Neuromarketing: a brave new world of consumerism

Literature, Books

Introduction t this point in our social history we are experiencing trends in marketing and consumerism that no cultural phenomena in antiquity has prepared us for. Each day between the hours of waking and sleeping we are exposed to 3000 - 5000 marketing messages across every shape and flavor of media mankind has been able to devise In good conscience (Story 2007). Every niche, of every segment, of every market, for every product, has a multitude of competitors vying for space of mind, seeking to differentiate, remind, inform, or persuade themselves into our lives and shopping trellises (Copley 2004).

This clutter, consternation, and competition has taken the humble consumer transaction to be something more akin to game theory, and contemporary marketing strategy has become a battle of minds and wills (Lee, Frederick, and Chamberlain 2007). Each new generation of consumer finds themselves delivered deeper Into anenvironmentof Increasing media and message saturation.

But, with every generational cycle a further sophistication In the adaptive discretionary filtering system is created in order for these individuals to preserve some degree of highly guarded 'psychic space', and as such 'marketing professionals re keenly aware of the obstacles posed by both information-processing limitations and viewer opposition' (Rumba 2002). 'The multiplicity of advertising messages to which each consumer is exposed dictates that advertisers place a lofty premium on the much-coveted psychic space of their Intended message recipients.

Moreover, marketers Increasingly find themselves trying to reach target audiences who have an arsenal of cognitive, behavioral, and mechanical strategies for ad avoidance at their disposal' (Speck and Elliott 1997). Further adding to this already encumbered media/ immunization sphere is also the weight and complexity of the postmodern condition in which Goldman (1992) speaks of 'relentless scrambling of signified and signifier, mixing and matching meanings' and Brown (1995) goes on to highlight 'practices such as fragmentation, De-deliberation, hypnotherapy, chronology, pastiche, pluralism and anta-functionalism'.

This escalating complexity of exchange devised for increasingly more sophisticated and media salt-B»,' consumers attempts to side-step any 'predictability of antiquated advertising conventions that could no longer pass through the filters of seasoned postmodern nonusers' (Goldman and Passion 1994).

What remains is the perfect storm of social complexity, ever-changing message filtering, and big-business 'sign wars' which has left some marketers believing that turning to the dark arts Is the only way to get ahead in marketing communications, with notably one energy drink brand literally and comically commissioning a Haitian priestess to channel a foul-mouthed voodoo deem-god to help design their advertising campaign (Panamas 2010). Enter stage left - marketing's. Thin such a relatively young field of inquiry the precise definition of marketing's s still finding its footing with conflicting definitions still being proposed and utilized by divergent agents within the realm (Fisher 2010). Perpetuating this conflict is the notion that

academia and industry share limited cohesion in exploring this field, that private enterprises do not tend to publish findings or share proprietary information, and that more has been published about marketing's across the popular media, relative to the traditional tome of recognized peer-reviewed publications (Fisher 2010).

In spite of this, Lee (2007) proposes that 'marketing's as a field of study an simply be defined as the application of neuroscience methods to analyses and understand human behavior in relation to markets and marketing exchanges' and Fisher (2010) notes that marketing's 'can be tentatively defined as marketing designed on the basis of neuroscience research'. These proposed definitions avoid the subjective bias embraced by some proponents and detractors and are a suitable explanation of the topic for the purposes of this discussion.

As brain sciences increasingly inform our daily lives, social practices, and intellectual discourses, ornamenting has become one of a collection of developing fields to gain the 'neuron' prefix along with neuroscience, neurasthenics, neuropathology, and neurotically - these fields now collectively earning the moniker 'neuromuscular', 'and the brain-based explanations arising from it are progressively influencing public notions of personal identity, responsibility, and causation' (Fisher 2010).

Why Marketing's? He most acute advantage thought to stem from the utilization of neuroscience in examining an individual's response to market based inquiries is its unfiltered objectivity and unbiased honesty. Typically

the self-assessment measures commonly used in marketing research rely totally on the ability and willingness of the respondent to accurately report their attitudes and/or prior behaviors' (Petty and Caption 1983).

