NEURO MARKETING-AN EFFECTIVE MARKETING STRATEGY

Dr.V.Sreedevi*

Dr.K.V.Jayasree**

Mr.P.Lovelin Auguskani***

Abstract: - Today neuromarketing is an emerging form of marketing research with the basis of neuro science. Neuro marketing is a scientific tool that provides modern day marketer with a gainful insight into the consumer's mind. The gap between business and science is rapidly getting reduced with the sciences of the brain having made tremendous advances over the past decades. The researchers and marketers are analyzing the ways in which the mind of the consumer works through neuro marketing.

<u>Keywords</u>:- Sensory branding, Emotions, Brain imaging, Positioning, behavioural analyses, Electro-encephalography (EEG) or Magneto- encephalography (MEG), Transcranial magnetic simulation (TMS) and Direct current simulation (DCS), Functional magnetic resonance imaging (fMRI)

^{*} Prof.&Head, Department Of Management Studies, Loyola Institute of Science&Technology, Thovalai

^{**} Professor, Department Of Zoology, Sree Ayyappa College, Alloor

^{***} Research Scholar, M.S.University, Tirunelveli



Introduction

Human beings are amenable to change and their senses are timely and appropriately aroused and tuned in with the natural surroundings. The senses are attracted always by new sights and new sounds. Brands have been taking advantage of the weakness the senses for a long time. The result is the tendency of the customers to buy products which attract their sensory organs because of color, shape, utility or some such quality. Sensory branding is the purposeful design and deployment of the interaction among the senses in order to stimulate the consumer's relationship with a brand and to foster a lasting emotional connection that optimizes purchasing and brand loyalty.

Sensory branding is a technique that aims at seducing the mind of the consumers by using their senses to influence their behavior. It is a type of marketing which appeals to all the senses in relation to the brand. It uses the senses to relate with customers on an emotional level. Brands can forge emotional associations in the customer's minds by appealing to their senses. A multi sensory brand experience generates certain beliefs, feelings, thoughts and opinions to create a brand image in the consumer's mind. (HulteBertil 2011).

Emotions play a significant role in decision making. The manner in which customers make association with and ascribe emotions and personalities to brands can make or mar a new product or campaign. Brain imaging experiments examine the way in which the mind and memory work and marketing uses this understanding to guide brand research and development. A lot of research has been carried out to predict preferences based on brain scans to assess the mental response of the consumer to a particular advertisement, product or brand. An accurate estimation of the demand preference of the customer is vital for the success of new products and sales. The success of marketing depends on the prediction of demand and preference of the customers. Hence most of the companies embrace neuro marketing, a technique that maps brain patterns and provides a direct path to human decision-making. (Howard Greenfield2006)

Positioning is the art of creating distinct image of a product in the minds of the customers. It is the process of prompting buyers to form a particular mental impression of a product. Today's market is highly fragmented. The positioning of brand is highly diffused today. Spotting new trends, creating opportunities and sensory branding are imperative in today's world of business.

Thinking and making choices are the outcomes of events that occur in the brain. The brain is a living organ reflecting consciousness, perception, mood, pleasure, pain control etc. and it works in resetting the state of consciousness and unconsciousness and also in coordinating the mind and the self. (Baars 2003)

Under similar and controlled situations and circumstances, people react differently. The success of marketing depends upon the exact prediction of the demand and preferences of the consumers. Neuromarketing is the neurological study of a person's mental state and reactions while being exposed to marketing messages. Neuromarketing is an emerging form of marketing research with the basis of neuro science...

Neuromarketing

The neuro marketing concept was developed by psychologists at Harvard University in 1990. The technology is based on a model where by the major thinking part of human activity (over 90%), including emotion, takes place in the sub conscious area that is below the levels of controlled awareness. To attain this, the perception technologists of the market are tempted to learn the technique of effective manipulation of the subconscious brain activity. The main aim is to inspire the desired reaction in a person's perception as strongly as possible.

The base of neuro marketing is meme (Krugman H.E1964 and1977). Meme is a unit of information stored in the brain. These units are effective in influencing a person who is making choices and divisions within 2.6 seconds. If 16 memos are chosen properly we are able to remember good, jokes or songs and are able to share them. Memes stay in memory and they are affected by markets. (Hansen,F,1981)

Neuromarketing is an applied extension of neuro science and it is the application of brain – scan technology to marketing. It is an emerging field which combines the study of consumer behavior with neuro science. It merges the two fields of study-that is, neuro science and marketing. Neuro marketing is to maintain what neuro psychology is to psychology. Neuropsychology studies the relationship between the brain and human cognitive and psychological functions. Neuromarketing promotes the value of looking at consumer from the perspective of brain.

