

Confronting the contemporary compelling customer-redeemed by Neuromarketing in organized retailing

SunitaRamaswamy, Assistant professor
Department of business management
T John College, Bangalore, India

Abstract

The contemporary customer, up to the minute, tech saavy and updated – a powerful entity in the retail chain who needs to be tackled on an altogether different dimension in order to lure him to the product or service and keep him forever linked and affiliated is indeed an arduous task that requires lot of innovative practices. Customers who are connected, networked and whose expectations are more advanced and sophisticated with the rapid invasion of technology into their lives have become a force to reckon with and retailers have found out new ways and means to confront the new age user by positioning their marketing tactics that differentiate their product or service from the clutter of items mapped in the human brain by channelizing the thought process towards a realm which allows the customer inadvertently, almost sub consciously to identify and narrow down on the one product that will be shown allegiance to. The organized retail market consisting of an heterogeneous mix of segments varying from food, to fashion to consumer durables to leisure and entertainment to telecom among a motley mix of merchandise is one of the fastest growing industry with rivalry from hundreds of similar businesses and neuromarketing is the latest ploy adopted by businesses to stimulate the cognitive minds to elucidate effective positive reactions and responses. This application of neuroscience is extensively used with big data in modern day digital marketing by understanding consumer behaviour and social engagement patterns.

This conceptual paper is to understand the fine blend of psychology, marketing and neuro science, aided by technology, which has enabled marketers to perceive both conscious and underlying consumer behaviour and therefore predict their preferences and choices.

Key words: Consumer behaviour, Neuromarketing, Organized retailing, Stimuli

Introduction

The human brain along with the spinal chord and the peripheral nervous system form the central nervous system which is the epicentre of all our activities, from breathing and blinking to rational and reasonable cognitive thinking. The higher part of this remarkable human organ called the cerebrum is that which allows us to think and act and neuroscience deals with the study of the brain and its cognitive function. In today's complex world, the behavioural and cognitive components of neuroscience have impacted diverse multidisciplinary fields such as linguistics, psychology and engineering and the author through this theoretical and unapplied paper has made a collaborative effort to observe and comprehend the implications of these components on the marketing and retailing of goods and services. A cross section of companies through their retail stores is using this magnificent tool to connect with customers and establish a bond that translates into an ownership experience. This is where the word "clutter" comes to play; imagine a store that has umpteen number of products and brands from as many companies that vie for customer's attention, the value and intensity of attention grabbing is done by that product that is packaged and priced desirably, has the right set of ingredients and nutritional aspects, but above all the effect of touch and hold psychology and the offers and paybacks that surround it. The retail stores brilliantly use this dimension of neuroscience and market their products and services through what is termed as neuromarketing! The sensory motor neurons are activated and stimulated to change their thinking strategy and focus on one that would be perceived as the most important one that they cannot live without! The focus today may not be shiny packages but neuro

imaging that would make this product to stand out from the incredible clutter. A baby's face may not be the crucial aspect in a baby product advertisement but his or her cute actions or gazes or expressions which would the appeal. Personalization and customization become the defining factors to tide over the decision making paralysis with too many choices at one's disposal. The emotional response, connect and satisfaction that a customer derives is phenomenal and overwhelming with this trending customer engagement tactics wrapped in neuromarketing. The pain of letting go that favourite item of yours is beautifully prevented by marketers in this strong engagement activity with phrases such as "offer valid only till stocks last" or "limited period offer". Another fascinating aspect is the fastening or hooked on effect wherein the purchaser or user who is in a very "undecided" mode finally takes the plunge towards a particular object due to the bounty attached to it. So if one had to make a choice on similar hotel rooms, the winner would be the one with a free breakfast coupon!

Purpose

The main objective of this paper is to understand whether the neuro mechanisms would trigger the choice button from among many options cluttered in the human brain.

To discuss the shift from traditional mindset of consumer where preferences were stratified into three – first to check the utility and quality of the goods, then to verify and compare the price and thirdly the decision factor towards purchase through neural mechanism backed consumer propensities.

The application of neuromarketing sciences in human behaviour with specific relation to marketing exchanges and transactions

An effort is made to understand the critical part played by emotion in influencing buyer behaviour through Robert Plutchik's theory of colours.

