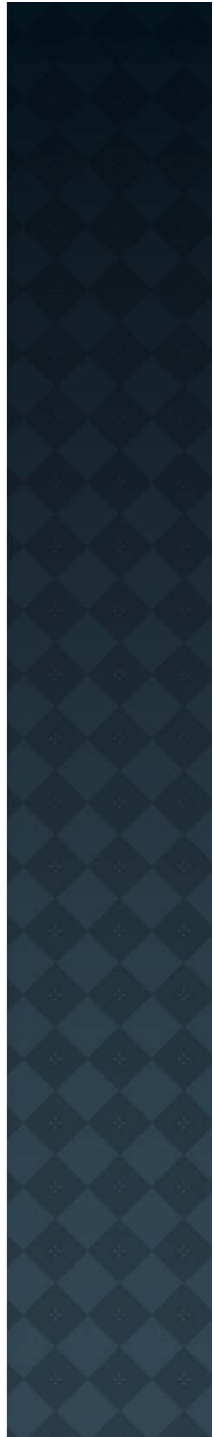


NEUROMARKETING

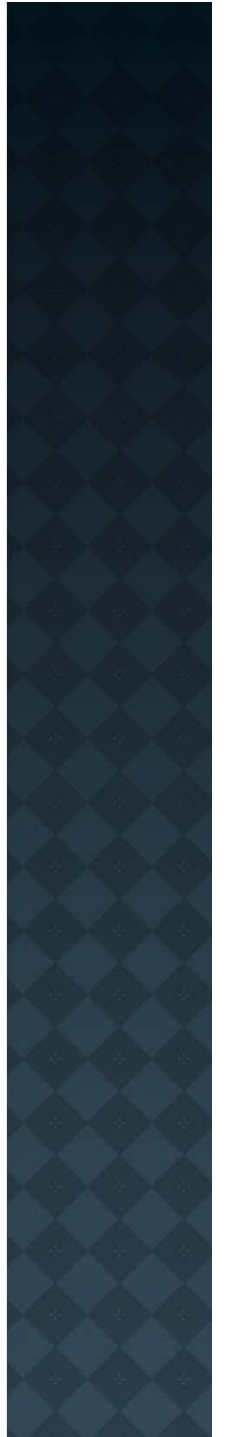
NEUROMARKETING

- is a new field of marketing research that studies consumers' sensorimotor, cognitive, and affective response to marketing stimuli.



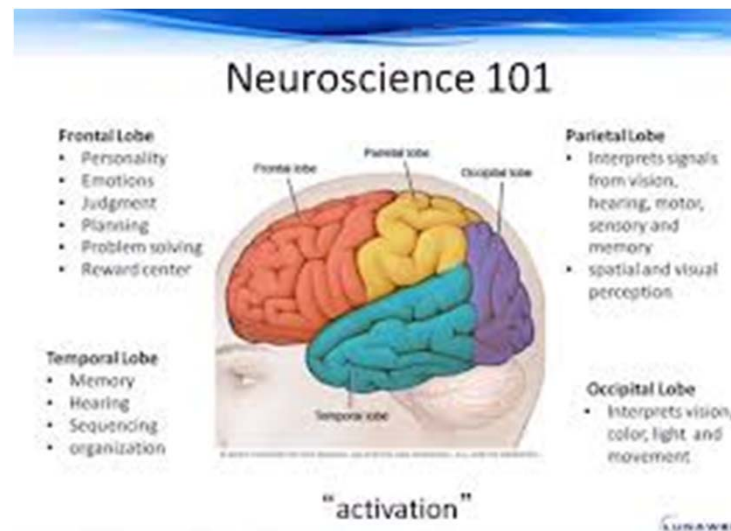
NEUROMARKETING

- Researchers use technologies such as functional magnetic resonance imaging (fMRI) to measure changes in activity in parts of the brain, electroencephalography (EEG) and Steady state topography (SST) to measure activity in specific regional spectra of the brain response



