



The application of Neuro-Marketing on Advertising Agency in Bangladesh

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ABSTRACTS

This paper discusses a relatively new and insufficiently explored marketing branch – neuro-marketing. The goal of this paper's research is to focus on this relatively new branch of marketing and to indicate the direction the marketing is heading. The paper points out the relevance of internal factors and customers' emotions which have been largely neglected in the previous stages of marketing research in advertising agency in Bangladesh in where there are almost 62 advertising agency in this country; it has now become obvious that these factors will become a "key to success" of the marketing in future. The paper specifically focuses on the customer's perception and emphasizes the importance of internal, psychological factors affecting advertise and customer response in almost all real-life situations. The perception and psychological factors represent the core interest of marketing experts, given the fact that making decisions on buying products is one of the most common aspects of decision-making. The central topic of the paper is neuro-marketing, its nature and most commonly used techniques and methods in advertising agency. Particular interest are the neuro-design and neuro-branding which focus on emotions, that is to say, which aim to "provoke" the desired emotions in customers by using various marketing tools such as color, scent, design, music, and the like for giving advertising in right way. In addition, the paper explores the ethical aspect. Ethical limits of the influence of the marketing techniques, strategies and tools on the customer, and presents an overview of the most common ethical problems and issues related to the use of neuro-marketing. This paper's research is based on the use of the existing sources and the previously conducted analyses of a number of cases in marketing practice with the hand of global advertising agency.

1.1 Introduction

Neuro-marketing is the practice of using technology to measure brain activity in consumer subjects in order to inform the development of products and communications—really to inform the brand's 4Ps. The premise is that consumer buying decisions are made in split seconds in the subconscious, emotional part of the brain and that by understanding what we like, don't like, want, fear, are bored by, etc. as indicated by our brain's reactions to brand stimuli, marketers can design products and communications to better meet "unmet" market needs, connect and drive "the buy". And advertising agencies plays a vital role to reach the customer closer.

Here one advertising agency had been chosen to measure how they implement neuro-marketing philosophy in making their advertisement and that is AsiaticJWT experienced over 40 years in Bangladesh. Especially, the thesis paper analysis and findings included as far as maximum advertisement campaign of different clients and by doing so, the analysis of Neuro-Marketing has been accomplished.

It is commonly accepted that traditional market research is flawed because consumers don't know, can't articulate, or will even lie in a focus group about their purchase motivations. Neuro-marketing research removes subjectivity and ambiguity by going right to measuring observable brain behavior. Respondent attention level, emotional engagement and memory storage are common metrics. In Bangladesh this term is hardly used to measure the customer preference by providing such a scientific advertisement based on neuro-marketing.

But over the last decade or so, as the fields of neuroscience and marketing science have evolved, the area of Neuro-marketing has emerged. Today more companies are investing in the technology and studies. Neuro-marketing blogs (Roger Dooley) and books (Buyology) are being accorded attention and legitimacy. And many in and out of marketing have raised concerns about the reliability and ethicality of neuro-marketing (Genco et al. 2013, p. 8).

1.2 Purpose Statement

The objective is to draw the attention of advertising agency in Bangladesh and its practitioners to the necessity of study of the sensitive matter of neuro-marketing and its two aspects: on the one hand, neuro-marketing will ensure a better and more efficient marketing

management, resulting in increasing purchase of desired products/services and better business outcomes through fruitful advertising making; while on the other, this is clearly a very sensitive area involving ethical issues with regard to using marketing techniques and tools.

Advertising agency should be able to find out how to enhance the techniques and tools used by Neuro-Marketing in advertising agency while, at the same time, respecting the ethics and customer's free will.

This paper surely cannot provide a definite answer as these issues are, no doubt, very sensitive because they go beyond the scope of economy and management and enter the area of philosophy and ethics and, besides, the question arises as to how to define the limits of ethical behavior in marketing accurately. However, the purpose of this thesis is therefore to discuss neuro-marketing from a theoretical perspective and arrive at a better understanding of the practice.

1.3 Methodology of the Paper

1.3.1 Research Design

Qualitative research has been conducted for gathering better information that will give a better understanding on different necessary data. Secondary sources of data collection procedure have been used in the report.

1.3.2 Primary Sources

An interview session had been accomplished with the senior copywriter Mr. TaizulAzom who gave the opportunity to know about AsiaticJwt Ad making strategy in a concise view. This interview session helped to furnish the research objective especially Neuro-Marketing aspects.

1.3.3 Secondary Sources:

Different types of secondary data had been used in completion of thesis paper. Here important to mention that no questionnaires are used for collecting the data. Sources of information and collection of data:

- Different types of international journal regarding Neuro-Marketing
- AsiaticJwt website
- Necessary Books of Psychology and Marketing

1.4 Limitations behind the Paper

The report has been accomplished through theoretical aspects. Research has been classified into two ways are ideological analysis and scientific analysis. But for shortage of scientific equipment and tools, it is not possible to do scientific analysis. After that, the research followed proper guidance to carry on.

2. Literature Review and historical aspect of Neuro-Marketing

2.1 Marketing and Social Change

The American Marketing Association (AMA) defines marketing as "a process for creating, communicating, delivering, and exchanging ideas, goods and services, establishing their prices, promotion and distribution, in order to satisfy the goals of customers, clients, partners, and society at large". This definition emphasizes the marketing focus on planning and performing marketing activities in order to satisfy the requirements of customers.

