
Post Mortem of Marketing; A Blend of Marketing and Medical Practices

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Abstract

Sale of a commodity is dependent on multiple factors including price, quality, features and other related factors. These entire characteristics are more or less visible at the time of purchase and a customer can make a runtime decision whether to opt for a specific product or not. Some other factors are not visible at the time of purchase; however,

they do operate at the back end and can influence the purchase decision. Country of Origin (COO) is a prominent factor among these underlying factors. COO can influence the customer's perception and the customer can walk away from the purchase or make purchase at a lower cost. Irrespective of the quality of the product, COO can prove to be a label, which may affect the overall competitive position of the product. The same is true in case of Pakistan. Despite of the fact that Pakistan is producing international level textile items and making supplies to international customers, however, the brand building approach is not prevailing. This research tries to understand the COO impact on purchase intentions in case of Pakistan based textile products and brands. The data was collected from customers all across the globe through an online questionnaire designed to assess the impact of COO impact on purchase intentions. It was judged that people from all geographic regions of the world do consider the country of origin, however, it was not found that they would drop their purchase plan just because the product is from a specific country (Pakistan).

Keywords:

Neuro Marketing; Eye Tracking Technique; Medical Marketing; Facial Coding

Reference to this paper should be made as follows: Aziz, B. (2018) 'Post Mortem of Marketing; A Blend of Marketing and Medical Practices', *Asia Pacific Journal of Emerging Markets*, Vol. 2, No. 2, pp.192–206.

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1. Introduction

Social marketing was introduced first time in 1971 for clarifying and explaining the application of basic marketing principles and techniques to bring advancement in social cause, idea or behavior. It is taken as an applicable strategy to change the behavior. According to Kotler, social marketing is the process of designing, implementing and controlling the calculated programs and activities to create an impact on the level of acceptability of different social ideas. It also involves consideration and suggestion for planning products, pricing, communication, market, consumer research and distribution (Khan & Varshney, 2018). Moreover, it is also taken as the application of principles of marketing to manage and design the social program. Social marketing is a systematic approach for identifying the solution of several problems which are related to adaption of health-promoting behaviors which includes better utilization of services, continuous usage of a product and brining improvement in general practices of a community or household. Social marketing raise the voice for beneficiaries of consumer programs and it is concerned with the different applications and viewpoints to make it easier to follow the application process (Griffiths, 1992).

Postmortem is an ultimate diagnostic tool and many studies have revealed its benefits of diagnosing overlooked diseases (Shojania et al., 2003; Shojania & Burton, 2008; Thurnheer et al., 2009). The post-mortem meeting is an open forum

that is run at the conclusion of a project, where you, your team, and your clients can identify and analyze all aspects related to the project's lifecycle (Heaton, 2016). Whereas, postmortem of marketing is important for analyzing marketing operations of any organization. The delegated team evaluates the effectiveness of marketing campaign by comparing desired and actual outcomes. Upon completion the campaign result into report comprising types of useful data for the delegated marketing team to do postmortem. This is an effective and useful process as it provides the chance of improvement but it is done at the end of campaign rather than reviewing the performance continuously over several time intervals. In this rapid world, it is always preferred to continuously evaluate the performance on different time intervals by using digital technology to gather data and feedback for making continuous improvements and doing corrective actions rather than waiting for the end of campaign and start of post mortem (Kahane, 2015).

Neuroscientists have started to study the cortical activity from the perspectives of frequency, time and space in recent years. In order understand the processing of brain and cognition, psychological and physiological experts are applying different techniques for ease in study. There is room for improvement in different domains of social sciences which have to adapt neuroimaging as a tool for conducting standard research. Economists have started applying the technique of neuroimaging in their research which has resulted in the development of neuro-economics (Braeutigam, 2005; Kenning and Plassmann, 2005; Rustichini, 2005). The science of marketing is lagging behind in reaping the benefits of imaging research despite of having similarities between the both fields in terms of "decision making" and "exchange" (Lee et al., 2007).

The emerging field of neuro-marketing lays a bridge between studying the behavior of consumer and principles of neuroscience. This concept faces controversy when it was introduced in 2002 but since then it gained rapid credibility and acceptability from different organizations and their marketing departments all around the globe. More than 400 billion is invested all over the world in campaigns for advertising. The traditional method to calculate and predict the effectiveness of marketing investment is failed due to higher dependency on willingness of customers and their competency of explaining the feelings about an advertisement. Neuro-marketing provides different method of cutting edge for probing the behaviors directly without interacting cognitively with consumers (Morin, 2011).