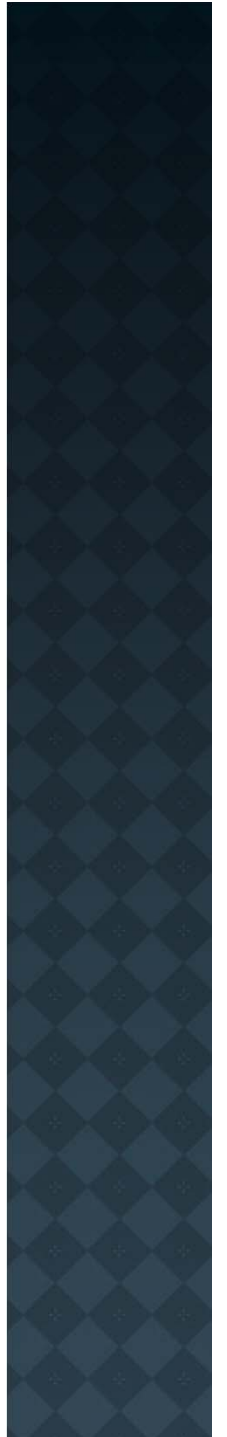
NERURO SCIENCE

- , and/or sensors to measure changes in one's physiological state, also known as biometrics, including (heart rate and respiratory rate, galvanic skin response) to learn why consumers make the decisions they do, and what part of the brain is telling them to do it.

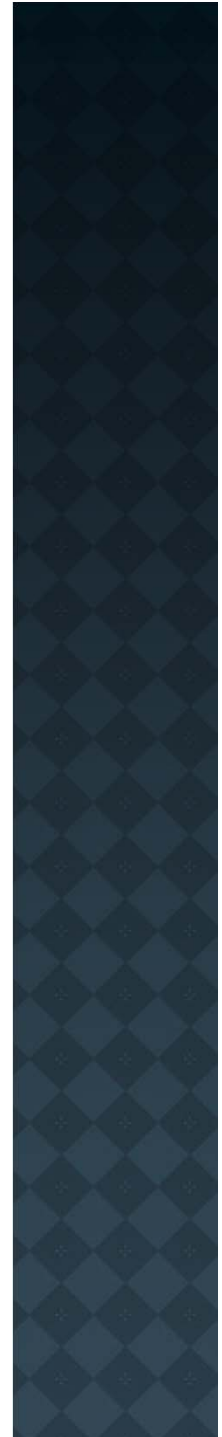


NEUROMARKETING

- ⦿ Neuromarketing research raised interest for both academic and business side. In fact, certain companies, particularly those with large-scale goals, have invested in their own laboratories, science personnel and / or partnerships with academia.
- ⦿ The word "neuromarketing" was coined by Ale Smidts in 2002

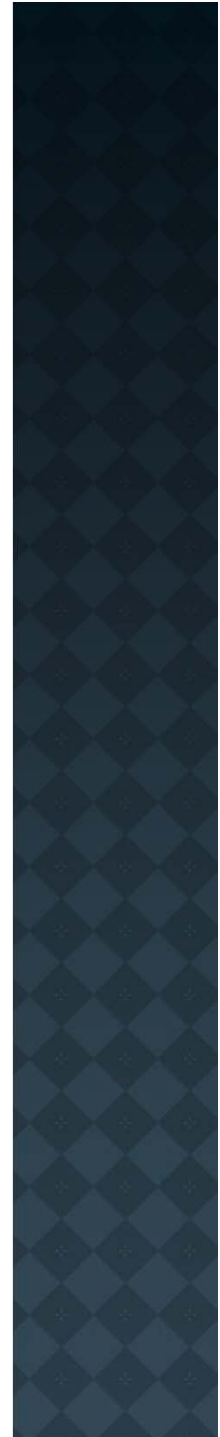


- ◉ Companies such as Google, CBS, and Frito-Lay amongst others have used neuromarketing research services to measure consumer thoughts on their advertisements or products.



PLATO'S TWO HORSES

- Although the term, “Neuromarketing” was coined in 2002 by Ale Smidts, the bases for Neuromarketing derives from the Greek Philosopher Plato.



- Plato's two horses drawn by a chariot philosophy was the first to link the human person to a human soul (mind). One horse symbolizes human emotion (system 1) while the other is a representation of human reasoning (system 2); however, until recently, the "black box" of consumer was merely the horse of reason.



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- Nevertheless, Plato's chariot and two horse theory was disregarded as it was simpler to investigate, model and forecast reasoning of the consumer than predict their emotions (Miljkovic et al., 2010, p. 274).
- Consequently, the philosophy of Plato has evolved in the concepts of Neuromarketing. An example of this is seen in the decision processing of Neuromarketing, system 1 and system 2.

