

# Brain Games Market Analysis

## August 2013

This proprietary report is prepared for Bio-Investigations Ltd. All efforts have been made to check the authenticity of sources by the analyst.

All rights reserved  
2013  
Bio-Investigations Ltd.

Browsing “The Mind” section of a local bookstore, I noticed various books that focused on treating cognitive illnesses such as depression and Alzheimer’s rather than promoting wellness. This is good news for Boston Brain Fitness (BBF). Their approach



to the brain games market will set them apart significantly from other players in the brain games field because of the different aspects of their focus. The six areas of their business model include cognitive exercise, nutrition, physical activity, sleep training, stress reduction, and yoga. This diversity provides them with a creative and unique approach, which may allow them to successfully break into this previously established market. Within this report I will be analyzing six players in the brain games field: Lumosity, My Vigorous Mind, Posit Science, Cogmed, Scientific Brain Training Pro, and BBF. A high percentage of Internet users are under 40, therefore, if BBF decides to market towards aging baby boomers, every effort must be made to create an uncomplicated user interface to attract older customers.

Boston Brain Fitness will provide a preventative approach focused on promoting wellness through programs in cognitive exercise, nutrition, physical activity, sleep training, stress reduction, and yoga. The company is directed by two leading physicians in ADHD, Dr. Edward Hallowell, MD and Dr. James Ellison, MD MPH. These two world-class authors have practiced medicine and promoted public health for years. The physicians whose books have become major bestsellers are translating their collective experience into an online program, which will be

accessible to millions of people. Their multi-faceted approach to the brain games market and a focus on wellness rather than treating ill patients will set them apart from other players in the field. BBF's target audience may be dedicated to baby boomers, which represents about 70 million people in the 45-65 age bracket. In addition the founders plan to offer an office and web-based presence, which will create multiple venues for interactions between counselors and clients. Because BBF will be taking such a distinctive approach to breaking into the brain games market, there is no direct competition for the company, rather numerous players in the field. In order for BBF to be seen as such a vastly different company from others in the market, they must advertise in numerous and diverse locations to emphasize their multi-faceted focus on wellness.

Lumosity, established in 2007 in San Francisco, CA, is the most popular and effective online brain game company, primarily focused on personalized brain training by enhancing memory, attention, flexibility, speed and problem solving. While BBF's main goals include a multi-layered approach with a base in promoting the wellness factor, Lumosity concentrates simply on brain games using "Reclaim Your Brain" as their catchphrase. They also boast a 97% user improvement rate and state that after just 10 hours of training, drastic improvements become apparent. Their rising popularity is evidenced by their over 40 million users and user success stories found within their site. Providing user stories is an original tactic for attracting potential customers to their service and verifying their reputation as number one in the market. Another strategy utilized involves explaining the science behind the games, which is based on neuroplasticity, the brain's natural ability to

form new connections in order to compensate for injury or changes in one's environment (aka brain plasticity). The brain's ability to strengthen and grow is the central theory behind training your brain. This capability provides immediate insurance for the effectiveness of the services they provide. Lumosity has also developed a free iPhone App, which instantly hooks consumers into potentially buying the paid version. Ongoing research is currently being done by Lumos Labs to advance neuroscience. Designated as The Human Cognition Project, Lumosity claims it will revolutionize our understanding of the human brain. Lumosity's high popularity and proven efficacy mark this company as the leading player in the field, signaling a challenging undertaking for BBF.

