

# Ambient Insight Targeted Research Report

## The US Consumer Market for Brain Fitness Applications: 2009-2014 Forecast and Analysis



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### **This is a Targeted Research Report. Ambient Insight has four market research product types:**

**Comprehensive Reports** are 60-75 page reports that provide detailed analyses and revenue forecasts for content, content services, technology services, and technology for a specific product type and breaks the revenue out by all eight buyer segments.

**Targeted Reports** are 25-40 page reports that provide industry-wide analysis, an analysis of a particular product type, or an analysis of a specific buyer segment.

**Research Briefs** are 10-15 page reports that highlight revenue opportunities, provide trend analyses, and forecast revenues for a particular sub-category of content, service, or technology.

**Revenue Snapshots** are 2-3 page reports that include a single revenue forecast table from a current market report. Please review the free Executive Overview for each report for a list of available tables. Contact us at [info@ambientinsight.com](mailto:info@ambientinsight.com) to request a specific Revenue Snapshot.

## Key Findings

The brain fitness industry has entered a wide adoption phase and competition between suppliers is heating up. There is a growing array of suppliers, some of which have been releasing second-generation products designed for consumers.

Until recently, suppliers targeted organizational and institutional buyers. Now they are marketing and selling products directly to consumers and this has become an important factor driving demand.

Demand will eventually slow as the market matures, but for now there is a very healthy revenue growth rate. The US Consumer demand for brain fitness applications is growing at a robust five-year compound annual growth rate (CAGR) of 51.2%.

The suppliers that are competing successfully in the current market are selling products that offer unique value to increasingly savvy customers.

- The market has evolved significantly in the last two years
- Suppliers have successfully created a market for new types of products that appeal to a diverse demographic on two ends of the age spectrum: young children and the elderly
- Seasoned suppliers are expanding their market share by acquisitions, building innovative new features, cross-marketing, and promotional arrangements with well-known organizations
- The emergence of an online reseller channel has dramatically increased distribution options for suppliers
- A significant amount of venture capital is being invested in companies that compete in the consumer segment
- Suppliers are also aiming for new markets, such as wellness programs and physical fitness venues
- And a new trend in the market is that suppliers are now connecting with customers and new audiences via social media and new distribution channels.
- The barriers-to-entry are relatively high for advanced products, but a steady stream of new suppliers are entering the market with low-end products
- Suppliers have created confusion in the market by conflating product terms such as brain training, cognitive fitness, and brain fitness, and by releasing low-priced, scaled-down demo versions of their brain fitness applications.

Because of confusion in the market about the distinctions between brain trainer games and brain fitness applications, Ambient Insight has revised its research taxonomy to provide clarity to suppliers. We categorize brain fitness applications as a type of Cognitive Learning product that is based on scientific research, designed to enhance "working memory." We define brain trainer games as a type of Mobile Learning or Simulation and Game-based Learning product.

Ambient Insight also categorizes mobile brain trainer edugames as a type of Mobile Learning packaged content.

## Definition of Product Types

Technology-based Cognitive Learning products are designed to improve or enhance perception, working memory, comprehension, emotional states, decision making, fluid intelligence (general problem solving), and reasoning.

Cognitive Learning products are meta-cognition products that enable users to modify cognitive behavior (learn) by understanding and manipulating the learning process itself. Educational psychologist John W. Santrock defined meta-cognition in 2008 as the information process that, "includes knowledge about when and where to use particular strategies for learning or for problem solving." There are three primary types of Cognitive Learning products on the market:

- Cognitive assessments
- Cognitive and intelligent tutors
- Brain fitness applications.

Brain fitness, also known as cognitive fitness, is based on cognitive science, neuropsychology, and brain-based learning theories emerging from educational psychology and educational neuroscience. It is an instructional method that targets the neuro-physiological processes involved in learning and has little in common with traditional instructional design principles.

The "fitness" metaphor is an extension of physical exercise concepts. Researchers and suppliers have a growing body of empirical evidence to show that people who use the products can condition and train the brain to improve memory, attention, visual and spatial awareness, auditory processing, linguistic skills, planning skills, and problem solving.

In 2006, brain fitness applications were enjoying a spike in demand. Late in that same year, mobile brain trainer games appeared in the US market. During this period, there were clear distinctions between the two product types. The brain fitness industry in the US entered a wide adoption phase in late 2008-early 2009.

**Table 1 - Comparison of Typical Brain Trainer Games and Brain Fitness Applications**

<b>Product Type</b>	<b>Brain Trainer Games</b>	<b>Brain Fitness</b>
<i><b>AI Taxonomy</b></i>	Mobile Learning or Simulation and Game-based Learning	Cognitive Learning
<i><b>Origins</b></i>	Gaming industry	Life sciences
<i><b>Platform</b></i>	Mobile devices	Computer (Web-based or CD-ROM)
<i><b>Purpose</b></i>	Edugame, entertainment	Enhance specific cognitive abilities
<i><b>Primary Activity</b></i>	Games and puzzles	Cognitive Exercises
<i><b>Average Price</b></i>	\$7 - \$15	\$100 - \$2,200 plus monthly fees

As shown in Table 1, a key difference between the two product types is the supplier's purpose or intent:

- **Brain trainer games** are mobile or simulation and game-based products designed as entertainment products; the intent of **brain trainer game** developers is to provide a user with a challenging game experience.
- **Brain fitness applications** are based on scientific research and designed to enhance specific cognitive abilities; designers of **brain fitness applications** aim to spark a change in the user's mental state, but they are also trying to achieve what is known as "transfer," where the skills learned in the experience can be extended to new situations.

Ambient Insight does not categorize or include in forecasts those products that are designed for cognitive rehabilitation or for clinical diagnosis as brain fitness applications or brain trainer products.

**Disclaimer:**

Ambient Insight analyzes the competitive landscape and supply chain for Cognitive Learning products and is agnostic about claims or criticisms surrounding the effectiveness of the products. We are an integrity-based firm and we do not endorse specific suppliers or products. We do not evaluate, compare, or rank the effectiveness of Cognitive Learning products. We are interested in the on-going research developments from a product marketing perspective and as potential market catalysts and inhibitors, but our primary focus is to track the buying behavior of customers and identify the revenue opportunities for suppliers.

## ***Related Research***

Buyers of this report may also benefit from the following Ambient Insight market research:

- [The US Consumer Market for Technology-based Cognitive Learning Products: 2009-2014 Forecast and Analysis](#)
- [Private Investment Trends in the US Learning Technology Industry: 1999-2008 Longitudinal Analysis](#)
- [The US Market for Mobile Learning Products and Services: 2009-2014 Forecast and Analysis](#)
- [The US Market for Mobile Brain Trainer Products: 2009-2014 Forecast and Analysis](#)
- [The US Healthcare Market for Mobile Learning Products and Services: 2009-2014 Forecast and Analysis](#)
- [Ambient Insight's 2010 Learning and Performance Technology Research Taxonomy](#)