Kotler et al. (2006) point out that, today, marketing must not be interpreted by referring to its old nature of "talking and selling" but, instead, by referring to its new meaning which includes the satisfaction of customers' needs. Sale cannot be performed before creating a product. On the contrary, marketing starts long before a product is created by a company. Marketing encompasses activities carried out by managers in order to assess the needs, define their scope and identity, and find out whether a profit is possible. Marketing activities continue over the entire lifetime of a product, trying to attract new clients and keep the existing ones by improving the product's quality and appeal, using the insights into sales results and the management of repeated orders.

Dibb et al. (1995) affirm that "if you ask a number of people what marketing is, they will answer the question in various ways". Marketing involves more activities than most people might imagine. Although a single definition of marketing does not exist, there are a few definitions that have been widely approved.

Sheth et al. (1995) state that marketing as a discipline has initially stemmed from economy, due to economists who lacked interest in exploring the market behavior, in particular with regard to the function of intermediary persons.

All the "stages" of social development have strongly affected marketing, marketing activities, strategies and techniques. In certain periods of history, marketing was used to improve the "looks" of a product/service intended for sale/delivery – marketing materials were designed to look appealing, news was "constructed" to sound clever and TV channels had a large number of trusting viewers. It was the time when marketing achieved up to 70% of viewership by a single TV commercial. However, times have changed and today's marketing experts have more possibilities at hand than ever to reach the "audiences" through cable television, internet, mobile gadgets... It is not surprising that the number of commercials viewed by an average American has increased from 500 per day (in 1970) to almost 5000 per day (in 2010).

Vodopija and Felici (2009) state that experts have calculated that an average 65-year-old American belonging to the "TV generation" has seen about two million commercials over his/her lifetime. If turned into work-days, this means that he or she "worked" six years as a commercial viewer, every day, eight hours a day.

We can say that a new marketing is "on the air" today, a marketing tending towards a complete individualization, a marketing that does not consider people as goals but is aimed at emotions, heart and mind of an individual, thus creating an emotional link between an individual and a product/brand. It is a marketing whose objective is, as Peter Drucker says, to make sales superfluous. The objective is to know and understand a client so well that a product or service corresponds to the client... and sells by itself. The "new" marketing has come to understand the role of emotions and the fact that a purchase decision is not a rational act.

2.2 Marketing and Consumer Perception

McClure et al. (2004) carried out an interesting research based on the fact that the Coca-Cola and Pepsi drinks have an almost identical chemical composition. They examined the influence of perception on the preferences of consumers with regard to aforementioned products. They ran a few tests. During the first testing, the respondents drank Coca-Cola and Pepsi not knowing which beverage they drank (the so-called "blind test"), whereas on another occasion they drank from the brand-marked glasses. The researchers found out that the results differed a lot.

In the first test the respondents equally favored Pepsi and Coca-Cola; however, when they knew which drink they had, the domination of Coca-Cola was significant. Furthermore, the researchers established that the brain activity was higher when drinking the "marked" Coca-Cola than when drinking "marked" Pepsi. This research, as well as many other studies, clearly showed the influence of emotions, motives, perception – in short, the inner consumers' world on their purchase decisions and opinions on the quality of a product/brand.

Foxall et al. (2007) state that the perception of goods and services partly depends on the stimuli the consumers are exposed to, and partly on the way the consumers interpret these stimuli. The latter is sometimes called "perceptual coding". Different perceptions of a product can serve as an explanation of different behaviors and views related to the product. Furthermore, Foxall et al. (2007) affirm that each consumer in our economic system is daily "bombarded" by hundreds of messages attempting to inform him/her about something, persuade, teach or change him/her in some way. It is clear that no one has enough time for evaluating each message received, or even time to pay attention to each message.

Therefore customers, as Dibb et al. (1995) point out, adopt certain "inputs" while neglecting others, as they do not have capacity for a simultaneous reception of all possible "inputs". The phenomenon is called selective exposure and involves selecting the "inputs" we are exposed to in order to become aware of them. The selective nature of selection creates two situations: selective twisting and selective remembering.

Selective twisting is changing or twisting the received information. The situation occurs when a person receives the information which is not in line with his/her personal feelings or beliefs. For example, when a person watches a commercial advertising a brand that he/she does not like, he/she may twist the information in order to match his/her previous standpoints. Twisting considerably reduces the effect of marketing on an individual.

In the case of selective remembering, a person remembers the information inputs that support his/her personal feelings, beliefs and views, while forgetting the inputs that do not provide such a support. After a sales presentation of a brand at a shop, the customer forgets most of the presentation if it was in conflict with his/her earlier views.

Foxall et al. (2007) point out that there are many examples of manipulation of perceptive processes in marketing. Packing in aluminum foil is good not only for drawing the attention; using this material for wrapping a product also increases the value of the brand in the eyes of consumers, suggesting a prestige and high status (Higgins, 1984). A yellow nuance on the chicken skin gives the impression of health, rich taste and freshness. In order to make chicken skin yellow and distinguished on the shop shelves, hence better evaluated than the less yellow brands provided by the competition, Frank Perdue feeds his chicken on large amounts of corn and marigold petals (Copulsky and Marton, 1977).

Consumers use sensory characteristics such as color, design, pattern and visual impression to find out the quality, the message and the value of a brand. The prestige, i.e. the status of a brand (outdated or modern, in or out) is often determined through its package looks and the way of selling (Moran 1980). The image that consumers have of a brand, in other words, results from their perception of the brand, which has been created on the basis of relatively few stimuli. Nevertheless, these images may form the basis for selecting a brand, faithfulness to a brand, or trying a new product.