Using "Revitalizing Your Brain" as their slogan, My Vigorous Mind, started in pre-2008 in Newton, MA, combines cognitive wellness with social networking found within a senior citizen target audience in senior centers, home care, and hospital settings. This exclusive age group excludes a wide variety of potential users, however, if they were to expand their audience, potentially losing their loyal customer base could be a major threat. Although they might not be popular on a large scale, they are prevalent within older age groups, which explains their high effectiveness rating. Providing touch screen computer labs found at each of the four centers for the sole purpose of completing these brain games ensures their select customer base. My Vigorous Mind can be found in computer labs in only four senior centers: Maplewood at Danbury, CT, Shorefront Center for Rehabilitation and Nursing Care, NY, NY, The Woods at Center Run Camp Hill, PA, and Elmwood Senior Center in West Hartford, CT. Their particular approach to the brain games market

includes a personal dashboard allowing users to keep track of daily schedules, communicate, play brain exercises, and experience group activities. Essentially these centers have created a designated brain gym for residents interested in stimulating their synapses. Rather than expanding their target audience to a more diverse age group, My Vigorous Mind could set up labs in additional centers across the country, which would significantly extend their reach. Their low popularity rating is reflected in one of the questions from the brain games survey I conducted, which points towards a deficiency in advertisements for this company. (Sample Survey attached as Exhibit III)

Posit Science, founded in 2002, based in San Francisco, CA, is a third player in the market of online brain training exercises with “Train Your Brain” in their logo. Like Lumosity, a free trial is offered on their game site known as Brain HQ. Posit Science focuses on training the mind exclusively, with options for the user to focus on attention, speed, memory, people skills, or intelligence. Two trial games are available for the attention and speed subdivisions with further access offered as either a monthly or yearly subscription. They promote the concepts of “Think Faster, Focus Better, Remember More”, which instantaneously encourages and motivates potential users. Posit Science is very similar to Lumosity’s concentrated approach to the market. In fact, Posit Science is almost equivalent to Lumosity, however is not as popular or as effective according to my research. Of the people who have completed my survey, 86% had never seen an advertisement for Posit Science and 93% had never played one of their online games. Therefore, more emphasis should be placed

on advertising along with possibly offering one free trial game under each section of Brain HQ, so that users will understand the service.

One company that is focused completely on working memory training is known as Cogmed, begun in 2001 in Sweden. It is funded by Pearson Technology, global leader in education, education technology, and assessment. Their target audience includes people who were born with a deficit, acquired a deficit through brain injury or disease, developed a deficit through natural decline caused by aging, or faced career demands and wish to improve job performance. Working memory can be defined as the ability to retain information in your mind for short periods of time. Cogmed's focus is much narrower than any other player in the field, because the emphasis is only on a specific type of memory. Their strong background in cognitive neuroscience, innovative computer game design, and close professional support provide for a unique experience, supported by an exceptionally distinguished company. They also provide a chat function with a Cogmed qualified coach who will guide you through five weeks with five sessions each week. Another singular aspect to their online game software is seen in their age specific applications, which includes Cogmed JM for preschoolers, Cogmed RM for school-age children, and Cogmed QM for adults. Difficulty levels are adjusted to each user's ability by a highly sensitive and specific algorithm. Their focus on working memory sets them apart from other brain game companies providing Cogmed with a high effectiveness rating with 80% of users experiencing meaningful benefits. Their website highlights the phrase "Working Memory Training".

Happy Neuron, a division of Scientific Brain Training Pro, established in 2000, functions in a patient-centric manner through cognitive remediation and rehabilitation programs. “Brain Fitness for Life” appears as part of their logo. Their three diverse programs include a rehabilitation program, which treats cognitive impairment, a CR-Psych Program, that treats psychiatric patients, and an aging well program for patients with mild memory loss. Happy Neuron also offers five different free phone Apps. Although Happy Neuron boasts more than 5 million users, their popularity rating was very low. This was also apparent in the results of my survey, as 0% had seen a Scientific Brain Training Pro or Happy Neuron advertisement. In order to increase their popularity and prove their value, this company must advertise more frequently online, or in magazines and newspapers. Once a user has completed the free trial stage of the service and has decided to begin a program, the customer experiences three main steps: building your profile, training your cognitive functions, and keeping your brain sharp. By breaking the main program into individual stages, the user has the impression that they are remaining on track and becoming closer to the end result. In order to begin building a personalized profile, the user must start playing games in all areas of cognitive functioning, which include memory, attention, language, executive functions, and visual and spatial processing. As the user completes more exercises, their profile becomes increasingly accurate. Happy Neuron provides detailed descriptions for each step, another attractive aspect to potential customers.