Traditionally, the concept of marketing can be explained as the process of collecting and understanding the human or consumer behavior for specific purchase decisions which bring together different products and their related consumers or people (Ariely & Bems, 2010; Lee et al.,2007). According to Madan (2010), the focus of marketing activities is purely on commercial and sales activities and according to Ariely and Berms (2010) that one side of marketing process deals with promoting the product by focusing on different consumer needs and on the other hand, it influences the behavior of customers in terms of purchasing. The major issue in the development of marketing to neuro-marketing is the collection of data to identify the consumer preferences and behaviors.

Eye gaze tracker is the device used to identify the direction of a gaze of any individual. Young & Sheena (1975) presented their survey related to traditional techniques for eye gaze tracking but there are many other reviews which are studied by (Glenstrup & Nielson, 1995; Duchowski, 2003). The purpose of tradition eye glazed trackers is exploration of science in controlled environments and labs. The data from eye gazed trackers is applicable in different fields like ophthalmology, psychology, neurology. Moreover it has implications in study of their features with respect to their relationship with mental state. There are several modernized development and implementation of conducting research in field of advertising and marketing along with human factors engineering to evaluate the interfaces of computer and web sites but they are still dependent on environments which are ideally controlled in laboratories (Morimoto & Mimica, 2005).

The importance and acceptability of neuro-marketing is continuously increasing among different organizations and marketing agencies since last 1.5 decade (Morin, 2011). The concept has gained more focus in the field of medical and psychology due to its relatedness. Furthermore, many studies have focused on clarification and explanation of behaviors with the help of neuro-makreting concepts along with its advantages and disadvantages in the field of economy (Sanfey et al., 2006).

The application of different marketing concepts, methods, processes and techniques create interdisciplinarity in marketing department. Different concepts of marketing such as competition, promotion and advertising, supply and demand, return and cost are getting new meaning accordingly with changing environment specially in case of defining the competition between significant

medical companies, advancement of health care, identification, generation and application of strategies and policies in medical marketing, increasing demand for treatment, demand and supply of services related to health care along with its cost (Coculescu et al., 2018). In this study post mortem term is used to explore the interdisciplinary research based on medical practices and marketing or advertisement. This research is based on literature review of neuromarketing and eye tracking techniques.

2. Literature Review

Brain plays the most important part in consumer behavior as each action derives from brain. The brain burns 20 % of total energy of individual's body despite of the fact that it contains only 2 percent of body weight. To sustain the state of tranquility, 80 % of total activities by brain are done unconsciously and only 20 % activities are within the hands of an individual.

The customer purchase decision does not represent the binary social response. It means that it is difficult to predict whether an individual will make a purchase in response to an advertisement. The expectation from the ability and potential of neuro-marketing is on the high side for observing, assessing and analyzing the activities of brain to figure out innovative, non-predictive and nontraditional outcomes in order to provide new insights for subject of neuroscience (Lee, & Kacen, 2008; Hubert, & Kenning, 2008).

2.1. Influence of Neuro-Marketing on Marketing Inputs:

Neuro-marketing is a qualitative technique to conduct consumer research and the applications of neuroscience in field of marketing as compare traditional tools and techniques of marketing (Kosslyn1999; Taher, 2006). The techniques of neuroscience are becoming more popular among different researchers for marketing since last few decades (Krugman, 1971; Weinstein, 1981; Weinstein et al., 1984). Presently, there are many researchers who have mentioned the vast use of commercial neuro-marketing and neuroscience to provide solutions of problem by different companies. Through estimation from past decade, there are more than 100 companies which are doing commercial neuro-marketing and offering solutions derived from neuroscience (Wall, 2013; Plassmann et al., 2012). There is a significant increase in the number of volumes produced for commercial neuro-marketing over last few years (see, e.g., Lindstrom, 2008; Pradeep, 2010; Renvoise´ & Morin, 2007). The book cover of these volumes

mentions that these volumes contain latest and new techniques of taking out the inside information of brain (Renvoise´ & Morin, 2007). This influences the consumer to buy the book for having exposure of new techniques (Lindstrom, 2008; Renvoise´ & Morin, 2007; though see also Blakeslee, 2004; Hubert & Kenning, 2008; Lee et al., 2007) or knowing the secrets of selling the product to subconscious mind of people (Pradeep, 2010). Milward Brown conducted a relevant research on the behalf of Royal Mail which shows that the physical media has the ability to develop in depth activities from brain (Brown, 2009). There is high acceptability of the concept that the neuroscience of consumer is considered as a good and potential business (Hubert & Kenning, 2008). In this era of technology, there are several significant areas of research such as effectiveness of advertising and designing of product which comes under the umbrella of neuro-marketing (Legrenzi & Umilta, 2011) neuro-merchandizing (Roper, 2014), and so on (see Breiter et al., 2015). There are also many other techniques to study the purchase behavior of consumer and target market (Javor et al., 2013; Lee et al., 2012a, 2012b; Senior & Lee, 2008, 2013).