Having all the aforementioned in mind, it is understandable that the marketing experts have been focusing on "deeper" and better familiarization with the consumers, their emotions, desires and needs – in short, focusing on discovering their inner world. In an attempt to get the consumers "know" better, marketing experts have started using new methods, tools and scientific disciplines. It can be openly said that they have shifted the area of operation from "visible to invisible". Instead of traditional research of all conscious, rational and explicable elements involved in the purchase process, they have turned to exploring unconscious, irrational, inexplicable and emotional elements. In order to make the research successful, they have had to include a number of scientific disciplines ranging from sociology to psychology and medicine. As a result, a new branch of marketing has been created – "Neuro-marketing".

2.3 The Concept and Emergence of Neuro-Marketing

The word "neuro-marketing" might sound rather strange. As Sar (2009) explains, the word is fairly new as it was used for the first time by German professor Ale Smidts (Erasmus University) in 2002. However, it is considered that the real founder of neuro-marketing is Gerry Zaltman (Harvard University) who first used fMRI as a marketing tool, way back in 1999.

Lee et al. (2007) assert that, in the past few years, there has been a real explosion of abilities of neuroscientists to directly study brain activities related to frequency, time and the space where these activities take place. Psychologists and psychiatrists were quick to apply the new technology in order to better understand human brain, emotions and insights of individuals. Soon the marketing experts realized the potential of such technologies and, associated with neuroscientists, created "neuro-marketing". Neuro-marketing can be defined as a marketing branch using neuro-scientific methods and techniques for analyzing and understanding human behavior with regard to market and important marketing issues.

Sar (2009) states that, given the fact that the marketing balances between the products/services the marketing experts want to sell and the consumers' desires and needs, it is of paramount importance for marketing experts to know and understand consumers. In the "traditional" marketing these attempts would use the form of interviews, focus groups, research, observations. Even though these methods are very useful and usable, they have a pronounced shortcoming: they are not enough precise and accurate. The most frequent reason for their insufficient accuracy lies in respondents and their inaccurate/untrue responses. The reason of their insufficient accuracy was discovered by neuroscientists who found out that "what people say is often contradictory to the activities of the human brain". To put it more straightforwardly, what we say and what our brain says are two different things.

Ariely and Berns (2010) assume that the brain scanning techniques can provide indications regarding the basic preferences of an individual, which are more accurate than the data gathered by standard market research as these data, are subject to prejudice due to a subjective approach to values. If this is true, the concepts and prototypes of the products could be quickly tested and the products which are not "promising" could be eliminated. This would result in a more efficient allocation of resources that could be used only for "promising" products.

A sudden expansion of neuro-marketing and the interest of scientists are exactly due to this potential of detecting "hidden" information. As a proof, Wilson et al. (2008) affirm that there are more than 90 private neuro-marketing agencies in the USA alone.

2.3.1 Advantages and disadvantages of neuro-marketing methods

As it has been already stated, neuro-marketing and its methods have made a great "fuss" in public and media, as well as among marketing experts and researchers. In both groups there are critics and advocates of this branch and its methods.

Schull (2008) states that there are numerous scientists who disagree with the whole concept of neuro-marketing. Actually, they oppose the increasing efficiency of marketing campaigns on these grounds. They believe that the factors not directly affecting the quality of a product must not influence a potential buyer in any way. They insist that the consumers should be encouraged to buy a product exclusively by emphasizing its quality.

Touhami et al. (2011) point out that the number of respondents in neuro-marketing is still low. This is perhaps owing to certain techniques that are used in neuro-marketing which are rather noisy and claustrophobic. They also set forth the information that the testing process is long due to numerous procedures to be carried out prior to testing itself (from signing the consent to the doctor's approval).

Moreover, Ariely and Berns (2010) question the essential advantage of neuro-marketing detecting hidden information. Namely, they claim that very little is known about the connections between the brain's activity and the expressed preference. Likewise, they wonder whether a neuronal signal that is measured during or just before the decision is made can be a good indicator of satisfaction or reward in the time of spending. Furthermore, they question the return on investment of these researches compared to "classical" methods. An average cost of scanning is about 500 dollars per hour. However, the real scanning costs are much lower as 75% of the total costs refer to personnel and overheads.

Wilson et al. (2008) state that today's MRI machines are large, noisy and expensive, but they also say that our computers were the same forty years ago. They claim that these machines will likely continue to develop and eventually become small and portable (just like today's computers).

Apart from these negative connotations related to neuro-marketing and its methods and techniques, there are a number of authors who claim that a comprehensive approach such as neuro-marketing can only create better connections and understanding between supply and demand. The first and the basic advantage emphasized by many authors is exactly the possibility of detecting hidden information. Wilson et al. (2008) state that the use of neuro-marketing could help buyers and marketing experts to understand each other better, but also to understand better the products they want, which leads to a win/win situation for both sides. Lee et al. (2007) point out that the applications of these techniques have been focused only on brands and customer behavior so far. Schull (2008) writes about an interesting research that Martin Lindstrom⁷ carried out using the neuro-marketing methods and techniques. The research proved that warnings on cigarette packets such as "smoking kills" or "smoking can cause a slow and painful death", at a sub-conscious level, trigger activities in the brain area that are "in charge of" desire and addiction, in such a way that these activities overcome the activities and the influence of the conscious and rational thinking that smoking is bad for health.

With regard to this research Sam Lindstorm (2008) says: "The warnings and images on cigarette boxes have absolutely no effect on smokers and smoking reduction. This means that billions of dollars invested by 123 states in this campaign have gone with the wind. And this is not the strangest part. According to the results produced by the research, all these warnings and images on cigarette packs stimulate the part of the brain known as the "point of desire". This brain region consists of a chain of specialized neurons that "switch

on" when the body wants something – whether it is drugs, sex, cigarettes or gambling. This implies that the warnings do not have any effect on smoking reduction, they actually stimulate smoking."

