IMPLICIT MARKET RESEARCH

a brief guide.

CONTENT

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WHY EMOTIONS AND THE SUBCONSCIOUS MATTERS

Feeling is a form of thinking. Both are ways we process information, but feeling is faster. That's the crux of Nobel Prize winner, Daniel Kahneman's mind-clarifying work. In everyday life, we are constantly bombarded with huge amounts of sensory information. We can't process it all because the capacity of the brain is limited. The brain must decide what to focus on/pay attention to and what to ignore.

In Thinking, Fast and Slow, Kahneman uses the terms "System 1" and "System 2" to describe and explain how the mind works. System 1 "is the brain's fast, automatic, intuitive approach", System 2 "the mind's slower, analytical mode, where reason dominates." According to Kahneman, System 1 is the more influential, guiding and steering System 2 to a very large extent. Or more simply put, attention is prioritized for emotional information, meaning emotional things draw attention faster and hold it longer than non-emotional elements. In turn, information that is perceptual prioritized is easier to remember – both directly after the event and over time (i.e. things that are highly emotional profit from a stronger consolidation which increases the possibility that the event is remembered later).

The reason for this is that evolutionary it has been beneficial to remember and be able to retrieve information connected with well-being (things that are good or things to stay clear off). Indeed, a general and central role of emotion is to emphasize things in the environment that are significant to us, and thus influence how we direct our attention and actions.

Today modern brain research can prove that rationality and judgment are connected to emotional ability. From the same research, it becomes clear that our consciousness has a narrow range. At least 95 percent, probably more, of all external sensory input are received at a low consciousness level and much of what we do is thus steered at a subconscious level.

Only a fraction of our decision making is made on conscious and rational grounds and a decision is probably more akin to processed emotions and rough estimates than to rational analysis of carefully calculated amounts. This means that emotions are key in communication as our decision-making process mostly does not include rational reasoning.

It also means that anything that involves opinions or people's own accounts of what they do or feel is heavily biased towards what an individual thinks you want to hear and what you as a researcher want to hear.

The traditional research methods need to be supplemented by other more indirect methods that can measure what really happens - implicit market research methods that actually consider how the human mind works

"Consumers don't think how they feel. They don't say what they think and they don't do what they say "

- David Ogilvy

IMPLICIT METHODS - A PEEPHOLE INTO THE SUBCONSCIOUS

In market research you're often interested in consumer's reaction to different things, i.e. to a large extent it aims at measuring memories and associations. But, as was described in the introduction, it's not always (or even very often) easy to know what you really remember or why you've made the choices you did.

For most of our day-to-day activities we rely on system 1 and are not aware of what, how or why we do what we do. But when given a question in a survey, it's highly probable that system 2 steps into motion to articulate an explicit post-rationalization about the choices and behavior that system 1 actually did for us.

This dissonance contributes to a kind of "research noise" that explains why traditional, explicit market research methods so often fails to provide insight into how purchase decisions are really made.

It's obvious, and has been for the last decades, that to make substantial steps forward, marketers will have to gain better control over how emotions and the subconscious forms consumers' attention and motivation.

The measurement problem

Regardless if you've launching a new, bold innovation or just made a small design revision, you will not get answers that matches reality by merely asking consumers about what they like or if they intend to buy the product. So, the first step when choosing research method is to think over what the people we want to research actually can be expected to contribute; is it something subconscious, i.e. something implicit? Or is it something people can tell, i.e. something explicit?

Traditional market research methods can often contribute with a lot and valuable information. At the same time, they suffer from big challenges because they rely on people's memories and their ability to convey and express what and why they do what they do. This is hard since most of that activity happens on a subconscious level.

Implicit research as a complement

As insights and knowledge about the measurement problem have increased, and as development in technology has made it possible, new research methods have become commercially available. The new methods measure implicitly and includes, for instance, biometric and neurometric approaches.

The methods currently used to measure non-articulated and subconscious consumer reactions, range from advanced magnetic X-ray technology (fMRI) that measures brain activity to methods that measures physiological changes in other parts of the body. Yet another set of techniques track implicit reactions through psychological association and behavioral tests.

These new techniques can roughly be divided into three main categories: neurometric (in brain or neural response), biometric (biological or physiological response) and psychometric (psychological or implicit responses). All the methods can, when used wisely, contribute to very useful and often complementary insights about perception and behavior. The key to success is to understand the relative advantages of each method to know when to use them, when to use traditional methods or when a mix of both is required.

