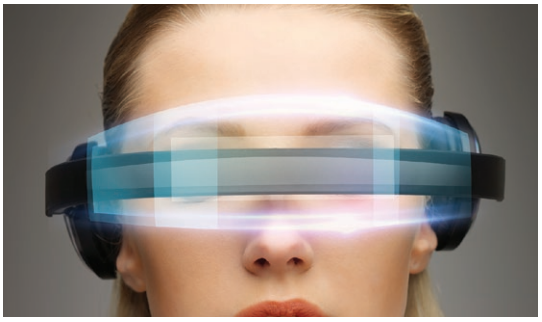
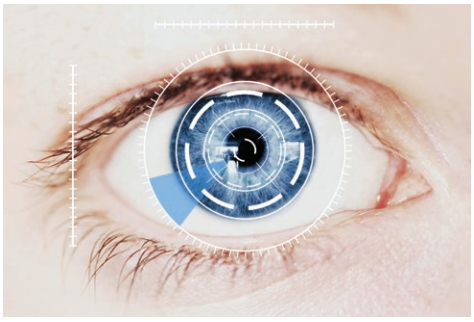
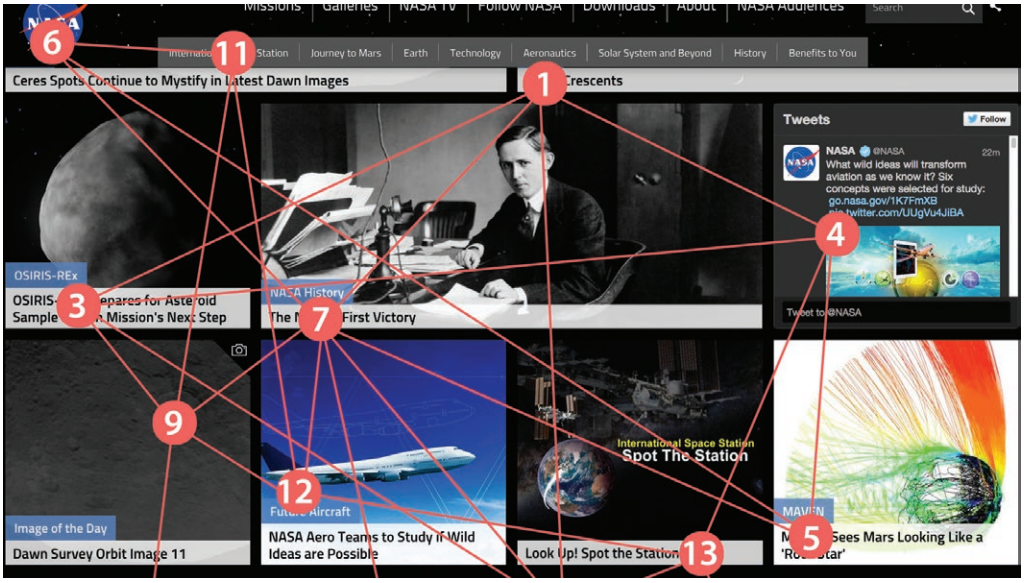
A Thintri
MARKET STUDY 2015

Market Opportunities in Eye Tracking, 2015

Thintri, Inc. announces the release of **Market Opportunities in Eye Tracking, 2015**, a new market study that analyzes the extraordinary opportunities emerging in the use of eye tracking for a wide range of applications. This comprehensive examination discusses the development of new eye tracking technologies that are inexpensive and easily implemented, resulting in new applications that, in some cases, are poised to create billion-dollar markets, with market forecasts to 2022.







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Contact:
J. Scott Moore, Ph.D., *President*
Thintri, Inc.
914/242-4615
smoore@thintri.com

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Background on Eye Tracking

Eye tracking, the detection and determination of the direction of a person's gaze while following and recording the movement of the gaze from one point to another, has long been available for use by paralyzed patients to control computers and other devices. Because the systems were sold in low volumes and had to meet extraordinary requirements in performance and reliability, prices remained too high for many worthy applications. And because of the low volumes, there was little incentive to develop new capabilities and cultivate new markets.

All that is changing with the advent of new, inexpensive eye tracking tools. As recently as ten years ago, tracking the eye movements of test shoppers in a store required them to be tethered to bulky computer equipment pushed behind them in a trolley. Today, the same task can be accomplished with a pair of wireless goggles.

Outside of a couple of demanding applications like gaming and virtual/augmented reality, where goggles will still be common, the bulky goggles and even eye-contact devices that recorded gaze direction in the past are being replaced with a simple infrared source attached to a computer, tablet or other device. The increased comfort for the subject, combined with the inherently low cost of the source/detector system, are about to create huge markets.

Providing access to technologies for the disabled will continue to be an important application, but that market is nearing saturation, and may even face decline with growing issues in funding. However, the breadth and promise of emerging applications for eye tracking are startling. Medical personnel will be able to diagnose brain injury, neurological disease, Parkinson's disease, ADD/ADHD, learning/reading disabilities and even psychiatric conditions, all with a simple, inexpensive eye tracking tool. As each individual has unique eye tracking characteristics, eye tracking can be used in biometrics. Law enforcement can use eye tracking to evaluate the accuracy and certainty of a witness' decisions when viewing a police lineup. Eye tracking will provide tremendous benefits in website design and the development of virtually anything that is meant to be viewed.

Some emerging applications offer the promise of growth to billion-dollar levels within a decade. Already, eye tracking systems are used in detecting fatigue and sleepiness in operators of heavy machinery, such as mining vehicles. When the technology moves to the consumer automotive market, growth could be explosive. In gaming, eye tracking will allow control in first-person shooter games with unprecedented speed. A gamer will need only glance at a target while pressing a button to shoot. Already, laptops are available with built-in eye tracking technology for gaming. Smartphones are available that allow control such as scrolling by eye movement.

Some of the greatest opportunities are in market and advertising research. The development of inexpensive eye tracking systems that combine webcams and online platforms will allow virtually any small or medium-sized business to conduct market research online, where subjects from all over the world can be tested from their homes, without the need to travel.

Nevertheless, there are limitations to today's eye tracking technology. The tools cannot, for example, determine whether a subject has seen something consciously or unconsciously, or whether they have seen something in peripheral vision. They also cannot tell why users are looking at an object, whether their gaze is an indication of interest or repulsion. Basically, the tools say relatively little about a user's thought processes, but an emerging solution to this problem lies in neuromarketing, the combination of eye tracking with other sensors, such as ECG, EEG and particularly facial expression analysis. The combination of several modalities in neuromarketing promises to be as fundamental a breakthrough in this decade as eye tracking is today.

Understand the Markets

Eye tracking is a relatively mature technology; most significant technical obstacles have already been resolved. The only major hurdle at this time is user education and awareness. The eye tracking industry today has only scratched the surface of the opportunities facing a uniquely versatile and useful technology.

Established industry players are opening up markets, and will most likely be successful in doing so, but it is largely the smaller players and startups that are pointing the way to billion-dollar markets, by finding opportunities and rapidly developing inexpensive products and services to serve those markets. In many cases, the smaller and less costly eye tracking tools will, as expected, compromise accuracy and resolution. However, this can be compensated for in market research, for example, by reaching vast numbers of test subjects at very low cost, allowing even greater reliability and accuracy than many in-lab studies.

Thintri's market study, Market Opportunities in Eye Tracking, examines the leading technical solutions to eye tracking, new and established applications, and forecasts the development of these markets to 2022.

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914/242-4615
smoore@thintri.com
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