Finally, it can be asserted that, regardless of advocates and opponents of neuro-marketing, everyone agrees that neuro-marketing has introduced great changes into the perception of the marketing and has changed the attitude towards the consumers. However, it should be noted that, no matter how big is the step that neuro-marketing has made, there is still plenty of room left for progress, primarily in connecting the consumers' activities with their thoughts, emotions and brain activities. The new technologies will certainly help neuroscientists and marketing experts to better understand the role of emotions in decision-making, to develop more efficient methods of stimulating these emotions, to reinforce trust and loyalty to a brand and, generally, to be more persuasive in marketing. But where are the ethical limits in this process?

2.3.2 Techniques and methods in neuromarketing

There are a number of techniques and methods that neuro-marketing uses for detecting hidden information. Lewis (2004) affirms two most important techniques of analyzing human brain activities that are used in neuro-marketing - fMRI and EEG:

fMRI Functional magnetic resonance imaging is the most frequent technique of scanning human brain in neuro-marketing. The functional magnetic resonance is a technique using powerful magnetic and radio waves to create high-quality brain images.

Ariely and Berns (2010) stated that this technique uses MRI scanner to measure the level of oxygen in blood in certain brain areas. Changes in the oxygen level correlate with brain activity. The more active is a brain area, the more oxygen it requires, and this is recorded in minute detail by the scanner. The result is most frequently a fragmented brain area shown in colors. But Lewis (2004) says that, regardless the undoubtedly "seducing" colorful brain images produced by the scanner and displayed in high resolution by the computer, we must not be tempted to interpret them without thorough understanding of the analytic methods through which these images are generated.

2.3.3 What is Functional MR Imaging (fMRI) - Brain

Magnetic resonance imaging (MRI) is a noninvasive medical test that helps physicians diagnose and treat medical conditions. MRI uses a powerful magnetic field, radio frequency pulses and a computer to produce detailed pictures of organs, soft tissues, bone and virtually all other internal body structures. MRI does not use ionizing radiation (x-rays). Detailed MR images allow physicians to evaluate various parts of the body and determine the presence of certain diseases. The images can then be examined on a computer monitor, transmitted electronically, printed or copied to a CD. Functional magnetic resonance imaging (fMRI) is a relatively new procedure that uses MR imaging to measure the tiny metabolic changes that take place in an active part of the brain.

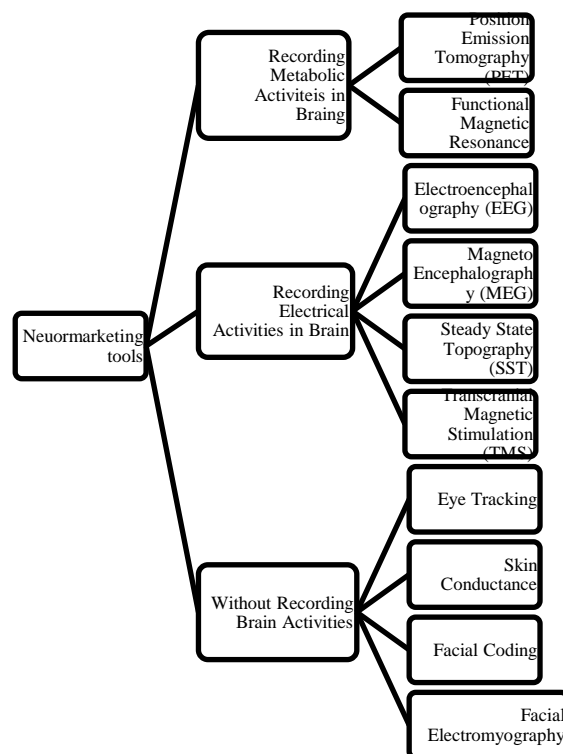


Fig.01: Neuro-Marketing Tools Dimension

2.3.4 What are some common uses of the procedure?

fMRI is becoming the diagnostic method of choice for learning how a normal, diseased or injured brain is working, as well as for assessing the potential risks of surgery or other invasive treatments of the brain.

Physicians perform fMRI to examine the anatomy of the brain, determine precisely which part of the brain is handling critical functions such as thought, speech, movement and sensation, which is called brain mapping, help assess the effects of stroke, trauma or degenerative disease (such as Alzheimer's) on brain function, monitor the growth and function of brain tumors, guide the planning of surgery, radiation therapy, or other surgical treatments for the brain.

According to Ariely and Berns (2010), the second most frequently used method is EEG electroencephalography. The method uses electrodes placed on the skull to assess the electrical activity of the neurons. Owing to a very high temporal resolution (millisecond), EEG can detect a very short neuronal "spike". As Lewis (2004) points out, EEG technique is the most practical among the currently developed method of brain scanning; it is the most cost-effective and the most suitable, due to the simplicity of use and compactness of the apparatus which is able to make a quantitative assessment of brain activities through the high level of sensitivity and temporal resolution.

When observing brain activities with the aid of fMRI and EEG techniques, researchers actually detect the brain areas which "switch on" with regard to certain sounds, scents, images and messages. The gathered information is then combined with traditional questionnaires and is further analyzed and placed into the correlation and context of consumer behavior.