SYSTEM 1 AND SYSTEM 2

- Based on the Neuromarketing concept of decision processing, consumer buying decisions rely on either System 1 or System 2 processing or Plato's two horses and a chariot. System 1 thinking is intuitive, unconscious, effortless, fast and emotional. In contrast, decisions driven by system 2 are deliberate, conscious reasoning, slow and effortful. In consumer behavior, these processes guide everyday purchasing decisions. Nevertheless, Zurawicki (2010) believes that buying decisions are driven by one's mood and emotions; concluding that compulsive and or spontaneous purchases are driven by system 1.

THE NEUROMARKETING CONCEPT

- ⦿ was developed by psychologists at Harvard University in 1990. The technology is based on a model whereby the major thinking part of human activity (over 90%), including emotion, takes place in the subconscious area that is below the levels of controlled awareness. For this reason, the perception technologists of the market are very tempted to learn the techniques of effective manipulation of the subconscious brain activity. The main reason is to inspire the desired reaction in person's perception as deeply as possible.

- ◉ The base of neuromarketing is “meme” [4][5] (by Richard Dawkins - a unit of cultural information similar to gene). [6] Meme is a unit of information stored in the brain. These units are effective at influencing a person who is making choices and decisions within 2.6 seconds. If “meme” is chosen properly we remember the good, joke or song and would share it. “Memes stay in memory and they are affected by marketers” .
- ◉ Examples of memes: Aromas of fresh bread, sweets, grandmother's pie; Characters in fairy tales, melodies that cannot be out of head. Thus neuromarketers examine people (brain scan, revealing subconscious motives) and manipulate them.

- Best-known technology of neuromarketing was developed in the late 1990s by Harvard professor Jerry Zaltman (Gerald Zaltman), once it was patented under the name of Zaltman Metaphor Elicitation Technique (ZMET). The essence of ZMET reduces to exploring the human unconscious with specially selected sets of images that cause a positive emotional response and activate hidden images, metaphors stimulating the purchase. [7] Graphical collages are constructed on the base of detected images, which lays in the basis for commercials. Marketing Technology ZMET quickly gained popularity among hundreds of major companies- customers including Coca-Cola, General Motors, Nestle, Procter & Gamble.

COKE VS. PEPSI

- ◉ In a study from the group of [Read Montague](#) published in 2004 in [Neuron](#),^[8] 67 people had their brains scanned while being given the "[Pepsi Challenge](#)", a [blind taste test](#) of [Coca-Cola](#) and [Pepsi](#). Half the subjects chose Pepsi, since Pepsi tended to produce a stronger response than Coke in their brain's ventromedial [prefrontal cortex](#), a region thought to process feelings of reward. But when the subjects were told they were drinking Coke three-quarters said that Coke tasted better. Their brain activity had also changed. The lateral [prefrontal cortex](#), an area of the brain that scientists say governs high-level cognitive powers, and the [hippocampus](#), an area related to memory, were now being used, indicating that the consumers were thinking about Coke and relating it to memories and other impressions. The results demonstrated that Pepsi should have half the market share, but in reality consumers are buying Coke for reasons related less to their taste preferences and more to their experience with the Coke brand.

CRITICISM

- ◉ Some consumer advocate organizations, such as the Center for Digital Democracy, have criticized neuromarketing's potentially invasive technology. Jeff Chester, the executive director of the organization, claims that neuromarketing is "having an effect on individuals that individuals are not informed about." Further, he claims that though there has not historically been regulation on adult advertising due to adults having defense mechanisms to discern what is true and untrue, that it should now be regulated "if the advertising is now purposely designed to bypass those rational defenses . . . protecting advertising speech in the marketplace has to be questioned." [2]
- ◉ Joseph Turow, a communications professor at the University of Pennsylvania, dismisses neuromarketing as another reincarnation of gimmicky attempts for advertisers to find non-traditional approaches toward gathering consumer opinion. He is quoted in saying, "There has always been a holy grail in advertising to try to reach people in a hypodermic way. Major corporations and research firms are jumping on the neuromarketing bandwagon, because they are desperate for any novel technique to help them break through all the marketing clutter. 'It's as much about the nature of the industry and the anxiety roiling through the system as it is about anything else.'" [9]