However, it is believed that the brain approximately expends only 2 percent of its energy on conscious activity with the remaining majority devoted to unconscious thought and processes, thus, neurotransmitters believe, traditional market research methods ? like consumer surveys and focus groups ? are inherently inaccurate because the participants can never articulate the unconscious impressions that whet their appetites for certain products' (Singer 2010).

In addition to this intrinsic inability for an individual to access all relevant perceptual data, this error factor cumulatively adds to any conscious or even unrecognized desire the respondent may have to please or deceive the information gathering unit, even further exaggerating the potential for inaccurate measurements. In contrast, physiological responses can be collected when respondents are actively partaking in research activities and are difficult for subjects to control, although not difficult to affect (Petty and Caption 1983).

In many ways marketing's is the lie detector of the marketing industry, but the potential application is much greater than simply extracting truthful responses, it may prove instrumental in uncovering the processes and transparent way than marketers have previously had access to. The benefits of marketing's are obvious when framed in the above context. This field

creates the possibility for marketers to understand consumers to an extent that a myriad of techniques over many decades of investigation have only ever been able to scratch at the door of.

Felt (2007) believes that, assuming thesciencecan be translated into meaningfultechnologythe power and the precision of the retrieved data as a management tool could prove sublime, it would finally enable marketers to reach out and pinprick consumers without using broad strokes'. " In fact, exploring exactly what elements of anadvertisementare critical to awareness, attitudes and evaluations of products, and whether these differ for different groups, should reduce firms' reliance on the 'blunt instruments' of blanket coverage, shock tactics, or sexual imagery' (Lee 2007).

The Marketing's Mix he research generated by any given marketing's firm is of course a product article and as such marketing mix considerations are a requirement of presenting to the market, however, the more significant discussion is the current and conceivable application of this technology to play a major role in guiding and optimizing each of the up's of the marketing mix for utilities. Them Noble, Managing Director of 'Neurotics' a major player in the burgeoning marketing's industry, has stated that 'all the biggest brands are using it... But most of them are keeping it to themselves... Even so, marketing's has become a key part of today's marketing ix' (Fagan 2011). The technology is believed to be equally applicable to each of the seven aspects of the mix provided a suitable interpretation model is utilized to rationalist the raw data. The up's the literature most commonly discourses are reviewed below. Product Typically product designers refer to consciously

generated studies of consumer preferences to inform the process, in such inquiries subjects are likely to be influenced by 'normative expectations and social influences' (Figurate 2007).

For example, survey research typically reports that women find wrestler-turned-action ere 'The Rock unattractive 'but their brain activity says otherwise: areas associated with attractiveness light up when women watch him on screen' (Singer, 2004). Bruit (2004) mentions that some tests conducted for Demolisher's showed that certain products can activate the self-reward centre of the brain which is the same region that natural stimulants such as sex, chocolate, and cocaine trigger, this action is aroused by the release of the molecule dopamine and releases endogenous opiates - substances linked to lust and pleasure'.

Whilst this trigger is not a guarantee of arches, all other things being equal - designs that create pleasure are far more likely to be purchased than those that do not (Figurate 2007). Price Lee (2007) states that 'pricing seems to lend itself almost perfectly to normalizing research' and believes that age old questions like why " prices such as '$4. 99' are perceived as significantly cheaper than those such as '$5. 00" could be answered by simultaneously exploring the temporal and spatial nature of brain activity.

Through utilizing this technology marketers can not only underpin optimal pricing strategies but also understand how and why pricing perceptions are formed. Place customers to seeing, hearing, feeling, touching, tasting, and smelling stimuli, stores may be able to customize environments to enhance

the consumer experience, or weight the chances of a sale. 'For example, if normalizing data suggest a positive response to the touching of Jewelry, the consumer may experience a personalized discount prominently displayed in their sightline in order to provide encouragement for purchase' (Wilson 2008).

Promotion Measurement of advertising messages and their success in provoking emotional responses can be gauged, and assumptions can be made about the subject's unconscious thought patterns depending on which areas of the brain 'light' up (Figurate 2007). The reaction an agency wishes to evoke with a given advertisement e. G. Excitement, passion, hostility, humor, attention, etc. ; can be transposed to the brain map where these concepts are processed. If that brain area is unaffected after exposure to the advertising stimulus, it is obvious that the advertisement has failed this crucial test' (Figurate 2007) Schafer (2005) also states that 'neural scanning might be able to predict the strength of advertising recall for specific advertisements'. The History he earliest reported use of the term marketing's first appeared in a press release in July 2002 by Atlanta based advertising agency 'Birthrights' announcing the creation of a new business division which utilized functional magnetic resonance imaging (fem.) for purposes of marketing research (Wilson 2008; Fisher 2010).

