

## Overview

Brainwave Science, LLC is the inventor and developer of a unique, proprietary solution to solve crimes, provide evidence to exonerate innocents, and identify terrorists accurately and scientifically before and after a terrorist act with over 99% accuracy.

Brain fingerprinting is a computer-based, scientific, patented technology to detect whether specific information is stored in a person's brain or not. The technique is not for interrogation. It does not require any questions and answers. It reveals objectively whether information is present in the brain or not, regardless of whether any false or truthful statements are made by the subject. The brain does the talking. Hidden information is uncovered by measuring brain-wave activity in response to crime-related pictures, words or phrases.

## Opportunity:

Globally, countries are constantly looking for ways to reduce the crime rate, increase security, and decrease government expenditures on crime and national safety. In modern era where criminals have various technologically advanced resources at their disposal, it is essential to have the highest amount of accuracy while determining and disclosing the perpetrator. Violence containment spending just in the US is \$2.16 Trillion annually, whereas in UK it is more than £124 billion a year. For example, Saudi Arabia Homeland Security Spending 2014-2018 will surpass \$70B. The market is wide open and growing fast. According to UNDOC, the global average homicide rate is 6.2 per 100,000 populations. 12.7 million people inject drugs every year. 11.4 million unauthorized immigrants reside in USA, which is the most attractive destination for immigrants from all over the world. The total cost of war on terror is estimated to be around \$5 trillion. Corruption and fraud are a US\$2.6 trillion worldwide problem annually. World economy is suffering drastically due to crimes beyond their control.

## Solution:

Brain fingerprinting is a revolutionary technology introduced by Brainwave Science that evaluates brain waves generated and concludes with highest accuracy and reliability, if an individual possesses any concealed information related to an act of crime, fraud, terrorism, threat to national security or anything significant in similar areas. It is impossible to evade the knowledge your brain has no matter how vehemently you deny it. Conventional fingerprinting and DNA testing match physical evidence from a crime scene with evidence found on the perpetrator. While these are tested and accepted methods, they are only available in roughly 1% of crimes and not applicable in Counterterrorism. It is estimated that Brain Fingerprinting would be applicable in 85%-90% of these same cases and National Security, thus having the potential to make a profound effect on the criminal justice system and Counterterrorism. Within the fields of law enforcement, national security, and counter-terrorism, Brain Fingerprinting can reduce time and cost of investigation by 80%, while also increasing investigation success by rate by 100%.

## Applications

Experts from FBI found that Brain Fingerprinting technology is applicable to more than 85-90% of cases of both criminal and civil nature where as DNA and Fingerprints are applicable in 1-2% of cases. It has been ruled admissible in United States courts.

## Offenses:

**Personal/Violent Crimes:** Aggravated assault, Forcible rape, Murder, Robbery

**Property Crimes:** Arson, Burglary, Larceny-theft, Motor vehicle theft

**Other Offenses:** Curfew violation/loitering, Disorderly conduct, Driving under the influence, Drug law violations, Embezzlement, Forgery and counterfeiting, Fraud Gambling, Liquor-law violations, Offenses against the family, Prostitution and related offenses, Public drunkenness, Runaways, Sex offenses, Simple assault, Stolen property, Vandalism, Weapons, Vagrancy

**Other Crimes:** Corporate/white-collar crimes, Financial Crimes, Hate crimes, Identity theft, Organized crime, Cyber Crime, Medical Crime, Terrorism, Spousal Conflicts, Infidelity

## How its delivered?

**Brain Fingerprinting Solution – Over 99% Accurate, Portable and Applicable in almost all situations where evidence is available:**

Brainwave Science delivers this technology to its clients through hardware as well as software along with its patented technique.

Brainwave Science services include:

- Training client on user friendly Brain Fingerprinting software and a customized EEG Headset
- A controller and monitor for the subject (Testee)
- 30-50 hours of customer support, expert support as well as training

## How it works:

1

### Subject preparation

The first step is to correctly place the wireless Headset, which uses sensors (electrode) to collect the brain responses from the scalp and muscle movements.

2

### Launch Application

A series of crime or event specific, relevant and irrelevant stimulus in the form of words, phrases, or pictures are flashed on a computer screen to collect the Brain responses for each stimuli in the form of EEG signals.

3

### Analyze the Result

The collected brain responses to the stimuli are analyzed with the patented techniques and scientific algorithms to determine whether the information under test is present or absent with over 99% accuracy in subject's brain.



- The headset will be put properly on the subject head.
- The game controller device will be given to the subject to respond to the images or words that he/she is seeing in the monitor
- Crime related Images and words display on the computer monitor as the subject watches.
- The brain response to the words or images is captured through the application.
- The collected Brainwave response will be analyzed by a click of a button.

**Competitive Advantage/Market Differentiation**



**Advantages:**

This latest technological crime-solving tool, which provides an accurate, reliable and systematic process to conduct criminal investigations without invasive procedures. It can be used efficiently and affordably to:

- Identify criminals quickly and scientifically.
- Exonerate the innocent and prevent lawsuits from false accusations.
- Gather intelligence information and uncover espionage and terrorists plots.
- Detect accomplices and members of gangs and criminal organizations.
- It is objective, does not depend on the subjective judgment of the person conducting the test
- Very effective in Counter Terrorism and Counter Intelligence activities and cases
- It is a patented P300 MERMER technique
- No known countermeasures
- Shows no false positives or false negatives
- Can be applied in all situations where evidence can be collected
- It is highly accurate over 99.9% and reliable
- It is published and peer-reviewed in relevant scientific journals
- Admissible in US courts
- Portable
- User friendly
- Easy to operate
- Minimum maintenance

- It is tested and proven at the FBI, CIA and US Navy with results published in peer-reviewed journals
- It can be applied over 85 to 90% civil and criminal cases
- It exonerates innocents quickly and efficiently
- Measures information from processing brain activity
- Highly customizable

As a product, Brain Fingerprinting is a segment in its own with no competition in the market. However, as a forensic tool, it is often compared to existing tools and technologies to evaluate its worth.

The closest technology to Brain Fingerprinting is Polygraph or Lie Detection as it is more popularly known.

Some of many competitive advantages of Brain Fingerprinting include:

- First in the market, first market mover advantage in the defense space, which spends trillions of dollars on homeland security globally
- Scientific, tested in over 200 cases, peer-reviewed and Proven
- Accepted as a scientific evidence in US courts
- Unique Intellectual Property with strong patents
- Strong and experienced management team