2.2. Neuro-Marketing and Consumer Buying Behavior:

A focused and tailed analysis of consumer behavior by the application of different neuro-marketing techniques can provide several benefits (Gang et al. 2012). Despite of advantages, there are few factors which need special attention. It is important to note that the consumers most of the time are unable to express and explain their exact need and wants in terms of a specific product but brain can expose or enclose information itself which can explain consumer's want. If this information can be made available, there is a probability of increase in buying behavior and the disadvantages of cost from neuro-marketing can outweigh the advantages of using different neuro-marketing techniques (Ariel & Berns, 2010). Therefore, different techniques of neuro-marketing can be taken as a perfect way to collect internal information (Kenning et al., 2007).

The main objective of neuro-marketing is to identify the relationship between marketing activities and their impact on consumer's brain to generate a response (Kumlehn, 2011). It is highly expected that neuro-marketing can help to bring in assessing the objective activities of brain (Hubert & Kenning, 2008). In order to understand neuro-marketing one must understand the things like body language, empathic design, eye tracking used, eye gazed trackers, the facial coding and the rate of heart (Calvert & Brammer, 2012). EEG and fMRI are methods in field of

brain imaging (Kumlehn, 2011). These different methods of neuro-marketing are expected to produce the insights regarding the inside information of brain (kenning et al., 2007).

2.2.1. Facial coding:

It is a form of body language in which the expressions of individual's face are systematized along with their emotions. Dan Hill developed a useful research by establishing different 24 combinations for movements of muscle that can be tracked in terms of seven emotions. This is a universally accepted method of tracking since Darwin concluded in his research that the facial expression is same for different nations. Toyota and Capital One are significant examples as they are progressively using the facial coding to analyze the behavior of consumer for buying. Dutch companies including C1000 & KPN are considered as experts in using face coding. The person under test are mainly confront with some type of relevant stimulus to record the expressions of their face. This recording leads to interpretation of those expressions in terms of consumer behavior. The person under the test is aware of the fact that the facial expressions are recorded for the purpose of study (Postma, 2012).

2.2.2. Eye Tracking:

Eye tracing is considered as the final form of outside reflexes which provide the information related to different internal activities of brain. This method was implemented in 1980's with some simple methodologies but in modernized technologically advanced world, the process of eye tracking is completely computer-controlled which has increases the number of possible outcomes. This is an easy method to apply on different advertisements, web pages, mailing and online games as it allow to track and record the attention a person is paying to the content. There are two different type of analysis of explanation in case of fixing the eyes for a longer period of time on a center. One explanation could be that the person is focusing for a longer period of time because he is unable to understand it directly in first attempt. The other could be that the person is paying more attention because the content gets his attention and interest. The method of eye tracking does not provide any basis for differentiating between these two interpretations of fixing attention for long period towards specific content (Postma, 2012).

3. Methodology

This study is based on literature review of neuro-marketing and eye-tracking technique. In order to explore the deep view of this interdisciplinary approach, data was taken from 52 research articles published in top marketing journals. This research majorly focused on some medical practices, tools or terms used in marketing or advertising.

4. Results

The results of this study explained that it is highly expected that the tools and techniques of neuro-marketing would be helpful and applicable in identification of the heterogeneity of consumer behavior which is commonly assessed in market place. Moreover, it is important to note that the neuroimaging of commercials is becoming cost effective as the techniques and facilities are widely available now. In this interdisciplinary field the implementation of statistical analysis and techniques is gradually improving with knowledge advancement (Smidts et al., 2014).

5. Conclusion:

It is seen that there is emerging trend of interdisciplinary studies now a day. Therefore, every domain or field is getting new terms. In study post mortem referred to the deep evaluation of medical practices, tools or terms used in marketing or advertising. Literature provided the clear evidence that many companies are using neuro-marketing and eye tracking technique which can lead to efficient marketing campaign and strategy building. In case of eye-tracking technique, it is difficult for any person to focus on object for long time and also it's an expensive technique as compare to neuro-marketing. The commercial use of these techniques can bring several advancements in marketing and advertisement. Moreover, these latest techniques will help us in getting rid of traditional marketing or advertising tools and strategies.

