

# Chapter 1

## Introduction

**Andrew R. Thomas**

At its core, neuromarketing aims to better understand the impact of marketing stimuli, by observing and interpreting human emotions. The rationale behind neuromarketing is that human decision making is not so much a conscious process. Instead, there is more and more evidence that the willingness to buy products and services is an emotional process where the brain uses shortcuts to accelerate the decision-making process.

Neuromarketing focuses on which emotions are relevant in human decision making, and uses this knowledge to make marketing more effective. The knowledge is applied in product design, enhancing promotions and advertising, pricing, store design, and improving the consumer experience in a whole. The field lies at the intersection of economics, neuroscience, consumer behavior, and cognitive psychology.

At the strategic level, the vast majority of firms operating under the umbrella of neuromarketing are active in the market research domain. These companies evaluate commercials, advertisements, and new products, and measure audience responses to media like broadcasting or movies.

Tactically, neuromarketing operates at the following levels:

### **Product Design and Packaging**

How a product looks, feels, and functions strongly impacts the consumer experience. Applying neuromarketing principles and neuromarketing testing can provide insights into the emotional effects of design choices.

### **Pricing**

Marketers have known for a very long time that price is an important variable in the success of product and service. Knowledge on how price information is perceived and processed is the added value of neuromarketing in this part of the marketing process.

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### **Store Design**

If every in-store decision were taken rationally, your weekly trip to the grocery shopping would take up to 8 h. The success of retailers depends on how consumers experience their stores and services, how easy they can navigate, and how products, price, and promotions are presented (and perceived). Shopper marketing can be enriched by real-time measurements of participants' emotions in a lab or in-store situation.

### **Neuromarketing in Professional Services**

The professional service industry depends largely on human interactions. How B2B consumers experience the quality of these services is fundamentally an emotional process. This explains why the best offer for the best price does not always win the quote. Neuromarketing brings in some heuristics on how to act for better quality. Or for a better perceived quality, because most of the time the decision is taken before the service is delivered.

### **Neuromarketing in Advertising**

While advertising is mainly a creative process, neuromarketing can add value by a better understanding of the effects of ads on human beings. Neuromarketing is well developed in advert testing on effectiveness. Predicting how well is related to likability and sales.

The foundation for all of this activity is data gathering and analysis. Like many new processes and innovations, much of neuromarketing is operating far ahead of current governmental compliance and regulation. Real concerns about the ethical nature of pervasive data collection and its applications exist. For example, there are tools that are extensively used in neuromarketing, like facial recognition software, that are powerful enough to monitor and detect a wide range of micro-expressions. These could denote a high level of stress, or suggest that the person is trying to conceal something. At present, this technology is being tested at several airports—under the guise of security and counterterrorism. Such an application raises an ethical issue: To what extent is it acceptable to screen the entire population using these powerful and intrusive techniques without getting passengers' consent? Furthermore, these techniques have a certain rate of false-positive results, thus misidentifying innocent civilians as potential terrorists.

While many of these new technologies originated in the USA, the American Government has been way behind the curve in curbing their use and potential exploitation. The industry in the USA has also been slow to develop ethical parameters to internally monitor and control their behavior. In Europe, the landscape has been much more proactive. This book will detail many of those efforts, and offer rational, constructive approaches to laying an ethical foundation for neuromarketing efforts.

Terry Daugherty of the University of Akron and Ernest Hoffman from PRADCO kick off this volume by providing a contextual overview of what constitutes the study and practice of neuromarketing. This is followed by an exploration of the ethical concerns surrounding neuromarketing—and a clarification of the ethical limits—by Cristian Ducu of the Centre for Advanced Research in Management and Applied Ethics in Romania. In the next chapter, David Hensel, Lisa-Charlotte Wolter, and Judith Znanewitz from the Hamburg Media School in Germany shed further light on existing ethical guidelines, particularly with respect to tool-based distinctions, in order to provide reliable answers for both academic and marketing practitioners.

Neuromarketing, as a young, emerging discipline, is facing exciting challenges. Eugenia Laureckis and Alex Martínez Miralpeix from EEN Business School in Madrid turn up the resolution on important topics such as the ethical issues involving participants in neuromarketing research; consumers that experience the outcomes of such studies; and also the researchers that conduct them. It almost goes without saying that transparency and reliability are fundamental to building an ethical culture around neuromarketing. Arianna Trettel of BrainSigns in Italy, along with Patrizia Cherubino, Giulia Cartocci, Dario Rossi, Enrica Modica, Anton Giulio Maglione, Gianluca di Flumeri, and Fabio Babiloni, all from Sapienza University of Rome, dig deep into these critical areas.

This “newness” of neuromarketing is beginning to impact the conduct of market research. Michał Matukin of NEUROHM in Poland and Rafał Ohme of the University of Social Sciences and Humanities in Poland delve into how neuromarketing is increasing the robustness of obtained results by anticipating consumers’ behavior more effectively than traditional questioning methods. To get a better sense of this impact as it relates to ethics, Nicolae Al. Pop of Bucharest University of Economic Studies in Romania; Dan-Cristian Dabija of Babeş-Bolyai University, Romania; and Ana Maria Iorga Bucharest University of Economic Studies and Buyer Brain, Romania, provide an empirical analysis of the ethical considerations regarding stakeholders in neuromarketing research.

While it is assumed that neuromarketing is done for appropriate business and academic reasons, there is always the possibility of utilizing it for less than proper means. Kimberly Rose Clark of Dartmouth College posits how to “deal with the devils,” and articulates the responsibility of neuromarketing practitioners in conducting research for ethically dubious client agendas.

Next, Nansi Lung of Titu Maiorescu University in Romania reminds us that the ethics of neuroscience is inexorably linked to the discovery of prediction limits—and to the influence these predictions can have on us. Almost following in Kant’s footsteps, we could say that once we know how much we can learn, we will also know how far we can take our actions. The necessity of setting rigorous standards for consumer profiling in the neuromarketing field is due not only to the future potential threats and the present potential of technology, but also to the tendency of neuromarketing to rapidly extend further to insufficiently mapped ethical areas. To enhance this argument, Ana Maria Iorga and Nicolae Al. Pop take a look at the ethical issues surrounding new technologies and how the evolution of neuromarketing might provide scholars and practitioners in other disciplines valuable insight.

We conclude by exploring neuromarketing ethics as they relate to the industry of sports. Gregory Dumont of Plymouth State University details how sports teams and leagues have started to use neuromarketing as a way to enhance the fan experience and build greater brand loyalty. Real-time ethical questions have arisen as the use of neuromarketing continues to expand in sports.

On behalf of my coeditors and each of the contributors to this volume, we would like to thank you for your interest in this most important topic. Much of the future of neuromarketing will depend upon honorable people continuing to build a foundation of integrity around the amazing tools and technologies that have evolved. Doing so will ensure the correct use of those tools and technologies, and provide a positive effect on the greater society.