The intersection of consumer behaviour and cognitive sciences is discussed with the implications of recent applications in the background of technological changes

Literature Review

- ★ Justin R. Garcia and Gad Saad (2008) -Evolutionary neuromarketing: Darwinizing the neuroimaging paradigm for consumer behavior - Journal of Consumer Behaviour / Consumer Behav. 7: 397-414
- ★ Fugate DL (2007) - Neuromarketing: A Layman's Look at Neuroscience and its Potential Application to Marketing Practice. Journal of Consumer Marketing 24(7): 385-394. doi: 10.1108/07363760710834807
- ★ Christophe Morin - Neuromarketing: The New Science of Consumer Behavior
- ★ Ariely D, Berns G (2010)-Neuromarketing: the hope and hype of neuroimaging in business. Nature Reviews Neuroscience 11(4): 284-292. doi: 10.1038/nrn2795
- ★ Plassmann H, Kenning P, Ahlert D (2007) - Why Companies Should Make Their Customers Happy: The Neural Correlates of Customer Loyalty. Advances in Consumer Research 34: 735-739
- ★ Zurawicki L (2010) -Neuromarketing, Exploring the Brain of the Consumer. Springer-Verlag Berlin Heidelberg,
- ★ Dr. A. K. Pradeep, 2010 - The Buying Brain: Secrets for Selling to the Subconscious Mind – Research Methodology

This discussion in this paper is based on random observations of consumers in retail outlets and stores and reports of theoretical nature and is purely a conceptual study on the reactions and responses of humans towards neuromarketing. The observations have been harmonized with the practices of purchase and the contemporary trends of organizations in marketing activities. Corporates today have jumped on the bandwagon to connect with the customers in a big way and maintain the emotional strings of attachment with them and this paper has tried to understand the tools of contemporary customer engagement.

Analysis, Inferences and Rationale

Predicting human behaviour, that too from a quantitative perspective is seemingly next to impossible and how such a research study would help to evaluate the successes of the marketing plan of a company in terms of sales and revenues depends entirely on the customer preferences and inclinations as a result of the strategic manoeuvres with respect to matching their products with people. Aiding and facilitating the thought and subsequently the choice process is a matter of high priority for organizations and they normally assume focus on individual surveys and some time market tests as the former may have more elements of prejudice. This study is based on many assumptions such as there is definitely a trade off between neuromarketing and consumer buying habits, and that this field of science is useful to unearth that crucial matter which is intentionally/unintentionally and inadvertently hidden in the labyrinth of the human central processing unit. Also, there is the duration or how long will a reward/incentive/payback driven initiative last in the run up to a purchase; value or utility at the time of decisions, during purchase and experiencing the utility post a buy. It has been observed by various researchers in this field that brain activity is not uniform and subject to lot of variations when treated differently. Activating the choice of buy button from among many in varied circumstances and environment becomes the key. Sustenance based on the purchase patterns which is no longer dependent on traditional foundation of consumer behaviour but on neuro activities becomes the pivotal point for marketing standards.

Rationale behind Neuromarketing

- 1) As this paper is an outcome of reports and observations, with varying perceptions, the implications of this rapidly growing science backed by excellent results in sales and satisfaction, is immense even though the ramifications may not be direct. However, the marketing mix comprising of the vital ingredients has definitely been wedded to this cognitive activity yielding spectacular results.
- 2) The fabric of neuro marketing rests on the cornerstones of customer and people engagement, customer effort and experience, the pivotal role of customer, and customer insight which is constantly being assessed by measuring the attention, interpreting the data and information and prolonging the attention for longer periods of time.⁴
- 3) The power of influence brought about by emotions and sensory stimuli such as the impact of an eye gaze, the use of neuroimaging in packing, designing, can convert people to potential customers
- 4) The power of decision making rests on emotions and the purchase intention is boosted by engagement with high excitation levels with high precision tools such as eye tracking, facial expression analysis and EEG or electroencephalography.
- 5) Consumer buying behaviour is undergoing a sea change – from simple purchases to buying enhance authentic experience
- 6) Matching products with people is more effective using neuromarketing tools as studies have proven that a quantifiable result is possible which has not been the case with conventional marketing techniques such as feedback, questionnaires, surveys etc.

Neuromarketing and customer engagement

Activating the purchase decision is accomplished by the emotional activity levels of human beings and the trigger points ensure that the commodities are converted to goods and subsequently to services and finally to exhilarating experiences. The catalyst that transforms the customer into a happy one is the ‘marketing stimulus’ which sends highly energized brain waves to take that decision to buy. The power of persuasion to make the positive reaction and response is the biggest challenge of today and one is seeing more and more companies applying the tools of contemporary marketing that yields results in numbers and may eventually be cheaper. Modern practices envisage a relationship with the customer that has emotional engagement, profound retention of memory, the ability to convert awareness into acceptance with a sense of novelty and appeal that allows the good to stand out in a crowd as an experience.