Although these methods and techniques look like science fiction, they are part of the marketing's present (and future). Due to this futuristic appearance connotation, these methods have made quite a "fuss" in public and among scientists. The media started to treat the subject in a tendentious and sensationalist way, reporting about the alliance of neuroscientists and marketing experts in pursuing the "Holy Grail of marketing" – "purchase keys" in the consumer's brain.

However, Ariely and Berns (2010) point out that present proofs indicate that the cognitive process associated with the purchase decision is far more complex and involving too many factors to be "reduced" to a brain activity area. Nevertheless it is possible to ascertain that some brain areas are actually more engaged than others in the process of making decisions and selecting a particular brand/product.

2.4 Perspectives of neuro-marketing

As it was stated above, the greatest advantage of neuro-marketing is precisely the ability to detect hidden information in the consumer's mind. Ariely and Berns (2010) indicate a few other areas where neuro-marketing could have a considerable role, particularly in the stage of designing a product/service: To make the idea work, we should identify the product dimension (taste, scent, texture) we want Food – A high potential of neuro-marketing lies in designing food and juices which could be created in line with the taste and desire of consumers. As the perception of a product is achieved under the influence of a set of factors such as taste, scent, texture, appearance, even sound, which are so complex that even the respondents themselves would not be able to explain, the brain scanning technology could be of great help.

Prior to the attempt of maximizing the brain response to different variations and dimensions, such methods could be used in food production in order to make food more appealing (for example, healthy food or food for children). However, some researchers point out a disadvantage of this approach – and this is a potential possibility of creating "super food" – so tasty that almost no one could resist it. This is likely to result in obesity, health issues, and threatened free will of consumers.

Entertainment – This is an area where neuro-marketing has not been enough active yet. The area surely has a large potential. If we know that making an average high-budget Hollywood movie costs approximately 100 million dollars, plus additional 100 million dollars needed for marketing, the potential value of neuro-marketing in the film industry is obvious. One of the mitigating circumstances is the fact that, apart from a still image, a movie is the easiest "product" to be presented and examined by fMRI scanners. Neuro-marketing research can be designed in such a way that the respondents are given an opportunity to watch two versions of a movie. After comparing the brain images, the version which stimulated more activity in the desired brain areas can be released into movie theatres.

Architecture – This is certainly an interesting and atypical area for using neuro-marketing. Some studies using human brain scanning during driving or orientation within buildings have already been conducted in order to produce information on how to design buildings (for accommodation or public use) which would be easier for their users to find their way around. This idea has a great potential and is very useful from the social point of view, especially if we apply it to designing and building facilities such as, for example, old people's homes in order to compensate for the loss of memory experienced by their users, due to their age or the Alzheimer's disease.

Politics – It seems that politics is omnipresent, including the neuro-marketing. This is another interesting area requiring huge funds, which could benefit from the introduction of neuro-marketing techniques and methods. According to the data provided by Federal Election Commission⁸, the cost of the US presidential campaign amounted to 1.6 billion dollars in 2008. If we observe political candidates in the context of marketing, they are "goods" that should be "sold" to voters. Candidates and their campaigns operate in two stages – before and after the "image designing". Neuro-marketing could be used before "designing" when these candidates, their messages and the nature of campaign could be better designed owing to previous neuro-marketing research. A neuro-marketing

research performed by The New York Times showed in what way the different brain areas respond to various people and policies. This, however, raises the issue of manipulating people in the political marketing, but if neuro-marketing is used for promoting the messages of the general public interest (e.g. in anti-drug and anti-alcohol campaigns aimed at young populations) or for promoting humanitarian campaigns, its benefits to general public are unquestionable.

These and similar areas of possible neuro-marketing application indicate that neuro-marketing and neuro-marketing research do not necessarily have to be focused only on commercial activities, but can serve well for the benefit of a wider community. These studies may indicate the right course the neuro-marketing should take in the future. These ways of using neuro-marketing could reduce negative connotations that are frequently undeservingly associated with neuro-marketing.

2.5 Neuro-Design and Neuro Branding

Lindstrom (2008) states that in 2005 corporations spent over 7.3 billion dollars on marketing research in the USA alone. In 2007, this figure amounted to 12 billion dollars, not including the funds that were spent for the marketing of the product, such as packing, TV commercials, billboards, which amount to a total of about 117 billion dollars per year – in the USA alone. If this machinery "works" and makes sense, why are 8 out of 10 new products in the USA unsuccessful?

It is obvious that marketing experts have forgotten to pay attention to one aspect: the synergy of all senses. To date, marketing experts have focused only on one, maybe two senses (in most cases, the eyesight). As asserted by Vodopija and Felici (2009), the synergy of senses, a unique experience in which all senses take part, is very powerful and strongly affects the decisions of each individual. The goal of the "new" marketing is to achieve that synergy in branding by using all available information produced by neuro-marketing research. For once the associations are triggered by good branding, this is followed a psychological chain reaction. In that case it is enough to stimulate one of the senses to launch an unstoppable association sequence – one sense awakes another until all awoken senses generate an effect which literally launches us into a certain emotional state/mood.

"Emotions" – this is the new marketing "weapon" of the 21st century. Owing to neuro-marketing methods and technologies, it is now clear that emotions are very important when selecting a product/brand.

Norman (2004) states the example of neuroscientist Antonio Damasio⁹ who studied the behavior of people who were perfectly "normal" in all aspects, except that they had a brain damage which reduced the functionality of their emotional system. Regardless of "normal" appearance, they were incapable of making decisions and normal functioning in the world. Although they were able to explain how exactly they should function, they could not realize where they lived, what they ate or what products to buy and use. These findings contradicted common beliefs that decision-making is a result of rational, logical thoughts.

