Chapter 1

Why Is Neuromarketing a Game Changer?

Intelligence is the ability to adapt to change.

– Stephen Hawking

This chapter will help you understand why anyone creating persuasive messages should consider using a neuromarketing model. First, we focus on the unique research questions answered by NeuroMap – specifically, an aspect not discussed in other books on the topic. Yes, it is easy to get lost under the hood of the neuromarketing engine with all its shiny bells and whistles. However, knowing the basics will help you quickly become a sharp and discriminant persuader!

In the following five chapters written by me, Dr. Christophe Morin, I bring a devouring passion for cracking the scientific code of persuasion. As you will quickly realize, I am somewhat of a brain nerd and therefore I have lots of information I am eager to share about this topic, while making this portion of the book both informative and enjoyable. I have delivered workshops on neuromarketing to thousands of people around the world for nearly 20 years. As an adjunct professor of media psychology at Fielding Graduate University, I collaborate with top academics to improve our understanding of media effectiveness in all its forms. Also, I have students from all over the world using the teachings of neuromarketing to improve movie scripts, ad campaigns, fundraising drives, and even to decode the neurobiological basis of terrorist propaganda.

Although the subject of brain-based persuasion can be intimidating at first, what you learn about the brain in the next sections may influence your life beyond what you may have imagined when you picked this book. Personally, neuroscience helped me understand complex psychological disorders affecting some of my close family members; it influenced my parenting style and much more. Be assured that choosing to read through these next pages will not just improve your ability to persuade; it may also improve your life. Often, people walk up to me after a lecture and share how learning the basics of neuroscience made it much easier for them to understand why they have struggled (sometimes for decades) to influence or to understand loved ones. I have heard powerful stories that tell desperate attempts to convince a child not to smoke, compassionate efforts to ask a friend to quit drinking, or frustrating failures to close heated arguments. Let's be clear though; our goal is to discuss the effect of sales and advertising messages on people's brains. However, I believe the value of neuromarketing can be broadened to other aspects of life for which your ability to persuade others can bring relief and hope. In fact, Patrick Renvoisé addresses a broader application of neuromarketing in his popular TEDx talk (tinyurl.com/yb3x79vq).

WHAT NEUROMARKETING CAN TELL YOU OTHER METHODS CANNOT

Right from the beginning of the creation of SalesBrain in 2002, Patrick and I suggested that *traditional marketing research* falls short of its goals, especially when it comes to measuring the effect of advertising messages. Surveys, interviews, or focus groups do not explain the neurophysiological mechanisms underlying consumer behavior. Yet, the subconscious and preconscious functional circuits of the brain are essential to explain our responses to most marketing stimuli [4–8]. That is why neuroscientific methods can generate unique insights compared to traditional research methods – a fact that is now widely accepted by marketing and advertising researchers around the world [7, 9–11]. According to many scholars, the integration of neuroscientific methods in advertising research represents one of the most significant events in consumer research over the past 50 years [12].

Despite initial skepticism and resistance to change, the advertising industry has started to recognize the importance and relevance of this movement. Why? Because collectively, neuromarketing methods go far beyond traditional collection techniques by tracing the biological, physiological, and neurological changes that arise in our brains in response to marketing stimuli. These innovative experimental settings help us analyze instinctive, emotive, and cognitive responses without placing the burden of interpretation on research subjects. You may not realize this, but anytime you answer a survey, it requires an enormous amount of your precious brain energy. Getting paid to participate in surveys does not even reduce this burden! Cognitive energy is priceless. Using brain-based methods means we no longer depend on the conscious and active participation of subjects. We are not asking them to behave like zombies but, simply, to relax and let the messages work on their brains. There is no need for the subjects to verbalize anything either. The point is to allow the exposure to a stimulus to work on their neurophysiology. Meanwhile, we maintain an environment that is safe, comfortable, and free of artifacts that could compromise the data, such as noise, moving objects, changing light, and temperature conditions.