NEUROMETRIC METHODS

The insight that most of human brain activity (more than 90 percent) happens on a subconscious level made psychologists at Harvard University in the 1990s to start developing a model for effective influence of the subconscious.

This has been given the collective name neuromarketing and has also given rise to a completely new focus in the market research industry with attempts to measure effects on subconscious level where traditional methods are meaningless – we can't accurately answer questions about things we're not conscious. Instead researchers use methods like magnetic resonance imaging (fMRI) and EEG to measure changes in activity in different parts of the brain.

These techniques, aiming straight for the core and measuring brain activity directly, are powerful and lie more on the specialist end of the spectrum than, for example, the biometric and psychometric methods. Measuring this way is still relatively new, and can easily create time-consuming and costly projects. However, for large brands with big budgets, it can pay off, since it is reaches further than traditional surveys.

EEG

When nerve cells in the brain communicate, electric activity is created and via EEG, electroencephalography, it's possible to measure changes in this activity.

Within health-care, EEG is used to obtain information about, for example, different diseases affecting brain functionality or to analyze peoples' sleep.

In market research EEG studies are used for a wide range of activities ranging from product and packaging testing to advertising and communication. Tests can include stimuli for multiple senses and be used to optimize smell, feel and/or taste experiences. By combining EEG data with the respondents' self-reports on feelings or opinions, it's possible to get a deep understanding of consumers' reactions to marketing material and to enhance their effect.

fMIR
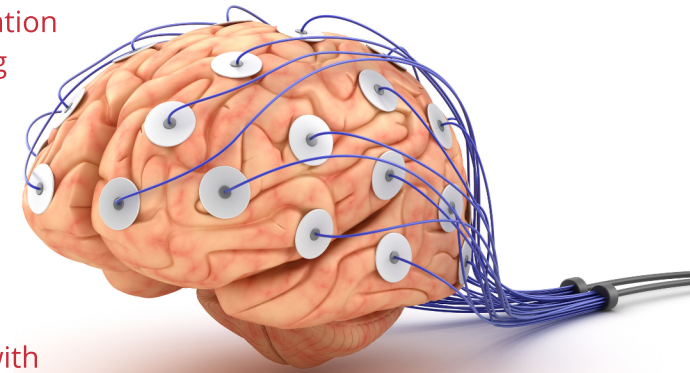
fMRI (functional magnetic resonance imaging) was introduced in the early 1990s and identifies which parts of the brain are involved in various activities. The equipment required is large and is usually located at clinics or academic institutions rather than research companies. Respondents lie still on a gurney while their head is immersed in the brain scanner.
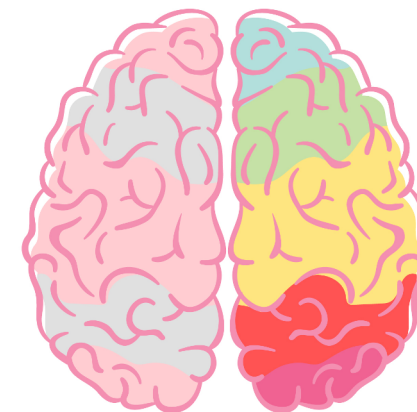
Like EEG, fMRI has its origins in health-care, but commercially studies are made to, for example, measure subjects' brain activity when exposed to different brands, products, choices or purchasing scenarios.

fMRI-projects are not something you easily pull off yourself - it requires specialists and is usually carried out in labs or at medical clinics. This makes the method expensive and projects can often get very expansive.

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BIOMETRIC METHODS

The common denominator to biometric methods is that they are measures of physiology – heart rate, respiration rate, sweat, motion etc. – and that they often can be carried out with fairly simple and inexpensive equipment.

In short, biometric methods measure arousal and since that's 'downstream' of the brain activity that governs it, biometric data tends to be less specific than neurometrics. Still, it usually provides robust and 'good enough' indicators on what triggers emotion in respondents and the ease of execution, fast turnaround time and relatively low cost make them a great option to use.

Biometric methods come in plenty of shapes and forms, but the two arguably most common and relevant when evaluating marketing are eye tracking and facial coding.

EYE TRACKING

Eye tracking is a technique that basically tells you three things: what people see, how long they look at it and in what order they see different objects.

The technology can produce statistics and hard facts on these variables as well as provide powerful visualizations with viewers' gaze data superimposed over the stimulus.

Based on fixation counts, a heat map or an opacity map gives an aggregated view of the results including what is seen and what is ignored. It's also possible to display data from one or several recordings as individual gaze points and scan paths.