However, the Economist (Inside the Mind of the Consumer 2004) duly notes thatHarvardProfessor-Emeritus Gerald Coalman filed a patent for 'normalizing as a marketing tool' in the late sass's approximately four years prior to Brightness's suspicious press release. In spite of this, some observers

consider this technology to be part of a continuum that has been ongoing for much longer. " Marketing's is simply the latest incarnation, says Joseph Throw, a professor ofcommunicationat the Ennobler School for Communication at the University of Pennsylvania. There has always been a holy grail in advertising to try to reach people in a hypodermic way,' he says" (Singer 2010). Educated observers also make note that Journalist and social critic Vance Packard (1957) wrote 'The Hidden Persuaders' more than 50 years ago which is still considered to be a seminal work, which outlines how advertisers play(deed) on people's unconscious desires in an attempt to influence them. Run for our Lives? Neatly probing consumers for answers to every fear, desire, motivation, and preference in underpants color has begun to beg the question in some quarters, should we love this or fear it? It appears from the outset that this technology has been spawning controversy; however, some of this contention seems not to be entirely new in nature but the amplification and reinvigoration of well disputed ground, freshly driven by this new and acute mechanism.

The contention largely remains in determining whether using such technology to understand the desires of consumers will be useful for serving them, or used for manipulating them, in short, is actions of a great many organizations and individuals, the main objective of marketing is to help match products with people (Rarely 2010; Kettle, Keller, and Burton 2009). 'Marketing serves the dualgoalsof guiding the design and presentation of products such that they are more compatible with consumer preferences and facilitating the choice process for the consumer' (Rarely 2010).

Marketing as ethical or unethical in practice is a purely a determination to be made on a case by case basis, not generalized in overarching sweeps. Rallies (1999) surmises that the organizational factors contributing to principled business undertakings or in fact impeding a unified ethical framework are moral reasoning, organizational ethical climate, level of economic development, and cultural dimensions, Murphy (2005) suggests on an individualistic level that indicative qualities can be determined from virtue and character ethics utilizing measurements of the five core virtues of - integrity, fairness, trust, respectand empathy.

In comprehension, understanding the afore is to recognize that marketing's (like most industries,) exists within a context of moral heterogeneity and the concerns that exist toward the frayed edge of the ethical fabric, underpin a movement ofanxietytoward the potentiality of neuron-techniques to probe the subconscious mind, and the conceivability of these vehicles to unduly influence consumers, turning them into shopping robots without their knowledge and consent' (Singer 2010).

Singer (2010) states that " marketing's is setting off alarm bells among some consumer advocates, who call it 'brainwashing ? an amalgam of branding and brainwashing". 'Our contention is that neuroscience findings and methods hold the potential for marketing practices that threaten consumers' abilities to follow preferences and dictates according to free will' (Greene 2003).

The controversy and paranoia surrounding a field that is yet to be evidenced or indicted of unethical practice is so potent that Senior and Senior (2008) have felt compelled to draft 'A Manifesto for Marketing's Science' to guide the ethical functioning of practitioners, quell some f the fears of alarmists, and address potential dilemmas arising on this new frontier.

The Advertising Research Foundation has also seen fit to undertake a collaborative study with the major operators in the marketing's industry to establish and implement the 'Northeastwards Initiatives' agenda and determine ethical working canons for the field (ARP Announces Groundbreaking Northeastwards Study 2010). In addition to this above, the exploratoryacademicdiscipline of neurotics has continued to grow in unison with the developments in neuroscience research and neuromuscular, informing it all the while.

Irrespective of the development in ethical governance, detractors warn that we do not have a current legal and social structure equipped to address technologies that are intentionally designed for subconscious persuasion. Singer (2010) states that 'if the advertising is now purposely designed to bypass those rational defenses, then the traditional legal defenses protecting advertising speech in the marketplace have to be questioned'.