What value do we get from these methods that traditional surveys and focus groups cannot provide? We get measures of consumer states that are difficult if not impossible for subjects to report consciously. Remember the last time you were asked what you thought of the most recent movie you saw? What a simple question, yet how difficult it would be to answer if you were forced to use emotional scales describing the degree to which it made you happy, sad, excited, nervous, worried, curious, and so on. The same is true of how we respond to advertising messages or even a website. We know these stimuli have some effect on us, but we cannot be trusted to rate with any precision their emotional and cognitive impact on our brain. Research has shown that when people are asked to describe their moods on a daily basis, they use more than three words on average to do so, suggesting that emotions are difficult to identify and report [13].

Let's go back to the key research questions that can be answered uniquely by neuromarketing research and NeuroMap. Neuromarketing research questions are designed to create insights that help you minimize the risk and uncertainty associated with the predictive effect

of ads, websites, packaging labels, and more. To help you understand the relevance of these questions, it may help if you recall a campaign or a message you have recently created or used to influence someone. Think of the value of answering any of the following questions before you deployed your campaign.

There are six crucial research questions that can be answered by sound neuromarketing experiments and, of course, by NeuroMap.

Will My Message Grab the Brain's Subconscious Attention?

Attention recruits brain energy to allow your audience to focus on your message and process its content. A lot of that attention is managed below our level of awareness. Therefore, attention is difficult to measure when you ask your audience to describe how much they focused on your message. Consciousness, our ability to observe and report our immediate experience, is both slow and fragile. Your messages are narrative constructions that affect your audience at a much greater speed than consciousness allows. Consequently, we are incompetent at describing the quality of our immediate attention. Instead, collecting brain data is rather easy because it does not rely on a subject's ability to report. More importantly, it helps measure attention on a millisecond basis, which is a game changer for how you can explain the effect of any marketing stimulus. Stories produce various cycles of attention during which your audience is engaged, moved, or bored, the timeline of which can be captured by different neuromarketing techniques such as reading the conductivity of the skin, decoding facial expressions, tracking eye movements, or monitoring brain waves. A story works in amazing ways. Most of its effect is not accessible to our awareness. Neuromarketing methods are designed to show whether a message has captured any form of attention, conscious or subconscious, automatic or intentional, which makes an enormous difference in your ability to create successful messages.

Case Study #1: Which Animal Images Grab the Most Attention. A prominent nonprofit organization focusing on defending the rights of all animals wanted to find out why some of their ads work better than others to generate donations. They gave SalesBrain three ads

that were produced in the past decade: one old and two new. The new ads were not doing better than the old ones, but they could not understand why. We used our NeuroLab to investigate the issue. By doing a complete assessment of the neurophysiological response from a sample of 40 subjects, we discovered that attention was dropping rapidly for any scenes that would fail to show the animals with a salient and clear expression of sadness. Also, a frontal view of the face of the animal was prompting more attention than a side view. This was related to the animal itself, and its capacity to trigger human empathy. However, a lot of the responses appear predicated on the power of the facial expression itself, and whether a scene was showing one or several animals. This hypothesis was confirmed by looking at eye tracking and emotional data on several animals, including cats, dogs, horses, pigs, cows, seals, and even monkeys. After we revealed the persuasion code of their ads, the advertising agency was able to release a new TV spot, which outperformed all the clips they had ever done before. Also, the insights produced by the study guided the photo and video team on how they use images in all their future communications.

Can People Say What They Feel?

We are good at masking and distorting the reporting of our emotions. Recent studies of social media content compared to search questions asked on Google show the extent of our capacity to deceive. Search sentences reveal concerns or interests that do not match what people are willing to disclose openly. Additionally, search data shows that we choose to share what makes us feel good and hide what lowers our self-esteem. The younger we are, the more unreliable our statements tend to be. I have conducted extensive research on teenagers that helped me realize that collecting their opinions does not begin to explain and predict their behaviors. Fortunately, neuromarketing studies do not depend on what people say, but how their brains respond. When we conduct one, we look at how the participants' neurons fire at millisecond intervals, and what they feel, measured by their brain's response to external stimuli.

