables that influence the acceptance of neuromarketing in the Indian society. The hidden strands of the “Human Black Box” act as an imperative tool for concerns to strategize their marketing attempts. The findings of the study paved way to form a structural framework which provides insights into the factors which will help neuromarketing to flow smoothly into the Indian society.

Harit Kumar, Dr. Neha Mathur, Dr.Sangeeta Jawhari (May 2016) emphasized on the eye tracking technique that forms an important part of neuromarketing technique. According to the authors they suggested prospective uses for eye tracking in marketing. The technique mainly concentrated on segmentation, targeting and positioning. It studied the visual attention of customers against marketing stimuli and how these were related to the cognitive and emotional responses of consumers. The technique helped to guesstimate an eye’s point of connection and determine precisely where the user’s attention is directed.

Nick Lee, Amanda J Broderick, Laura Chamberlin, (February 2016) have made an attempt to widen the scope of neuromarketing beyond commercial brand and consumer behaviour applications, to include a wider conceptualization of marketing science. They provided a clear perception about neuromarketing that would be helpful in developing a greater understanding of a critical area of contemporary human society. The authors also stressed on the neuroimaging research which thoroughly provided insights into exactly what activity and processes in various areas of the brain actually mean. These technological advancements would measure the frequency, temporal and spatial characteristics of brain activity more accurately. It thus, provides better and more objective measurement and observation in response to marketing stimuli.
Willem Kottier, 2014 examines the added value of neuromarketing tools in the area of marketing research. He conducted a detailed study on the basis of critical literature review. According to him neuromarketing would be useful because of the inability of the people to describe their feelings as a self-assessment method. The author opines that the brains of the consumers contain hidden information about their true preferences which could directly influence their buying behaviour. His study indicated a positive contribution of neuromarketing tools to the aspects of identifying the customer needs and wants and also to the all four aspects of integrated marketing program namely product, price, distribution and promotion. Hence, he concluded by proving that neuromarketing adds a lot of value to the marketing research area.

5. SPECTRUM OF NEUROMARKETING

The goal of every business is to position their product or service in a position of uniqueness so as to hit the target group. They can also be called as a successful brand management. The branding decision would be efficiently managed once they adjust the marketing mix hat is when product, price, place and promotion decisions are carefully combined and fitted according to the consumer needs and wants. Following attributes clearly figures out the practicality of neuromarketing technique in business processes.

5.1. Product Development

The neuromarketing technique is one which could be used right from developing a product. The market researchers find it difficult to map the actual needs and preferences of the consumers. It is the inability of the people to describe their feelings regarding why they prefer a product. Product design is an important aspect in product development. According to the neuromarketing experts a good design would attract the buyer’s attention. For the product development stage the researchers make use of the scientific technique which is known as FMRI (functional magnetic resonance imaging) which provides evidences about how the brain react to differently designed goods. In this technique, the brain areas are activated which are associated with motivation and decision making.

5.2. Pricing

The term price is said to be the amount of money paid for a product or service. Willingness to pay is an important factor in pricing. Consumers would be willing to pay only if the product or service would meet their requirement. To analyze the impact of prices fixed for a product, subjects are made to lie under an FMRI scanner and the brain activation is noted down. Prior studies conducted revealed that it had a mixture of variations and fluctuations during the process when the image of a product and subsequently the same image with the price information were showed. They also tested another aspect of pricing that is the increase or decrease of the price. It highlighted two different results. One is that an increased price showed a negative influence to purchase the product and the second result showed that when there was an increase in the price, they reflected a positive influence to buy the product. The reason was justified as – an increase in the quality will lead to higher product value.

5.3. Promotion

Promotion is all about sharing the information about the product to the consumers. Advertisements are one of the most effective forms of promotion. Neuromarketing make use of EEG technique in order to get immediate response from the consumers. The attractiveness is dependent on the activation of the rewarding system in the brain. Hence, they measure consumer’s sub-conscious mind every single second when they are provided with a television...
showing a particular advertisement or message. Under this technique the electrical reproduction of brain activity works. A short period recording of approximately 20-40 minutes is made and the brain activity is mapped. The blood flow and oxygen generation would be high if the subject shows a positive response towards the advertisement. Eye Tracking is another scientific technique made used in order to track which part of the advertisement is more concentrated by the consumers. The result of these techniques showed those advertisements which are very attractive and which are not at all attractive were better memorized than the neutral ones.

5.4. Distribution
Distribution process helps the consumers to get their desired products at their nearest places. The distribution decision of a company has a direct impact on the other marketing decisions. Optimal distribution of the product will also influence the buying decision of the consumers. Neuromarketing technique influences the distribution process in two different ways. Firstly, it helps to examine the loyalty towards retail brands and secondly, it helps the marketers to identify an appropriate location that would attract more attention and also will be more likely to be chosen by a buyer. To specify on the scientific neuromarketing technique that would help in the distribution process would be the Eye Tracking. Here subjects are provided with eye tracking glasses on their heads. The data would show the place where they focused the most attention to. Various studies conducted on the distribution process reveals that the neuromarketing tools will help to identify the use of emotional reinforcement which when adopted in the process can constitute the base for sustainable and long-term customer retention.