Every company in the brain games market boasts a highly esteemed team of scientists and board members, with impressive academic and occupational

backgrounds. BBF also stresses this high level of competence. The differentiating element for BBF could be their multi-faceted approach to the wellness market by providing programs in cognitive exercise, nutrition, physical activity, sleep training, stress reduction, and yoga. However, in talking with people who completed my Brain Games Survey and became aware of what BBF will have to offer, most of them agreed that including all six programs is overly ambitious, especially for a new company. The survey results revealed that cognitive exercise, stress reduction, and sleep training are the most interesting aspects of the overall service. A problem that might surface could be losing at least a somewhat multi-faceted approach to the brain games market by becoming too similar to Lumosity. BBF should decide on their focus areas and generate strategy around them.

Consumers are looking for fun and interactive programs that will fit into their lifestyle and not be excessively demanding or work based. BBF could develop a creative introduction as potential users enter the site, for example immediately flash a sample exercise on the main screen, and after a few seconds fade into the actual site. This would immediately immerse consumers into the technology and game design of BBF's system. Another way for BBF to become more attractive to potential customers in such a crowded market is to completely emphasize the entertainment side of the service, by for example displaying a roller coaster flying across the front page with BBF written on the coaster with a heading saying "Your brain is about to take the ride of its life". From the consumer feedback I have received through the survey I conducted, BBF will need to develop an appealing identity to differentiate



them from other players like Lumosity and Posit Science, as only 40% declared they would be more likely to subscribe to an online brain game company.

BBF's most potent adversary will be Lumosity, the most popular and well-known online brain game company on the Internet. Lumosity is purposely geared towards all age groups, and they have been extremely successful. BBF will either follow suit or focus on the 70 million baby boomers as their target audience. If they choose the latter, BBF will position all advertisements towards the over 40 age group and create a website and online environment that is easy and maneuverable for a crowd that is not as technologically savvy. Although creating a free phone App may be a good way to gain exposure, many older consumers will not have the ability to utilize this. By thinking about how older adults look for information and by keeping the website structure simple and straightforward, BBF will become more attractive to this age group. The aging sector of the population's hindrance to computer or Internet use is reflected in their declining ability to remember, learn, think, and reason. This is why BBF should focus on cognitive abilities like working memory, perceptual speed, attentional functioning, and spatial memory.

Out of the six key components BBF strives to focus on, I believe cognitive exercise, stress reduction, and sleep training may be the best areas to focus on in their main program. Dr. Gareth Moore, author of a wide range of brain-training and puzzle books for all ages, states that your brain takes up about 20% of your energy, therefore sleep is very important for your brain's ability to function at its highest potential. BBF can help their target audience break through the habits they have sustained for years by providing set individualized programs for sleep schedules and

cognitive exercises. Dr. Moore also points out that “your brain loves novelty—new experiences, new feelings, new thoughts” (Moore), so by providing a wide range of interactive activities users will be motivated to try different things and become exposed to a wide variety of mental exercises. Because BBF clients will not look to be treated for a mental illness or cognitive impairment, the site should be presented in a pleasurable fashion, to remind the user that they are there in order to begin living a healthier, fuller life and have fun doing it. More customer feedback would be extremely beneficial for deciding on which aspects of the program the set target audience would respond most to. For instance, after completing a survey, the willing participant could receive one free month with BBF. Today’s smartest businesses profit by giving something for nothing, which is why BBF must form a simple approach like this to entice potential buyers.