2.6 Ethical limits in Neuro-Marketing

There are a relatively small number of issues in marketing which are more controversial than ethics. Most of marketing decisions can be estimated as right or wrong, ethical or non-ethical. Yet the problem with ethics is that it is connected with an individual and therefore differs from one person to another.

Dibb et al (1995) state that ethics is a moral assessment of certain decisions or actions as acceptable or unacceptable from the standpoint of generally approved principles of behaviour. It can be concluded that ethics in management is formed by all moral principles which determine good or bad behavior in marketing. It should be also pointed out that most of fundamental ethical issues have been formalized in laws and behavioral codes by which someone's behavior conforms to the standards of society.

In the past few years the issue of ethics has become particularly topical by introducing neuro-marketing and neuro-marketing methods in the almost every-day practice of market research. With regard to neuro-marketing and its methods, the first and foremost issue that the public is concerned with is certainly the possibility of creating such products and marketing campaigns that would be "impossible to resist". The general public is concerned about finding a "purchase key", a brain area which is in charge of purchase.

Murphy et al. (2008) affirm that precisely the issue of consumer's "autonomy" is paramount. They also claim, as most of other authors do, that the present-day technologies do not provide the possibility of "access" to the human brain with the purpose of manipulation, in the way that the manipulation results in an exactly desired behavior. Other authors also believe that the purchase process is very complex and involves too many factors to consider that only one brain region is in charge of it. In addition to the widespread issue related to the "purchase key", some authors question other more or less realistic aspects of the neuro-marketing ethics.

Ariely and Berns (2010) raise the question of privacy of information on consumer preferences. Namely, we are witnessing the selling of information about our preferences and activities to companies. It is particularly emphasized in the "internet marketing" where a number of more or less private information (such as e-mail address, history of purchase, search history) is shared/sold among companies. Another issue refers to handling of the images obtained by brain scanning. Many questions require to be answered: who owns these images, which has right to access them, theoretically, it may occur that, during a neuro-marketing survey, the fMRI scanner detects a disease in a respondent's brain. The information could be forwarded to the employer who could then lay off the employee.

Due to this and many other issues, Murphy et al. (2008) suggest the creation of a code of ethics which would be adopted by neuro-marketing industry. The overall objective of the code of ethics would be to encourage research and development, entrepreneurship and company profitability by applying neuro-marketing technologies in a beneficial and harmless manner in all stages of development, implementation and dissemination. The code should, inter alia, address the issues related to respondents' safety (their health, scanning effects, handling of images), as well as protection of "niches" that are threatened by marketing exploitation.

Finally, it should be noted that some authors approached the ethical issues in a different way. Instead of raising questions about ethical problems in neuro-marketing, they point towards benefits the ethics may have from neuro-marketing. Lee et al. (2007) state several

areas where the application of neuro-marketing could reform the "ethical image" of the marketing in general. The first and the fundamental area is the study of efficiency of marketing campaigns. The public and the scientists often reproach the marketing industry for its excessive spending, which is a form of social irresponsibility.

2.7 Learning outcomes

Marketing has changed in recent years. It can be said that it has become more focused on individuals and their needs. The change has been encouraged by the emergence of a new branch of marketing called the neuro-marketing. The latter has appeared as a product of introducing neuro-scientific methods into the marketing system. This application has enabled "insights into human brain" and found previously unknown facts and data. Owing to this kind of "revolution" the marketing experts have started a "deeper" exploration of connections and relationships between particular marketing elements and customers' behavior. All these insights have been implemented in practice to create a product/brand which will "provoke" consumer's emotions and which will not make him/her indifferent.

In short, it could be asserted that neuro-marketing relies on the fact that many decisions, about 70% of them, are made at a sub-conscious level and that many people cannot explain the reasons for making their decisions in a logical way. Neuro-marketing provides a possibility of detecting the data about purchase decision-making and buyers' preferences that have not been known until now. In order to turn the data into information, neuro-marketing will have to "learn" how to connect the gathered data with customers' preferences, selection and behavior, in order to achieve the set goals, which certainly represents one of the future research areas of neuro-marketing. Therefore it is expected that the future research in this area will focus precisely on understanding the cause-effect relations between the activities of a particular brain area and the customer's actions. It should be pointed out that the connections between these instruments and customers' behavior have not been fully explained and ascertained, nor it can be done at this stage of technology development and understanding of human brain. However, it is assumed that this will be feasible in the future.

On the basis of previous analyses of the available literature on the concept and application of the neuro-marketing, the authors believe that there is not enough scientific evidence that can confirm the uniformity of its application; for example, it cannot be assumed that, say, the red packing help sell a product, whereas the blue one does not.

In this paper the authors have approached the neuro-marketing from an objective, scientific standpoint, without any intention to glorify particular neuro-marketing results or neuro-marketing in general, or to approach neuro-marketing with negative connotations in mind. This is an area where ethical issues, with regard to the boundaries and the scope of neuro-marketing application, are very accentuated and inevitable. Therefore, further research, using a multi-disciplinary and interdisciplinary approach including economy, psychology, ethics, medicine and other fields of science, should provide answers to these questions. Namely, it seems that the answer – To what extent does the use of neuro-marketing tools and techniques impinge on the free will of the consumers? – is not remotely answered.

The authors believe that further research should be done aimed at providing an answer to this question, which is not just a marketing issue, in particular given the fact that there has not been enough detailed research into the matter. Most of the existing studies only indirectly touch this area, perhaps simply because of the fact that neuro-marketing is a relatively new discipline. Unfortunately, in their "race for profit" the marketing experts occasionally use unethical instruments and methods. In its further stages of development, marketing should by all means resist the temptation to use such instruments for achieving profits.