References:

- Ariely, D., & Berns, G. S. (2010). Neuromarketing: The Hope and Hype of Neuroimaging in Business. *Nature reviews neuroscience*, 11(4), 284.
- Breiter, H. C., Block, M., Blood, A. J., Calder, B., Chamberlain, L., Lee, N., . Zhang, F. (2015). Redefining Neuromarketing as an Integrated Science of Influence. *Frontiers in Human Neuroscience*, 8, 1073.
- Brown, Millward. (2009). Using Neuroscience to Understand the Role of Direct Mail. Retrieved from http://www.millwardbrown.com/docs/default-source/insight-documents/case-studies/MillwardBrown_CaseStudy_Neuroscience.pdf.
- Calvert, G. A., & Brammer, M. J. (2012). Predicting Consumer Behavior: Using Novel Mind-Reading Approaches. *IEEE pulse*, 3(3), 38-41.
- Coculescu, B. I., Purcărea, V. L., & Coculescu, E. C. (2018). The Communication and Promotion Policies of the Medical Organizations in the Marketing of Romanian Healthcare Services. *Romanian Journal of Military Medicine*, 121(2), 46-49.
- Duchowski, A. (2003). Eye Tracking Methodology: *Theory and Practice*, Springer Verlag, Berlin.
- Gang, D. J., Lin, W., Qi, Z., & Yan, L. L. (2012, May). Neuromarketing: Marketing through Science. *In Service Sciences (IJCSS), 2012 International Joint Conference on* (pp. 285-289). IEEE.
- Griffiths, M, Social Marketing: Achieving Behaviour Changes in Nutrition from Household Practices to National Policies, Speech at the Anniversary

Scientific Meetings of the Institute for Nutrition of Central America and Panama (INCAP), Guatemala City, Guatemala, 1992 (7-11 Sept).

Glenstrup, A. J., & Engell-Nielsen, T. (1995). Eye controlled media: Present and future state. *University of Copenhagen, DK-2100*.

Heaton, S. (2016, July 15). *9 Tips for Getting the Most Out of Post-Mortem Meetings*. Retrieved November 2, 2018, from Shopify: <https://www.shopify.com/partners/blog/9-tips-for-getting-the-most-out-of-post-mortem-meetings>.

Hubert, M., & Kenning, P. (2008). A Current Overview of Consumer Neuroscience. *Journal of Consumer Behaviour*, 7(4-5), 272-292.

Javor, A., Koller, M., Lee, N., Chamberlain, L., & Ransmayr, G. (2013). Neuromarketing and consumer neuroscience: contributions to neurology. *BMC neurology*, 13(1), 13.

Kahane, O. (2015, May 4). *ThePostmortem is Dead. Why You Should Measure Campaign Effectiveness in Real-Time*. Retrieved October 6, 2018, from Origami Logic: <https://www.origamilogic.com/blog/postmortem-dead-measure-campaign-effectiveness-real-time/>

Khan, M. F., & Varshney, P. K. (2018). Emerging Educational Practices in Marketing of Healthcare Services. *Multidisciplinary Higher Education, Research, Dynamics & Concepts: Opportunities & Challenges For Sustainable Development (ISBN 978-93-87662-12-4)*, 1(1), 91-105.

Kenning, P., Plassmann, H., & Ahlert, D. (2007). Applications of Functional Magnetic Resonance Imaging for Market Research. *Qualitative Market Research: An International Journal*, 10(2), 135-152.

- Kenning, P., & Plassmann, H. (2005). NeuroEconomics: An Overview From an Economic Perspective. *Brain Research Bulletin*, 67(5), 343-354.
- Kumlehn, M. (2011). Consumer Neuroscience: Pricing Research to Gain and Sustain a Cutting Edge Competitive Advantage by Improving Customer Value and Profitability.
- Kosslyn, S. M. (1999). If Neuroimaging is the Answer, What is the Question? *Philosophical Transactions of the Royal Society of London B: Biological Sciences*, 354(1387), 1283-1294.
- Krugman, H. E. (1971). Brain Wave Measures of Media Involvement. *Journal of Advertising Research*, 11, 3-9.
- Lee, N., Broderick, A. J., & Chamberlain, L. (2007). What is 'Neuromarketing'? A Discussion and Agenda for Future Research. *International journal of psychophysiology*, 63(2), 199-204.
- Lee, J. A., & Kacen, J. J. (2008). Cultural Influences on Consumer Satisfaction with Impulse and Planned Purchase Decisions. *Journal of Business Research*, 61(3), 265-272.
- Lee, N., Senior, C., & Butler, M. J. R. (2012a). The Domain of Organizational Cognitive Neuroscience: Theoretical and Empirical Challenges. *Journal of Management*, 38, 921-931.
- Lee, N., Senior, C., & Butler, M. J. R. (2012b). Leadership Research and Cognitive Neuroscience: The State of this Union. *Leadership Quarterly*, 23, 213-218.
- Legrenzi, P., & Umiltà, C. (2011). *Neuromania: On the Limits of Brain Science* (F. Anderson, Trans.). Oxford, UK: Oxford University Press.