The neurons in the brain respond in a fraction of a second, triggering emotional responses before the conscious mind even processes

the information. Therefore, a subject may have a subconscious reaction, but once it becomes conscious, he may not feel comfortable sharing it with a researcher. Perhaps he may not feel it is appropriate or wants to be perceived favorably by the researcher. Either way, in psychology, this is referred to as the social desirability bias. Furthermore, even if the subject believes that he is reporting true feelings in response to an advertisement, the brain data may show otherwise. Neuromarketing findings help identify the distance, if not the distortions, between what people say they feel and how they truly feel while measuring the influence of our emotions on our behavior.

Case Study #2: Understanding How Consumers Feel About Banks in Morocco. Wafacash is a wholly owned subsidiary of the Attijariwafa banking group, which is the largest bank in North Africa and the sixth largest on the African continent. Over the past 20 years, Wafacash has enjoyed a dominant market share in the cash transfer and payment banking business in Morocco. The business of cash handling appeals to a majority of Moroccans who do not trust traditional banks: they value the privacy of saving and paying using cash without the requirement of owning a bank account. At the end of 2012, although Wafacash had done its share of consumer studies, the management believed that continuing to conduct focus groups or traditional one-on-one interviews would fail to generate innovative consumer insights. Wafacash commissioned SalesBrain to explore how neuromarketing methods could yield innovative consumer insights to develop and quickly deploy a more effective advertising and communication strategy. We recommended performing a study using voice analysis.

We used voice analysis during 24 in-depth qualitative interviews with customers and noncustomers. The voice analysis software extracted about 20 vocal parameters to identify emotional variables in the interviewee's voice like stress level, cognitive overload, or sadness. Through the use of voice analysis, the bank executive team received a much more objective view on what their customers felt about their services. For instance, the data revealed the presence of many frustrations and annoyances that had been historically misunderstood by Wafacash.

With a better understanding of their customers' feelings, the management was able to quickly create and deploy a new messaging campaign. The campaign was swiftly accepted and successfully launched throughout a network of 600-plus retail sites.

Which Emotions Trigger Decisions?

We experience thousands of emotions. Therefore, it is impossible to report specific emotions because they flicker, and even when they reach our consciousness, our perception is too slow and not discriminate enough to sort and label each feeling. However, some tools like facial decoding software give us the ability to reveal universal emotional expressions like happiness, sadness, surprise, anger, fear, contempt, and disgust, which are mostly triggered below people's level of awareness. Tiny movements created by our facial muscles produce micro-expressions that appear for less than 35 milliseconds. Interestingly, only self-reported negative emotions like disgust or anger tend to correlate with brain data. Negative emotions are felt in our guts and do not require the filter and bias of our cognitive interpretation.

Meanwhile, linking emotions and behavior is tricky. Understanding this critical connection requires that both emotions and behavior be defined and measured properly. Unfortunately, emotions are abstract concepts. There is not a tool ready-made to measure all emotions. For instance, there is no such thing as "an anger thermometer," so to assess anger via a questionnaire, psychologists need to develop a special scale. It is very difficult to do because once you start proposing a scale of a psychological construct, people have differing opinions about what the construct means. Fortunately, neuromarketing studies do not depend on scales or the subjective interpretation of psychological states but, rather, on known and accepted neurophysiological metrics.

Think of how we measure the weight of objects today. People do not argue about the definitions of what is light or heavy. We use standards that have been accepted and used for hundreds of years. Such standards do not exist in traditional marketing research to measure mental states like attention, boredom, engagement, comprehension,

memorization, and, of course, *persuasion*. Surveys are entirely dependent on the subjective interpretation people have about the questions. Are you excited by this ad? Are you bored? These are questions that assume all people will understand the same way, leaving no room for the subjective interpretation of a given emotional state. On the other hand, neuromarketing studies scientifically measure emotional states and remove the error provided by the subjective nature of our language and the limiting processing capacity of our consciousness.