Heatmaps are used in eye tracking to visualize the most viewed areas in an image in a simple and intuitive manner. The red areas mark what respondents have experienced as most interesting and looked at the most. Source: Sticky AB

Though not new in itself, the usage of eye tracking has increased rapidly over the last few years. Advances in automated calibration, granularity, mobility and even the possibility to do eye tracking on-line, using respondents own web cams, has made it more available and useful.

Knowing what consumers see is a first important step in ensuring effective communication. What is never sees can't influence anything, no matter how ingeniously and creatively the communication is. Eye tracking offers a unique opportunity to objectively measure consumer attention and spontaneous response to communication, instead of asking them to remember their reactions or to try to their behavior. It minimizes the risk of biased memories or "politically correct" responses. In this way, eye tracking works as a very valuable complement to traditional methods. It is also useful in time-synching with other tools like for example EEG, since it helps pinpoint specific shifts in response patterns in stimulus.

FACIAL CODING

Facial Action Coding System (FACS) is a system for encoding human facial expressions. The system was originally developed by American psychologist Paul Ekman and his colleagues in the late 1970s.

The method is based on linking specific facial expressions to different emotions. Paul Ekman and other researchers have shown that so-called micro-expressions in the face reflect emotions such as happiness, surprise, disgust and fear. These volatile expressions are also both innate and cultural neutral, that is, they are expressed in the same way over different cultures and people of different ethnicities. By studying people's facial expressions while exposing them to communication it's possible to track their emotions without asking any explicit questions.

Measuring facial expressions is nothing new to market research.
Companies in the USA and Europe have been doing it manually for   decades.
Over the last years, though, automated software have been developed, enabling data collection and recording via ordinary web cams. These web cam videos are then analyzed via an algorithm   and can provide insights into how people react emotionally to communication.

And because emotions are central to how we behave and make decisions, this is important information for marketers. In addition, this data is very difficult to obtain through traditional research methods, relying on respondents themselves having to describe their emotions.

At the same time, it's important to remember that a lack of response in the facial coding doesn't necessarily mean that there are no emotions. Some emotional states - like melancholy or "feeling sad in a good way" - are harder than other emotions to detect via facial coding. If you're aiming for these emotions it's advised to back your experiment up with survey questions in addition to the eye tracking and the facial coding.
That said, if you're aiming for virality, facial coding is a great way to predict success.
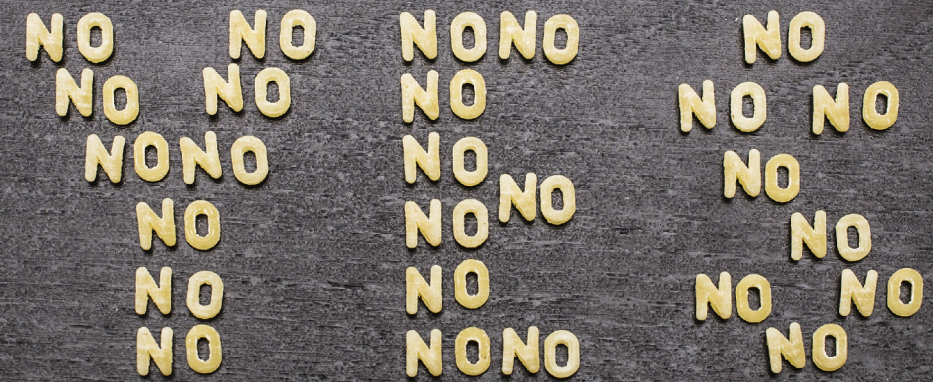
PSYCHOMETRIC METHODS

Although recent years have seen a rapid increase in the use of neuromarketing worldwide, challenges still exist in the form of scalability and time and cost effectiveness.

In order to get around this and at the same time approach consumers' implicit reactions and behaviors, initiatives have been taken in other test methods within the framework of what can be called psychometry.

An array of often proprietary software tools are commercially available to capture non-conscious, 'gut' instincts via screen-based testing protocols based on psychology research. Three renowned scientific methods that measure implicit associations are:

- Implicit Association Test (IAT)
- Affective Priming Task (APT)
- Go/No-go Test (GNAT)

IMPLICIT ASSOCIATION TEST (IAT)

The Implicit Association Test is probably the most know, researched and validated of the implicit research method. It's also, and likely because of this, the most used method.

The method builds on the notion that it takes more time for the brain to accurately act on incongruent thoughts and it's therefore possible to calculate associative strength from differences in reaction time in different tasks.

The entire validated IAT consists of 7 blocks and also involves a single-target category as well as training blocks.