It has been predicted by Sharp Brains, a market research firm, that more than one million adults in North America alone will take a self-administered annual brain health checkup online by next year. Sharp Brains tracks health and wellness applications of brain science. Their book *The Sharp Brain’s Guide to Brain Fitness: How to Optimize Brain Health and Performance at any Age* was released in April of 2013 and is geared towards consumers of any age interested in anything from memory enhancement to disease prevention. BBF’s target audience, which may comprise the over 40 crowd, will look to both improve performance and delay disease. Adults need an incentive and a motivation for taking charge of their own brain fitness, which is why BBF’s strategy must involve constant reminders through emails once a user has signed up for a free trial that a stronger and sharper brain is

waiting for them at a click of the mouse. The motivation must derive from added benefits like frequent coupons and specials with new exercises constantly being developed. A select amount of clients could be chosen at random to test new games and be rewarded with a free gift in the form of either a product or service.

Lumosity has perfected their motivational strategies and desirable aspects of their program, which creates quite a challenge for BBF. For example they pop up interesting facts, graphs, and coupons to grab your attention. Advertising on television channels and in magazines that healthy older audiences most frequent is BBF's best bet for attracting this particular clientele. Television channels like Food Network, HGTV, and the Travel channel and magazines like Woman's Day, AARP, and Fitness are some options for superior advertising tactics. For instance, by advertising in Fitness magazine, BBF can attract potential customers who are already physically fit, but have not given much thought to their cognitive abilities. These ads could prove that not only do aging adults need continuous physical exercise, but also cognitive stimulation. In the ad campaign I came up with using the words "Reboot your brain, Relax your body, Rejuvenate your spirit," I am pointing out the impact of how important a change in lifestyle is especially for such a large aging group of the population. Although Lumosity, Cogmed, and Posit Science already strive to achieve the goal of declaring the importance of cognitive enhancement, BBF's differentiating factor of combining multiple lifestyle focuses could be the key to their success. By convincing their audience that all aspects of their lives connect and therefore can benefit by their services, BBF could position themselves in a unique position within the brain games and health genre.

In a cost comparison of each of the six players in the brain games market, Cogmed came out on top as the most expensive program, with BBF as the runner up. If BBF hopes to triumph over previously established and well-known companies, they should lower their annual subscription fees to a more conservative level, for instance in the \$60-\$70 bracket rather than \$100. Because BBF will just be starting out and on undetermined ground, their pricing levels must reflect their willingness to accept exposure over income. Further down the road when their customer base is stronger, it would be appropriate to raise costs to a more profitable level. My Vigorous Mind can afford to have the lowest pricing, as they are only available in computer labs of select senior centers. Lumosity, with whom BBF will struggle the most, maintains a very inexpensive annual program of \$72/year. If BBF were to at least commence with lower annual subscription fees than Lumosity, they would already be more appealing to the 70 million baby boomers or even the general population.

Everyone knows the familiar phrase “the body is your temple”. It is interesting that culturally, we emphasize the body but not the brain as part of that body. BBF’s focus, which connects to all aspects of a healthy lifestyle, differentiates their business model from others in the brain games field. Although many individuals surveyed agreed that six programs within the main frame was overly ambitious, it might be the deciding factor for a user choosing between other companies and BBF. With companies like Wal-Mart and Target as one-stop shopping experiences, this new trend can easily translate into the brain games and wellness market. Each component of wellness is equally important, which is why BBF has no

competition on the level of all in one. Their business model combines all aspects of healthy living in an individualized and accessible method. A wholesome lifestyle involves both the body and the mind, something that BBF would promote as the key to balance and wellness.

**“The mind is not a vessel to be filled  
but a fire to be kindled”—Plutarch**

## Works Cited

Moore, Gareth. *The Brain Workout: Use It or Lose It*. London: Michael O'Mara Books Limited, 2011.

## Exhibits

Exhibit I: SWOT Analysis (Strengths, Weaknesses, Opportunities, Threats)

*see next page*

Exhibit IIA: Perceptual Map A

Exhibit IIB: Perceptual Map B

Exhibit III: Survey Sample