The subconscious mind is kept captive and hostage by the companies of the world in a valiant effort to create brands through massive marketing campaigns, product design and packaging, in store experience and appeals. The customer today, is willing to pay that extra buck to get the feel of involvement, in an ideal

ambiance with absolutely no pre made shopping lists. The spontaneous reaction of an activated brain is the target of the seller to tap that instantaneous choice – it is researched that human brain senses are taking in about 11 million bits of information every second through eyes, hearing, touch, smell, taste, and spatial sensations. The conscious mind is assumed to process 40 bits of information per second and so the phenomenal and staggering 99.99 percent is achieved by the subconscious mind. All the rest is processed subconsciously. It is therefore little wonder that the marketers are resorting to neuroscience methodology to impact customers through products, packaging, pricing, advertising and retailing.¹

Neuromarketing therefore is not an arbitrary trial and error tool but a systematic process that can compel a contemporary customer to look at that one single product which would pop out in the shelf of the retail shopping outlet or have an eye catching ad campaign that would make the prospective clients to sit up and notice. Measuring the attention and appeal backed by emotional engagement that is encoded by the brain decides emphatically on the buy button syndrome from among a million choices.

Robert Plutchik gave to the world an exciting model of eight primary emotions that included anger, fear, sadness, disgust, surprise, anticipation, trust, and joy. The psychology of marketing makes use of Plutchik's theory of colours and plays a critical role in advertisements, brand logos, store environment, website designs, packaging and eventually the product itself. Perception and cognitive performances in retail stores are leveraged by the colour theory to a very large extent. Hyper stimulated purchases, spontaneity in decisions, the disposition to shop and not postpone and probably linger more in that kind of retail environment may all be attributed to the effects of colours.²

The EEG tool has been tested on persons for reaction to advertisements and the information so obtained has matched this emotional classification! The brain signals have helped advertisers to choose their concept, reinforce, repeal and repeat at appropriate times. Reactions to the ads, as tracked by the EEG second by second reveal highly visual heat map showing scarlet red for high excitement and deep blue for boredom! So the consumers could decide when to start and stop an advertisement!³

Conclusions

The language of the brain is universal and cuts across countries and cultures and neuromarketing provides a real competitive advantage in a crowded and cluttered marketplace with its application in every sphere and spectrum ranging from brands, products, packages, store ambience, advertising to digital marketing and E commerce retailing. There is an explosive trend to understand the complexities of the stimuli triggered by the human brain by the retailers and apply them in an organized and structured manner in marketing. The tools of neuromarketing have a worldwide use in consumer preferences, responses, reactions and decision making and the modern marketing psychology is inclined towards the application of this, with the support of technology in a large way, to understand the emotional connect. Marketers are awakening to the new order of retailing through neuromarketing techniques that reads the brain circuitry and ensures prompt and favourable decisions, a versatile application that links brain science to business. The understanding of the clarity of thought process has increased remarkably with this new approach and consumer behaviour is a measure of attitudes reflected by benefits, loyalty, usage frequency and has indeed moved away from the traditional behaviour segmentation based on demography and purchase history.

Though critics dismiss this as yet another marketing research gimmick, fad and hype of neuroscience, studies and researches have proved beyond doubt that Neuromarketing strategies are here to stay and have become an innovative, quantifiable and indispensable tool to improve marketability.

Citations & References:

¹ Evolutionary neuromarketing: Darwinizing the neuroimaging paradigm for consumer behavior Justin R. Garcia ^^ and Gad Saad

² Robert Plutchik (1927-2006) developed an evolutionary theory of emotions. He proposed that both animals and humans have evolved their emotions to adapt our organization to the environment. <https://psicopico.com/en/la-rueda-las-emociones-robort-plutchik/>

³ <https://en.wikipedia.org/wiki/Electroencephalography>

⁴ <https://link.springer.com/content/pdf/10.1007%2Fs12115-010-9408-1.pdf>

Calvert GA, Thensen T (2004) Multisensory integration: methodological approaches and emerging principles in the human brain. *Journal of Psychology Paris* 98: 191-205. doi: 10.1016/j.jphysparis.2004.03.018

Falk EB, Rameson L, Berkman ET, Liao B, Kang Y, Inagaki TK, Lieberman MD (2009) The Neural Correlates of Persuasion: A Common Network across Cultures and Media. *Journal of Cognitive Neuroscience* 22(11): 2447-2459. doi: 10.1162/jocn.2009.21363

Garcia JR, Saad G (2008) Evolutionary neuromarketing: Darwinizing the neuroimaging paradigm for consumer behavior. *Journal of Consumer Behaviour* 7: 397-414. doi: 10.1002/cb.259