Neuro marketing emerged from behavioural analyses of how and what information are processed and in which part of the brain area, and the choices that results from that information-



processing. It activates the neural activity in the brain. The neural measures are used to test the theories of choice which are focused in marketing research.

Neuro science uses the imaging of brain activity to infer details about how the brain-the ultimate 'black -box' works. Now neuro scientific tools provide a way to combine controlled automatic as well as cognitive and affective (emotion) systems of human behavior. Neuro marketing also allows for an understanding of anomalous behavior that has been regarded so far as irrational or non-normal behavior in marketing.

Thus neuro science provides a picture of where things happen in brain, where as neuro marketing provides a powerful way to describe and predict choices by analyzing and underlying neuro activity.

The brain consists of a vast web of specialized nerve cells called neurons, woven together in to one of the most complex structures in the universe. The neuron is the basic building block of the brain.

They form 10 to the power of 15 neural or synaptic connections. (Noel caburn 2006)

A neuron has three components

- -A Central cell body
- -A long Taproot-like structure called an axon
- -A branch like series of projections called dendrites.

Neurons form links with other neurons by getting connected with them. When a particular event triggers a neuron in to action, a number of things follow. When we learn something, certain amount of physical change takes place in our brain.

Neurons form new connections or strengthen existing ones, clubbing together a network of neural cells. When the net are stimulated; the original piece of information is recorded. The brain has formed a memory which we can subsequently recall.

A brand is a set(s) of neural networks, and the ease and speed of accessibility and the complexibility of the set(s) are measures of how strongly or weakly we are aware of the brand. Neural networks are the record of a consumer's experience of a brand. Media advertising creates a part of the record. Effective advertisement can make effective physical changes in the brain. The 'ad' must be recorded. It must become part of the net. All the exposed information is scanned and recorded. No memory remains. So it is very important to investigate the situation



under which the brain will incorporate an encounter with brand, or market a brand into neural net. (Noel caburn 2006)

Neuro marketing is an emerging field of marketing research that studies consumer's sensorimotor and cognitive and affective response to marketing stimuli. It covers the intersection of neuroscience and behavior research with marketing, advertising and product design.

All human choices may not have any straight and simple answer. Science seeks to delve in to the human psyche for a better and closer view of the brain in action with the purpose of understanding human decision making process more closely. Neuro science- the study of the brain and nervous system-allows direct measurement of thoughts and feelings, thereby challenging one's understanding of the equation, if any, between mind and action before leading to new theoretical concepts and question the existing one. Neuro marketing would also make advertising more effective. The way people perceive advertising and how they recall it, are critical to both campaign and brand success.

Thinking and choices are the outcomes of events that occur in the brain. The brain is a living thing reflecting consciousness, perception, mood, control, pleasure, pain etc. and even works in resetting state of consciousness and unconsciousness and coordinating the mind and the self. (Baars 2003)

Decision making is usually defined as the process of considering several alternatives and choosing the optimal one. (Sanfey, 2007) The production machinery of choice or decision or action is the brain, and since this is primarily a discussion of the production processes, it will therefore be in terms of the brain or its units. The mind is the brain in action. (Clark 1999)

The mind is what the brain does, which in both cases would make the mind, an output of the brain. That is part of the behavior to be explained. (Pinker 1997)

Basically behavior consists of responses to stimuli that predict either rewards or punishments (pleasure or pain, gain or loss), and therefore the behavior is either, one of approach or avoidance depending on what the stimulus is like. These behavioral tendencies of approach or avoidance are genetically pre programmed or are acquired through a process of learning that associates stimuli with pleasure or pain. Stimuli come in the form of prospects (for food, money etc, positive and negative). These stimuli are reinforced and their effects can be represented on a continuous scale from the negative to the positive including indifference (Rolls 1999). Emotions



play a major role in this. They are the states produced by events either external events impacting directly on the organism or brought about by a response to an external event. They reflect the value assigned to events that are currently experienced and those that are expected to be experienced as a consequence of actions. Values as expressed by emotions are a requirement for identifying the proper response to a situation and are there by necessary ingredient to each and every action. Emotions may be considered the representations of a person's well being and thus an empirical correlate to utility. Further, perceptions are also an important part of mental activity like consciousness and a constituent part of the stimulus – response mechanism.