AFFECTIVE PRIMING TASK (APT)

Like most tests that measure implicit associative strength, the Affective Priming Task asks participants to sort stimuli. The main difference is that the APT uses a priming procedure, i.e. before the test brand or advert is shown, respondents are very briefly exposed to a flashing word or image. It's on screen for typically no more than 200-300 ms and is called a supraliminal priming.

The prime influences reaction time and associative strength is indicated by reaction differences.

GO/NO-GO ASSOCIATION TEST (GNAT)

The Go/no-go Association Test is does not involve sorting in the same way as the two methods above. Instead the experiment dictates for which stimuli people are supposed to press the 'go'-button and for which ones they press nothing (no-go).

For example, in the first block, participants may be asked to press 'go' for a specific brand and for positive words but do nothing for negative words and a competitor brand. Then the rules are reversed in another test block.

GNAT calculate associative strength through the amount of errors versus correct responses.

IMPLICIT METHODS - SUMMARY AND OVERVIEW

There is obviously plenty to gain from using implicit market research methods since they are generally better than traditional methods at predicting and forecasting consumer behavior in an accurate way.

At the same time, they demand more of a research buyer because set-up and analysis often require some level of expertise. It is therefore advisable to familiarize yourself with, and learn more about, the methods and to allow yourself some extra time to choose method and vendor with care.

On the next spread you'll find a table helping you get a quick overview of different implicit methods; typical use case as well as their individual pros and cons. You're also always welcole to contact us att hi@implicitacademy.com with questions or comments.

And hey, before we end, by all means, keep using familiar, traditional market research methods as well. It's usually a good idea to mix implicit with explicit research methods to get that 360-degree view of your research area.

IMPLICIT METHODS   SUMMARY OVERVIEW

METHOD	CATEGORY	USE CASES	PROS	CONS
EEG	**Neurometric**	Wide range of applications ranging from testing new innovations to communication effectiveness.	A powerful tool for capturing implicit and qualitative data. Can identify cause-effect relationships	Far from standardized in its application by different vendors and risk of over- interpretation of data. Relatively high costs and long lead times.
fMIR	**Neurometric**	Primarily for major R&D projects and / or academic studies.	A very powerful tool for capturing implicit and qualitative data. Analysis possible deep into the primal emotional centers of the brain. Can identify cause-effect relationships.	Requires specialist expertise and normally involves very high costs and long lead times. Difficult to scale up to quantitative levels and some risk of over-interpretation the result. Noisy and unnatural environment for the respondents.
Eye Tracking	**Biometric**	Used to find out what respondents look at, how long and in what order. Common in e.g. usability tests and to evaluate communication	Easy to use, relatively inexpensive and highly scalable. Provides objective and unbiased data on what people see and what they miss or ignore.	Purely visual and has no direct connection to brain activity or emotion. Interpretation in some cases subjective.
Facial Coding	**Biometric**	Wide range of applications. Commercially, the method is widely used to evaluate communication and new concepts.	A relatively simple and scalable tool for measuring emotions and reactions in an implicit way.	Faces only reveal some of the responses to stimuli and the technology today only works for a set of universal emotions. Some emotional states - like melancholy are hard to detect
IAT/APT/GNAT	**Psychometric**	Used, among other things, to better understand how people unconsciously make a difference between different brands or to test reactions to new innovations, packaging or advertising.	Simple, fast and scalable method that can be implemented on line, which enables large quantitative surveys at the global level.	Requires a lot of expertise to design a survey design that gives valid results and to interpret the results from the measurements

GET MARKETING SUPERPOWERS

Peak in to your customers sub-conscious and see what really makes them tick. Using implicit marketing research methods will help you and your team to get virtual marketing superpowers.

Implicit House was founded on the conviction that innovation and market success starts with real understanding of human behavior.

The core team includes seasoned professionals with 20+ years of experience each from behavioral economy, neuromarketing and implicit market research (with special focus on eye tracking, facial coding, EEG and IAT). We also have a vast network that we can tap into for expertise to meet any needs.

Our mission is to provide every marketer the tools they need to understand and influence their customers' behavior.

MEET THE TEAM

Clas is an experienced Market Researcher with a 25+ year career in the field of Research & Insight in different roles in international consumer goods companies.

Magnus is an accomplished Market and Business Analyst with 20+ years experience of converting information and data into clear insights and actionable business benefits.

Rikard has worked in Market Research for over 20 years with a focus on media, brand and communications. He combines both quantitative and qualitative experience.

IMPLICIT HOUSE