Johnson B, Christensen L (2008) *Educational research: Quantitative, qualitative, and mixed approaches*. Thousand Oaks, Sage Publications

Kenning P, Plassmann H (2005) NeuroEconomics: An Overview from an Economic Perspective. *Brain Research Bulletin* 67: 343-354. doi: 10.1016/j.brainresbull.2005.07.006

Laubrock J, Engbert R, Rolfs M, Kliegl R (2007) Microsaccades are an index of covert attention: Commentary on Horowitz, Fine, Fencsik, Yurgenson,, Wolfe. *Psychological Science* 18: 364-366 in Zurawicki L., (2010), *Neuromarketing, Exploring the Brain of the Consumer*, Springer-Verlag, Berlin Heidelberg

Lee N, Senior C, Butler M, Fuchs R (2009) The Feasibility of Neuroimaging Methods in Marketing Research. *Nature Proceedings* hdl.handle.net/10101/npre.2009.2836.1: posted 20 January 2009. hdl:10101/npre.2009.2836.1

Levy I, Lazzaro S, Rutledge RB, Glimcher PW (2011) Choice from Non-Choice: Predicting Consumer Preferences from Blood Oxygenation Level-Dependent Signals Obtained during Passive Viewing. *The Journal of Neuroscience* 31(1):118-125. doi: 10.1523/JNEUROSCI.3214-10.2011

Lichtman M (2006) *Qualitative research in education: A user's guide*. Thousand Oaks, Sage Publications.

Morris JD, Klahr NJ, Shen F, Villegas J, Wright P, He G, Liu Y (2009) Mapping a Multidimensional Emotion in Response to Television Commercials. *Human Brain Mapping* 30: 789-796. doi: 10.1002/hbm.20544

O'Connell B, Walden S, Pohlmann A (2011) *Marketing and Neuroscience. What Drives Customer Decisions?* American Marketing Association White Paper. doi:

Perrachione TK, Perrachione JR (2008) Brains and Brands: Developing Mutually Informative Research in Neuroscience and Marketing. *Journal of Consumer Behaviour* 7: 303-318. doi: 10.1002/cb.253

Plassmann H, O'Doherty J, Shiv B, Rangel A (2008) Marketing actions can modulate neural representations of experienced pleasantness. *PNAS* 105(3): 1050-1054

Plassmann H, Ramsøy TZ, Milosavljevic M (2011) Faculty and Research Working Paper: Branding the Brain - A Critical Review. INSEAD The Business School of the World 2011/15/MKT

Reimann M, Schilke O, Weber B, Neuhaus C, Zaichkowsky J (2011) Functional Magnetic Resonance Imaging in Consumer Research: A Review and Application. *Psychology & Marketing Wiley Periodicals* 28(6): 608-637. Available at: <http://ssrn.com/abstract=1774166>

Sellers R (1998) Qualitative versus Quantitative Research: Choosing the Right Approach. *The NonProfit Times*, 15th March 1998

Stoll M, Baecke S, Kenning P (2008) What they see is what they get? An fMRI-study on neural correlates of attractive packaging. *Journal of Consumer Behaviour* 7: 342-359. doi: 10.1002/cb.256

Thomas JW (2010) Qualitative Analytics. *Decision Analyst*. Available at: www.decisionanalyst.com

Vechiatto G, De VicoFallani F, Astolfi L, Toppi J, Cincotti F, Mattia D, Salinari S, Babiloni F (2010) The Issues of Multiple Univariate Comparisons in the Context of Neuroelectric Brain Mapping: An Application in a Neuromarketing Experiment. *Journal of Neuroscience Methods* 191: 283-289. doi: [dx.doi.org/10.1016/j.jneumeth.2010.07.009](https://doi.org/10.1016/j.jneumeth.2010.07.009)

Wang YJ, Minor MS (2008) Validity, Reliability and Applicability of Psychophysiological Techniques in Marketing Research. *Psychology & Marketing* 25(2): 197-232. doi: 10.1002/mar.20206

<https://imotions.com/blog/neuromarketing-examples/>

<http://www.sciencedirect.com/science/article/pii/S1877042814024409>

<https://en.wikipedia.org/wiki/Electroencephalography>

<https://imotions.com/blog/top-5-ted-talks-about-neuromarketing/>

https://ac.els-cdn.com/S1877042814024409/1-s2.0-S1877042814024409-main.pdf?_tid=3471c2ac-e5a3-11e7-98f6-00000aab0f6c&acdnat=1513787658_0783b0a9a5308cf36a1084a2d9ce9c31

(Ariely&Berns, 2010)

Pradeep (2010)

<https://www.neurosciencemarketing.com/blog/articles/what-is-neuromarketing.html>