Case Study #3: The Effectiveness of Public Health Campaigns. In 2011, I investigated the effectiveness of public service announcements (PSAs) on teenagers and young adults [14]. PSA researchers have mostly relied on subjects' ability to self-report their feelings to assess a campaign's success, a severe limitation considering how emotional messages are known to produce large subconscious effects. My study tested PSAs that varied by tone. Some were positive, carrying an optimistic and humoristic tone. Others were somber and scary. Because recent neuroscientific discoveries suggest that adolescents use distinct brain circuits when processing subconscious affective responses, I predicted that the persuasive effect of emotional messages would vary between age groups. The findings supported my predictions and demonstrated that neurophysiological methods could predict the effects of public health messages targeting adolescents and young adults. Most notably, I showed that negative emotions generated by threatening fear-based messages produce more effect than positive emotions regardless of age.

Which of My Messages Work Better on People's Brains and Why?

Research subjects get quickly confused and overwhelmed by too many direct questions on the multiple ads they are asked to evaluate. For instance, the Likert Scale is commonly used in advertising research. Here is an example: To what extent do you like this ad? Use a scale of five options going from "A lot" to "Not at all" to answer. However, assessing to what extent an ad is funny or sad does not

begin to represent the subconscious effect of millions of neurons firing within milliseconds in our brain. Furthermore, conventional studies ask people to express why they like or dislike various aspects of an ad. Those questions are very taxing on people's cognitive energy and rarely produce significant differences between subjects or even between stimuli.

So how good or helpful is your study if you find out that all your subjects feel the same and none of the ads appear to produce different states? I have conducted my share of such studies that yield little if any meaningful differences between subjects or worse, between the ads. Why does that happen so often? It is because we cannot begin to report the impact of the excessive amounts of information processed by different layers in our brain. Only the brain itself can do this complicated and tedious task. However, it is done below our level of awareness. By using neuromarketing tools and interpreting the data with a neuromarketing model like NeuroMap, you can assess how persuasion affects different areas of the brain and reveal meaningful differences between subjects and messages.

Case Study #4: Neurobenchmarking Multiple Ads. A large technology company asked SalesBrain to review several ads that had been airing for the past couple of years. The conventional benchmarking data on how well the ads were performing was inconclusive, so the marketing group who commissioned our study was not clear on which direction to go next. In many cases, the number of variables (tone, color, characters, etc.) involved in many advertising messages makes it impossible to isolate and measure the contribution of each variable using traditional methods. However, our neuromarketing study was able to measure the degree to which each ad was able to hold attention, create arousal, move the audience in pleasant or uncomfortable emotional states, and whether the message created any valuable cognitive engagement. The *NeuroScoring* of each ad did provide an objective way to sort the messages based on how well each activated critical persuasion stages in the audience's brains. As a result, our client was able to gain clarity and confidence on what to do next with the creative direction of a new campaign.

Can Neuromarketing Help Me Better Prove the Unique Value of My Solution?

More and more companies are turning to neuroscience to provide stronger proofs of their value proposition. You too may benefit from using a study that can demonstrate that your product or service produces stronger responses in your customers' brains than your competition does. There are many ways to design experiments that compare how subjects respond to your products, not with words but with brain signals. Consider these situations in which neuroscience can offer valuable proofs to demonstrate the strength of your value proposition.

- A Danish chocolate manufacturer wanted to promote the value of giving chocolates on Valentine's Day. In a creative study, Paul Zak [15] explored the effect of offering chocolate to loved ones while sharing romantic feelings. This experimental condition raised the level of oxytocin of men by nearly 30%.

Similarly, you could also use neuroscience to demonstrate that:

- A brand of spas is more relaxing than another by measuring how specific jets can reduce stress hormones and raise levels of endorphins.
- A noise canceling system can produce more productive office environments by monitoring cognitive effort and distraction while performing various office tasks.
- The design and color of furniture in a store may impact the emotional and cognitive state of shoppers.