We are also warned that many legally and morally ambiguous issues will arise with the increase in marketing's usage such as Who ultimately owns brain scans, whether scans can e sold to other persons or institutions, and what happens to extraneous information, such ashealthproblems, revealed

by the scans' (Wilson 2008). The array positron emission tomography (PET), magnetoencephalography (MEG), functional magnetic resonance imaging (fem.), electroencephalography (EGG) galvanic skin response (USSR), eye tracking technology, electrocardiography, and electromyography (Figurate 2007; Lee 2007).

It is noted that any corporeal measurements gained through the use of these instruments are strictly limited by the skill the interpreter has in correlating bio-readings to mental/emotional states, and therefore into actionable ATA. There has been some research to show that imagery favored in traditional research preference tests are often not the ones that stimulate the emotional centers of the brain (Uncommon 2007), according to People (quoted in Harris 2006) however, emotion is one of the major keys to all marketing and by monitoring brain activity we can get very good indication of when an emotional connection has been made.

Unfortunately, these results can only reveal activation correlated with particular imagery but cannot predict outcomes with certainty, and it does in fact highlight the actuality that there is 'no direct link between arousal and behavior; no measure of purchase intent' (Figurate 2007). According to James (2004) the only time ahuman beingcannot help acting on arousal is as a toddler'.

Some critics throughout the literature have argued for the existence of a 'buy button' in the brain, the above suggests that there could be no overriding of an individual's cognitive control and 'current evidence suggests

that the cognitive processes associated with purchase decisions are multi factorial and cannot be reduced to a single area of activation' (Rarely 2010). In the face of decries and skeptics Joey and Kilts Remain, Brightness's CEO and founder claim that rather than forecasting the shopping behavior of individuals, marketing's will help develop an understanding of how people develop preferences. Our goal is to change company, not consumer, behavior," says Remain. He adds that thisphilosophycould improve advertising ethics. " What if you could, for example, show a company that their moral and ethical behavior has a bigger influence on consumer preference than the color of their packaging or current tag line? "' (Singer 2010). New Scientist magazine conducted a est. of marketing's to choose the 'most attention getting cover for its 5th August 2010 issue.

Nineteen readers of the magazine were shown three alternative covers during EGG tests from which one was ultimately selected. The ultimate result of this experiment and the ensuing cover choice, was a 12% increase in sales year-on-year and the second highest selling issue of the year which the deputy editor Graham Layton claimed was " unheard of in August" (Tartan 2010). Outside of this, virtually no other results have been published either confirming or condemning the predictive ability of marketing's in the marketplace.

However, the one strong virtuous indicator that does exist, is the very fact that a multitude of global companies such asGoogle, CBS, Frito-Lay, Demolisher's, Brown-Foreman, General Motors, American Express, Campbell Soup, MAT, Disney Media, Heresy's, Millimeters, Colgate- Palmolive, NBC,

ESP., and Turner Broadcasting are utilizing this technology as a regular component of their own brand research efforts (ARP Announces Groundbreaking Northeastwards Study 2010; Rarely 2010; Figurate 2007; Bruit 2004). E detractors of marketing's see a dyspepsia future ahead, they envisage a world here we all become little more than purchase-making drones, slaves to big business recklessly pushing away at 'buy buttons' in our brains to move their wares and their stock prices. Valid concerns have been raised from some quarters citing the potential for the increase of 'marketing-related diseases' such asobesity, heart disease, and similarly related health issues (Fisher 2010).

What we understand from the above however, is that marketing's cannot now or any currently conceivable point in the future, have any ability to override an individual's cognitive control. Marketing's may help to design a more attractive car but will never have the ability to make a man sell his children to purchase it. Even with the limitations of the technology, neurotransmitters and researchers alike are currently exploring the ethical parameters of the field in order to create a unified framework for operation and quell concerns that vocal outliers currently raise.

The primary purpose of this technology, as is the purpose of all marketing research, is to better understand the needs and wants of consumers, the biggest problem with traditional research is the intimidation by a participant's own cognitive bias, or as advertising legend David Googol once said: " The trouble with market research is that people don't think how they

feel, they don't say what they think and they don't do what they say' (quoted in Scar 2011).