4. Analysis and Findings

4.1 Ideological Analysis

For the purpose of accomplishing the analyzing and findings part, the author had to take help to advertising agency AsiaticJWT. As it is mentioned about their company's core member are the most topnotch person in Bangladesh, that's why one senior copywriter, MrTaizulAzam and other assistant copywriter Mr. Mohammad Ruhul had given reasonable time to grasp information about Neuro-Marketing. It was an informal interview session as Mr. Taizul Ahmed is familiar with us before. I along with my friend was involved to handle it properly in a professional way.

The Synopsis of the Interview Session that helps to find out our expected information regarding Neuro Marketing is given below,

The View of AsiaticJWT while making advertise considering Interview session

As neuro-Marketing is a new scientific tools for using in marketing especially for advertising agency, AsiaticJWT is not used to be known in detail about it so far. But the considerable thing is that, they have been making ad for any company's product in accordance with following consumer psychology

When AsiaticJWT is involved themselves to make ad, they collect two types of information including "Consumer psychology and Buying Decision Behavior". For collecting information about aforementioned two factors they have to take help from two vital sources is the "Third Party (Research firms) and Focused Group Discussions" By gathering information from these sources, AsiaticJWT matches it's with the assigned product brand for advertising.

The subconscious mind is a key player in our decision making process. Only searching on the subconscious mind and emotional functions of the brain researchers can have more accurate details about why consumer buy certain products or prefer different brands and how they make decisions.

So, AsiaticJWT directly don't follow the neuro-marketing tools but they are in the way of neuro-marketing what they claim for. They believe if anyone think about to make advertise for any specific brand then one's should follow two important factors as it mentioned

consumer philosophy and Buying Decision Behavior.

But it is absolutely impossible to read every individual psychology. That's why AsiaticJWT is to take help some third party basically research firm those are involved to collect specific data about what actually advertising firms desires. This is one way to collect data for consumer philosophy and buying decision behavior.

On the other hand, focused group discussion method gives a concise assumption about consumer philosophy that is beloved by the firm AsiaticJWT. When any company or client comes to it for making any ad, then they are sorting some elite class customer those are really pure customer of that specific product. Collecting a short sample numbered by 25 people, they create a board, and then by considering brain storming, AsiaticJWT tries to find out the core point of their psychology. And that's the way they have been maintaining before maintaining any advertisement.

It is good to be mentioned that there are many research firms in Bangladesh. The most important firms are MillwardBrown, ACNielsen Bangladesh, Lotus Bangladesh Pvt. Ltd, Globex Marketing Co., Marketing Services and Promotion, Ivacom, Nipu Marketing Co, innovative marketing and consultancy, Social Behavior and Marketing Research Enterprise, Survey Research Group of Bangladesh. Apart from these strategies tried to observe some important psychological criteria such as memory and learning, attention and perception and emotional engagement. These factors is actually the internal language of theoretical Neuro-Marketing,

By getting all sort of information treated as a prerequisite for the AsiaticJWT, then they think about to cross match between Brand of the product and its consumer philosophy and buying decision behavior.

4.2 Findings

AsiaticJWT promotes advertising campaigns for specific clients. As they are not following Neuro-Marketing directly for the reason of very new and fresh tools, that's why the research findings has been designed by going through its existing advertising philosophy on the basis some crucial psychological contents are given below,

Memory and Learning: For people to use memory, they have to encode information, store and retrieve it. According to some hypothesis, consumers will remember better information if the environment in which they try to recall resembles the one in which they learned it. Without memory consumers would not be able to learn about products and services and building brands would be very difficult. The concept of "working memory" makes connection between different regions of the brain and consumer's reactions when visual, verbal and other temporary buffers are involved. Elements like numbers, words, rating steps, seen faces or musical tones may be called working memories. AsiaticJWT, in that case provides very amusing and emotional advertisement that is kept in consumers memory very well as it mention in Chapter 03.

Attention and Perception: *Attention* is at the core of mental functioning. Consumers may pay attention to a cup of coffee because of the low-level features like color, texture, and location or because of the high-level of features like: this cup of hot coffee can be useful. Intentional selection can affect neurons at almost any level.

Perception helps consumers to focus their attention only in those products they have some sort of interest. A good customer perception may increase the brand image and the loyalty. One of the most important functions of the unconscious mind is to process data coming from the eyes. About a third of our brain is involved in processing visual data. After data is processed and interpreted unconsciously the information is delivered to the conscious mind. Attention is usually tracked with eye-tracking devices and represents one of the main parameters in neuro-marketing studies. AsiaticJWT is much more concern in this sector. They always try to grow up attention and create strong perception on the making advertisement.

Emotional engagement: When deciding to buy a product, first the consumer is influenced by emotions and after that all this process become rational. The repurchase intention is based on satisfaction, which is depending on the customer's emotions. A long period of time the marketing researchers considered that the consumer makes purchases based on rational reasoning. Emotions influence consumer's behavior in ways they cannot consciously track. It can be seen that many marketing studies in which subjects are asked to suppress their emotions when making different tasks or answering questions – this kind of studies cannot have conclusive results.