Case Study #5: The Impact of Messages Viewed on Mobile. A large technology company whose revenue largely depends on selling ads for mobile platforms wanted to decode the neurophysiological difference between viewing the same ads on a mobile device versus viewing the same content on a TV. The study was focusing on distinct neurophysiological processes that are known to influence overall engagement with any form of content – namely, attention, emotion,

and retention. The study objectively measured these neurophysiological states without any conscious reporting from the subjects. It did prove that there were significant differences between the two delivery platforms, some that were favorable to the mobile platform. For more on this study, visit goo.gl/XjXypL.

Can You Get Higher Returns on Advertising Using a Brain-Based Persuasion Model?

With the benefit of both neurodata and a persuasion model like NeuroMap, SalesBrain's clients can optimize how they market, communicate, and sell their products or solutions. They can also provide better advertising briefs to their agencies. By following a scientific discipline to create all their messages, they remove the risk and uncertainty that so many marketing or advertising campaigns carry. I wish I could share here some of the advertising briefs clients have shared with us. Often, advertisers recommend gigantic creative leaps of faith that put enormous amounts of money at risk. In fact, in my 30 years in marketing research, I have not seen one creative brief supported by a scientific persuasion model! Sadly, some advertising agencies are not motivated to embrace neuromarketing because they perceive that a scientific approach may limit their creative options. But why take so many wild guesses when the discipline and rigor of a tested scientific process can improve the success and ROI of your marketing and advertising dollars? Moreover, this is not dependent on the size of your company's budget. In fact, you can apply the quality and value of NeuroMap before you launched your next campaign or deploy a new website right after you have read this book!

ROI of Neuromarketing Approach: A Collection of SalesBrain Customer Testimonials

Reading this book is not worth your time unless the value of what it brings to you is proven and measurable. Therefore, we share here a few of customer testimonials. Some of the companies are large, others are medium size, but all share the same conclusion: The investment of time and money they committed to deploying a neuromarketing discipline paid off!

Note that some of the stories are transcripts of video interviews available at www.salesbrain.com.

Neuromarketing helped us deliver our solution more quickly, and helped our customers make decisions more quickly. When our customers' pains line up with our claims and our customers' gains, you can deliver on that solution. Everybody is speaking the same language, and so you get the consistency in message, you get a consistency of delivery. Neuromarketing and the SalesBrain methodology, if you go in 100%, I mean you have to do it all the way, you will find that your results will significantly improve … and it's not just your revenue, it's not just your productivity. We've had a four times increase in the number of instructors or customers since we've completely converted to neuromarketing. My customers call me back and say, "You make things so easy for me! Love your product! It's so easy!" And when your customers parrot back to you your claims, you know you've won.

Bill Clendenen
CEO, HSI
Health & Safety Training

When – SalesBrain – was able to analyze our customers' pains by using NeuroMap™, that to me was one of the most impressive aspects of the entire process. They knew what questions to ask, they learned our business … which is not an easy business to learn … they came in, learned it, and were able to get information, extract it from the people we need it extracted from. It's marketing efficiency. If you can spend a dollar on marketing and generate 10 dollars in revenue … was it worth it? Absolutely! This has one of those 10 to 1 ratios attached to it in my opinion.

HK Bain
CEO, Digitech Systems
Enterprise Content Management in the Cloud

Backed by hard science that complements excellent market research, Christophe and Patrick use their knowledge to capture your attention in creative and clever ways. Then they show you how to do the same thing with your customers and prospects. Dozens of our companies around the world have seen tangible results from this innovative approach to improving sales.

Pam Hendrickson
COO, Riverside Company
Private Equity

I think every company in America is probably guilty of focusing on what they want to say about their company, rather than focusing on what they need their customers to hear. Neuromarketing has really helped us translate our message,

and what we wanted to deliver into something that the customers would want to hear. I was first introduced to neuromarketing in Chicago years ago. I was suspicious, it was the end of the day, and I was ready to move on. I can tell you today in hindsight, that presentation changed my life and our business forever. In 2005, CodeBlue was just a concept in our minds. We have used the Sales-Brain model to build this business ever since we've developed it. And today it now represents the majority of the revenue that our business throws out. For anyone who's really serious about growing their business, you've got to embrace the neuroscientific model of SalesBrain.