- Lindström, M. (2008). *Buy ology: how everything we believe about why we buy is wrong*. Doubleday.
- Madan, C. R. (2010). Neuromarketing: The Next Step in Market Research? *Eureka*, 1(1), 34-42.
- Morin, C. (2011). Neuromarketing: The New Science of Consumer Behavior. *Society*, 48(2), 131-135.
- Morimoto, C. H., & Mimica, M. R. (2005). Eye Gaze Tracking Techniques for Interactive Applications. *Computer vision and image understanding*, 98(1), 4-24.
- Plassmann, H., Ramsøy, T. Z., & Milosavljevic, M. (2012). Branding the Brain: A Critical Review and Outlook. *Journal of Consumer Psychology*, 22, 18-36.
- Postma (2012). Anatomie van de Verleiding. Neuromarketing – Neuromarketing Succesvol toegepast.
- Pradeep, A. K. (2010). *The Buying Brain: Secrets of Selling to the Subconscious Mind*. Hoboken, NJ: John Wiley.
- Renvoise', P., & Morin, C. (2007). *Neuromarketing: Understanding the "buy buttons" in your customer's brain*. Nashville, TN: Thomas Nelson.
- Roper, J. (2014, July 24). Neuromerchandising: How to Win Over the Subconscious shopper. Grocer. Retrieved from <http://www.thegrocer.co.uk/stores/consumertrends/neuromerchandising-how-to-win-over-the-sub-conscious-shopper/369776.fullarticle>.
- Sanfey, A. G., Loewenstein, G., McClure, S. M., & Cohen, J.D. (2006). Neuroeconomics: Cross-Currents in Research on Decision-Making. *Trends in cognitive sciences*, 10(3), 108-116.

- Senior, C., & Lee, N. (2008). A Manifesto for Neuromarketing Science. *Journal of Consumer Behavior*, 7(4/5), 263-271.
- Senior, C., & Lee, N. (2013). The State of the Art in Organizational Cognitive Neuroscience: The Therapeutic Gap and Possible Implications for Clinical Practice. *Frontiers in Human Neuroscience*, 7, 808.
- Smidts, A., Hsu, M., Sanfey, A. G., Boksem, M. A., Ebstein, R. B., Huettel, S. A., Yoon, C. (2014). Advancing Consumer Neuroscience. *Marketing Letters*, 25, 257-267.
- Shojania, K. G., & Burton, E. C. (2008). The Vanishing Non-Forensic Autopsy. *New England Journal of Medicine*, 358(9), 873-875.
- Shojania, K. G., Burton, E. C., McDonald, K. M., & Goldman, L. (2003). Changes in Rates of Autopsy-Detected Diagnostic Errors Over Time: A Systematic Review. *Jama*, 289(21), 2849-2856.
- Taher, N. (2006). *Neuromarketing*. New York: ICFAI University Press.
- Thurnheer, R., Hoess, C., Doenecke, C., Moll, C., Muntwyler, J., & Krause, M. (2009). Diagnostic Performance in a Primary Referral Hospital Assessed by Autopsy: Evolution over a Ten-Year Period. *European journal of internal medicine*, 20(8), 784-787.
- Weinstein, S. (1981). Brain Wave Analysis: The Beginning and Future of Package Design Research. In W. Stern (Ed.), *Handbook of Package Design Research* (pp. 492-504). New York, NY: Wiley Interscience.
- Wall, M. (2013, July 16). What are Neuromarketers Really Selling? The Poor Data and Shoddy Logic Behind a Hyped Business Boom. *Slate*. Retrieved from http://www.slate.com/articles/health_and_science/science/2013/07/does

[neuromarketing work poor data secret analysis and logical errors.html](#).

Weinstein, S., Drozdenko, R., & Weinstein, C. (1984). Brain Wave Analysis in Advertising Research. *Psychology & Marketing*, 1, 83-96.

Young, L. R., & Sheena, D. (1975). Survey of Eye Movement Recording Methods. *Behavior research methods & instrumentation*, 7(5), 397-429.