Emotions are generated in the Limbic System, which does not support consciousness itself. Much of the time we are unaware of having emotions. Due to the connections between our Limbic System and the Cortex, especially the Frontal Lobes, we can be aware only of intense emotions. Emotional engagement is tightly connected to the social aspects. An important activity of the consumer's life is the social involvement and the connections with other people of the community. Recommendations or simple discussions about a product or brand influence us in selection and decision-making processes. The human brain is designed for social life. A result and a cause of this fact is the expansion of the cortex which corresponds to increasingly larger groups. Without interaction the neuron dies. The individual neuron or a single human brain does not exist in the nature. Our neurons are far more social than people – estimates for human being social networks are about 100 – 150 connections, compared to the 10 000 for neurons. AsiaticJWT made many ads for Grameen Phone, Citycell, Close up, Fair and Lovely, Lifebuoy, Wheel, Lipton, Redcow and social ad for Unicef that undoubtedly touch the emotion of consumer to buy the product.

5. Results, recommendation and Conclusions

5.1 Results and discussion

Neuro-marketing is considered a cutting-edge science, a mix of more research fields namely Neuroscience which focuses on nervous system, and predominantly on the human brain; Brain Sciences a division of Neuroscience studying the connections between the brain and its structure or function Cognitive psychology which makes connection between human mind and behavior. So this is a pick time to get in touch with great success for the advertising company by using neuro-marketing philosophy. It refers to mental activities such

as memory, learning, imagery, problem solving, reasoning or decision making marketing that is responsible for developing products and brands in order to satisfy the customers, being profitable for the advertising agency.

What can be done?

Still many things need to be improved. There is not a unity in measuring the brain activity for neuro-marketing studies. Using various methodologies may result in different outputs. Due to the special technologies needed and high costs involved only a few companies and universities are able to run such complex researches. Additionally, to interpret data requires high skilled professionals and researchers from different fields such as neurologists, psychologists, economists and software engineers. That's this is realistically more difficult to implement in advertising agency in Bangladesh.

More areas of research were identified and classified according to the topics and patterns of neuro-marketing studies. Based on these areas of research companies might have direct and indirect benefits from the neuro-marketing studies. The direct benefits refer to key aspects of the business field such as products and services, brand, advertising, packaging, in-store solutions or business online. In this case the neuro-marketing studies outputs can be immediately implemented and the results can be measured. Regarding the researches with indirect benefits they can be categorized in more groups: choice and preferences, decision process, purchase intent, regional brain activation to marketing stimuli, hormones and reward and unconscious mind of the consumer underlying the emotions role in consumer behavior. This category of research leads to general outputs and every company has to implement the findings according to their specific. These are actually the main path that should be considered by the advertising firm.

The results of the study showed that different TV programs activate different part of the brain. Quiz shows and reality shows involve different areas of the brain, giving a clear image on how our mind functions when watching TV. So, advertising agency must be concerned about the matter while making ads.

5.2 Recommendations

There are some paramount recommendations given that may help to advertising agency for developing their view regarding ad making that expose right message to consumers.

1. Personalize the agency with the hand of Neuro-marketing philosophy

The agency owner is a key component for advertising firm. The agency owner should be the face of the agency. It's built upon relationships. People want to work with other people that they know, trust and like. Using personal, social media accounts, such as Twitter, Facebook, LinkedIn, Google + and even Pinterest, can become effective networking tools. Firm can engage with dozens of prospects daily without having to rely upon interruption type tactics.

2. Identify best prospects of Neuro-Marketing

The inability to clearly define their target audience has many agencies floundering when it comes to developing a lead generation pipeline and a consistent advertising program. A considerable amount of time and effort is wasted chasing the wrong type of accounts. In Neuro-marketing can help to analyze the problem.

3. Create a differentiated positioning

Positioning is the foundation of any agency's advertising firms. Without a differentiated position, ad agency is much harder than it needs to be. This is an area that the majority of agencies have not addressed because of procrastination or, more likely, their unwillingness to make the difficult business decisions. But, contrary to common belief, all agencies have pretty much the same basic capabilities, and processes. I know how difficult agency positioning can be but, I also know that a lack of positioning creates even more hardships. AsiaticJWT should follow specific positioning while making ad.

4. Create a written Neuro-marketing plan

After defining target audience and point of differentiation, agency needs to turn that into an executable strategy. It still amazes that most advertising agencies do not have a written Neuro-marketing plan. Having a plan makes business easier and much more consistent with a plan; Asiatic should have a program that only gets better with time because it is measurable. This allows refining and improving it.

5. Use PR (Public Relations) to create awareness and interest

No other marketing tool replicates what PR can do when it comes to building trust with important audiences. PR greatly enhances agency's credibility. Strategic use of public relations can help small and midsized agencies level the playing field with larger competitors. PR helps to make agency "discoverable" through local, regional, national or international consumer media coverage; niche industry trade publications, websites and blogs your prospects read.

6. Use Neuro-Science Specialist to understand customer inner mind

Advertising agency should do survey on certain number of sample by observing nuero-marketing scientific tools influence on their attributed case. It helps to clarify more about consumer's perceptions, emotions, contingency, attention and learning process that AsiaticJWT can implement in their advertisement.

Conclusion

Neuro-marketing studies are in their infancy and most of them are experimental. Generally, the lack of unity from the methodology point of view may lead to unclear outputs. However, understanding the human mind in biological terms has emerged as the central challenge of science in the twenty-first century. Neuro-marketing researchers need to do much more work into theory development and testing in order to move forward especially for advertising agency. From the methodology perspective the qualitative method is used more often than the quantitative one because of the complexity and high costs of this type of research. Sometimes only qualitative methods are not enough to bring with it accurate results and strong arguments. Future interested researchers should pay attention to both the qualitative and quantitative studies and explore data from a higher number of subjects.

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