Techniques

Brian imaging experiments examine the way in which mind and memory work. Marketers use this understanding to guide brand research and development. The brain imaging technology consists of scanning the brain that illustrates the areas of the brain that become active when the subject is presented with a stimulus or task.

- 1. Electro-encephalography (EEG) or Magneto- encephalography (MEG)

 It is a brain imaging technology involving a scalp-surface based measurement of brain electrical activity using Electro-encephalography (EEG) or Magneto- encephalography (MEG), where electrodes are attached to scalp to measure the electrical activity in brain to stimulate events during decision tasks.
- Transcranial magnetic simulation (TMS) and Direct current simulation (DCS)
 These are non invasive brain simulation techniques which enable exogenous manipulation of the brain activity especially in specific regions of the brain.
- 3. Position emission tomography (PET)

 It measures blood flow in the brain a proxy of neural activity and visualizes the metabolic and neuro chemical changes in brain activity. The technique is used for mapping the brain.
- 4. Functional magnetic resonance imaging (fMRI) It tracks blood flow in the specific brain areas using changes in magnetic properties due to blood oxygenation while subjects perform tasks. The MRI is a scanning technique for producing detailed image of the brain at high resolution, using a very strong magnet and radio waves to

produce brain images. Even though fMRI is increasingly becoming the method of choice, each method has its own advantages and disadvantages.

Ethical Issues

- Whenever a new technology emerges people ask themselves several questions, like what good or evil may result. Neuro marketing is mainly based on brain imaging and brains are viewed with powerful MRI scanners and other imaging modalities. When the brains neural activities are increased, stimulated or prompted, the purchase decisions of the unsuspecting consumer help boost sales. It is a manipulative and dishonest way to sell unwanted products to unsuspecting buyers.
 - -This technology does not belong to medicine. It is an application of physics and biology.
 - -Like all technology, it must be used only for development and not for destruction.
- -This technology or method of advertising assumes that the consumers are mindless individuals who can be influenced by compulsion or coercion. Neuromarketing is having an effect on individuals that individuals are not informed about.
- -Problem of Caveat emptor- Caveat venditor is "let the seller beware." It is a counter to caveat emptor and suggests that sellers can also be deceived in a market transaction. This forces the seller to take responsibility for the product and discourages sellers from selling products of unreasonable quality

Conclusion

The world is currently witnessing technologies that can monitor and manipulate mental processes. Neuromarketing goes beyond traditional selling techniques and actually drives the decision making process, having adopted neuroscience in to widely applicable commercial regimen. Like cloning and stem research cell it will require guidelines and legislation to control the direction of technology.



References:-

- 1. Baars, B. (2003) "How brain reveals mind; Neural studies support the Fundamental Role of Conscious Experience", Journal Conscious Studies 10, 9-10, 85-99.
- 2. Clark, T.W. (1999) "Fear of Mechanism: ACompatibilist critique of "The Volitional Brain", in B.Libet, A, Freeman and K.Sutherland (eds.) The Volitional Brain Thorvertin, UK: Imprint Academic, 279-293.
- 3. Hansen, F. (1981)"Hemispheral Lateralisation:Implications for understanding consumer Behaviour" Journal of consumer Research vol:8No.1):pp23-26.
- 4. Howard Greenfield: "Neuro marketing: Unlocking the decision making process". Neuro marketing an introduction 2006 P90.
- 5. Hulten, Bertil 2011 "Sensory marketing the multi- sensory brand-experience concept "European Business Review (23(3), 256-273.
- 6. Krugman, H.E. (1964)."Some Application of Pupil Measurement "Journal of Marketing Research1 (4) p15-19.
- 7. Krugman, H.E. (1964)."Memory without Recall, Exposure without Perception". Journal of advertising Research. (1977)
- 8. Noel Caburn"Branding: The cognitive neuro science way" Neuro marketing an introduction edited by Nasreen Taber 2006 pp106-108.
- 9. Pinker, S. (1997) How the mind works, Newyork; Norton.
- 10. Rolls, E.T. (1999) The Brain and Emotions, Oxford: Oxford University press
- 11. Sanfey A. G. (2007) "Decision Neuro Science; New Directions in Studies of Judgment and Decision making", current Directions in Psychological science, 16 151-155.