6. FIVE “NEURO-LESSONS” FOR MARKETING
Pohlmann listed five lessons learned from neuroscience research:

- Most processing in the human brain occurs subconsciously, below the level of conscious awareness.
- Most of this subconscious processing is emotional, not logical. “Logical” refers to a considered conscious decision, while “emotional” refers to the realm of the subconscious or non-conscious.
- Subconscious processes have a significant effect on shoppers’ attitudes, decisions, and behaviors.
- Subconscious processes do not control us entirely, but they form the vast majority of our decision-making. Conscious choice represents a minority.
- Consumers cannot tell you about these influences because they are unaware of them.

Therefore, it is important to combine logical and neurological processes.

[Source: Barbara O’Connell, Steven Walden, Andrew Pohlmann,- Marketing and Neuroscience What Drives Customer Decisions?]

7. BENEFITS OF NEUROMARKETING
Neuromarketing is a technovation happened in the field of marketing. In order to meet the highly complex nature of the human being and to satisfy them with what they actually require, technological advancements are always necessary. Neuromarketing always shows a positive impact compared to the traditional marketing techniques. Following are the major benefits of neuromarketing.
7.1. Provides novel ideas
Business always thrives on creativity and latest technology. Neuromarketing provides the marketers contemporary ideas with the help of scientific tools and techniques. They can map the consumer brain in terms of attention, emotion and memory responses. The neuromarketing can measure even the minute changes required in business processes and can provide marketers better recommendations. They also play an important role in design imagery, story board and editing to make an advertisement captive and memorable.

7.2. Helps to bring out the sub-conscious and emotional responses
Human brain is a pot filled with various kinds of emotions within it. They are never static and keep on changing every single second. These feelings and emotions influence the buying behaviour of the consumers. Neuromarketing technique helps to uncover these sub conscious mind of the consumer and reveals the actual need which could delight them in the long run.

7.3. Results are scalable
Neuromarketing strategy makes use of pure scientific techniques to measure the brain activity of the consumers to understand and overcome their cognitive biases. This brain activity measured are scalable to certain extend in order to provide reliability and accuracy to the study being conducted. This would show a better reliability if the sample size is large.

7.4. Fleeting reactions
Neuromarketing measures the responses of the consumers in a detailed manner. It gives a real time picture that the consumer experience over time. These intricate details of the consumers provide valuable information on how to better an advertisement or how to make a product even more attractive.

7.5. Use of comparable methods
Neuromarketing offers research techniques that companies can scale up and use different comparable methods to get an even clearer picture about the market scenario. They undertake these challenges with the help of experienced and talented market researchers. Neuromarketing has now a day’s been most talked about marketing strategy that is being successfully adopted by the companies on a wide range. Their success story also includes selection of specific cover design among the possible choices. A study on effect of priming with its strong emotional program content sustained a high viewer attention throughout the program. They also helped in an improved shelf performance in the retail stores. It has thus, begun its journey of success stories to evolve a new marketing era.

8. FINDINGS FROM NEUROMARKETING RESEARCH
Neuromarketing is a very new concept which is still in its infancy stage. Its operations in the present have provided the companies and the consumers with crystal observation and experience. Some of the findings from the previous studies conducted are listed below:

- Emotions drive biases and subconscious decision-making.
- Visuals are processed more quickly than words.
- Images of celebrities, beautiful women, children and puppies are universally appealing.
- Faces of any type draw the eye better than other kinds of visuals, and convey important emotional information such as mood, status, etc.
• Messages that consumers find irrelevant reduce their positive responses.
• Marketing elements that consumers can personally identify with create a positive response.
• When a consumer purchases a product from a brand he or she is loyal to, the reward center of the brain gets activated.
• Prices with round numbers (like $100) are processed more easily, yet numbers like $99.99 are perceived as a better deal.
• Certain colors elicit particular emotional reactions.
• The first and last parts of a message are especially important in setting the context for how a message is perceived.
• Social norms such as reciprocity can be invoked to influence behavior.
• Avoiding pain is often a stronger motivator than seeking pleasure.

[Source: Digital design and Marketing Blog - EMINENT SEO]

9. MAJOR IMPLICATIONS OF NEUROMARKETING

Implication to Policy Makers: Information provided from the neuromarketing technique is highly being used by the policy makers. The emotional processes at the base of decision making are used by government agencies to promote actions and communications to better educate the consumers towards decision for their own benefit. This technique is also essential to gather information about the overt decision making of consumers for the better understanding of their ethical decision. Since the concept of cognitive liberty is being highlighted in the present scenario, these neuromarketing techniques pave way to human preferences and gently push in some directions to their unconscious behaviour for making the right choice with all good intensions.

Implication to the Society: An incredible amount of potential exists for continued exploration and refinement within neuromarketing research. The technique is highly useful and helpful to the society which consists of normal consumers, academicians and practitioners. Neuromarketing technique focus on the internal perspective of the consumers to build up ideas right from a product plan till it is consumed by the final consumers. It widely covers all the psychological and emotional aspects of human brain by satisfying their needs and wants and also by meeting their expectations. This particular research is a society oriented one, it focus on exploring reasonable and viable technique that blend with the environment and reasonably deliver reliable insights to the society as a whole.

10. CONCLUSION

The development of the human race can be accounted by the milestones that scientific developments have reached. Same is the case with neuromarketing. This brain based technique is a recent origin that has been used on an ad-hoc basis to investigate issues arising in the marketing field. There is a lot of potential to unearth with respect to this branch. Neuromarketing helps to understand a particular area of contemporary human society. Applying these highly innovative techniques in marketing research problems allows the marketing professionals to gain insight into key problems concerning business relationships. Further, neuromarketing research, performed in a collaborative and non-judgmental spirit offer insight into how humans behave during various situations in modern lives.
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