Paul Gross
CEO, CodeBlue
Third-Party Insurance Claim Administrator

We get asked quite frequently, "Well, why should we use Forensic Analytical?" What is it that differentiates us? How do we say it? The time we spent, just thinking back for the last 10 years of meetings, and getting other consultants, and people together, just didn't feel right. SalesBrain came around and helped us really pare it down to six words. Right people, right perspective, right now. We've been trying to do this for 10 years! The session was one afternoon, they also did our website. It's clear, simple, and it does exactly what we want it to do. It demonstrates our claims right up front. It's not like we're doing anything new, we're just expressing what we've been doing for 25 years, and we're able to say it very elegantly.

Fred Vinciguerra
CEO, Forensic Analytical
Industrial Hygiene and Environmental Health

The entire process in understanding when you're marketing to the primal brain and understanding the core emotional selling process – I realized that we weren't doing that. That we were selling our product more than we were selling feelings. I really wanted the team to adopt – the pains/claims/gains that SalesBrain talks about. Applying those principles, those core principles into an organization and just really pulling that into every aspect of the marketing that we do, whether it's on the phone, whether it's in a presentation with a big bank. Being able to identify crisply what the pain is that we're solving, and how we solve it, and what the benefits are, and create the opportunity to really close the sale is what's happening for us. People here are energized around what it is that we're doing, because they understand it better now. They understand what we're appealing to in the customers. What it is that your customers need versus the features they need.

Rene Lacerte
CEO, Bill.com
Cloud-Based Accounting Solution

I've been working with SalesBrain for nearly 10 years on refining our story and our customer pitch. Recently, we were up against some companies who are a hundred times bigger than we are. So we brought in the SalesBrain guys to help us put that pitch together and finally deliver it. I don't think we were in the running prior to that presentation. We used videos, we used big pictures, we did a whole mini-drama, which was probably funny. And we won!

Stuart Little
Product Marketing Director, Aviat Networks
Microwave Networking Manufacturer

Airgas turned to SalesBrain to help get the attention of our customers in Hawaii to make a good choice on the distributor for their Safety Fall Protection and Respiratory needs. SalesBrain was able to produce a neuromovie that uniquely captured their attention! They found the right tone and style to do that and the campaign has produced measurable results!

Jason Oshiro
Area Vice President, Airgas
Distributor of Industrial, Medical, Safety Products, Tools, and Specialty Gases

The work we've done with Dr. Morin and his team has fundamentally changed the way we measure creative efficacy and design. As the race continues to help machines understand our world, Salesbrain remains focused on advancing our understanding of human intelligence and how marketers can effectively connect with people.

Ryan Anthony
Creative Director
Vungle

Neuromarketing hasn't just improved the effectiveness of our marketing, it's made us a better company. We were already aware of the need to translate product features into customer benefits, but we weren't going far enough. Now, we start with a concentrated focus on our customer – their fundamental needs, their pains. It's the difference between really listening to somebody versus just waiting until it's our turn to talk. We believe in the SalesBrain methodology because it works. We win in the marketplace because we bring more value to real people's needs.

Steven Hausman
President/CEO, Triumph Business Capital

To conclude, neuromarketing research can achieve better results by finding answers to critical research questions that do not require

the conscious participation of people. These answers help you create messages that remove risk and uncertainty while making your advertising dollars work for your growth and profits.

WHAT TO REMEMBER

- Traditional marketing research methods fail to capture the subconscious mechanisms that affect how people respond to any form of persuasive message.
- Neuromarketing tools collect brain data that can objectively explain critical neurological processes subjects cannot self-report. It provides unique insights about how we understand, feel, engage, and ultimately become persuaded by a message.
- The strategic value of using neuromarketing comes from the possibility of answering critical research questions that have been puzzling marketers, advertisers, and media experts for decades.
- The ROI of neuromarketing dollars is measurable in multiple ways. It will reduce drastic wastes of money spent in creating and deploying messages that don't work. More importantly, it will allow you and your organization to grow faster.