

Business Summary – 2015



Logo for Dyop® Certified
Eye Care Professionals

Dyop® Vision Associates LLC

5035 Morton Ferry Circle
Alpharetta, GA 30022
www.DyopVision.com

phone 678-893-0580
fax 678-893-0610
email Allan@Dyop.org

Management Team

Allan Hytowitz – Owner & Principal Scientist
Stephen Hart – Chief Financial Officer
Warren Chung - Asia Business Manager
Scott Talsma – Chief Information Officer
Reid Laurens – Director of Sales
Jerry Ehrlich – Director of Marketing
Vince Mungoli – Business Adviser
Barry Santini – Optician Adviser
Frank Heisel – Optician Adviser

CURRENT PRINCIPAL INVESTORS

Allan Hytowitz
Stephen Hart

FUNDING TO DATE

\$120,000

FINANCING SOUGHT

\$2,000,000

USE OF PROCEEDS

Test kit production - \$500,000
Software/Web development - \$180,000
Clinical evaluation/research - \$300,000
Additional patent acquisition - \$180,000
Sales and marketing – \$400,000
Working capital – \$200,000
Salaries – \$240,000

BANK

Bank of America, Duluth, GA

LAW FIRM

Paul Klein – Paul Klein & Associates

ACCOUNTING FIRM

Stephen M. Berman & Associates, L.L.C.

Company Description

Dyop® Vision Associates LLC has developed and patented an optical stimulus that more precisely and consistently measures visual acuity (VA). A Dyop® (short for Dynamic Optotype™) is a uniformly rotating image whose calibrated size, motion, color, and contrast provide a precise method for measuring VA based upon photoreceptor physiology rather than cognition.

Preliminary clinical testing has shown that Dyops® are significantly more precise (~3x) than static image acuity tests, are faster to use, minimize memorization, do not require the ability to read (let alone read English), and provide a precise and universal measurement of visual acuity regardless of literacy, age, language, or culture.

Using Dyops® for testing vision increases the accuracy of prescriptions, saves doctors' and patients' both time and money in determining their vision needs, and lets people more easily know when their vision is less than ideal. Visual testing with Dyops® allows determining acuity in children as young as five months of age. The use of contrasting colored Dyop® images allows for the screening of chromatic related problems such as dyslexia-type symptoms.

Since its creation in 1862, the Snellen chart has been the standard visual acuity testing stimulus used by eye care practitioners worldwide. Many attempts have been made to simplify visual acuity testing by improved test devices and by modifying the visual stimulus. The computer age provides a way to measure visual acuity and visual performance. Until the advent of Dyops® most computer applications have simply utilized images of standard static charts that were in use decades before computers rather than fully benefiting from that computerized technology.

See www.dyopvision.com for the on-line actual tests and additional details.

Background

Current static image visual acuity test methods are:

- non-standard,
- consensus based,
- subject to administrative variations,
- incompatible with humanistic factors,
- easily misinterpreted, and
- frequently result in acuity prescription errors.

As a result, current static image tests often produce significantly different results when patient assessments are repeated.

Approximately 75% of the US adult population has some type of vision correction such as glasses or contact lenses. An additional 10% likely needs vision correction, and 10% of current wearers of vision correction likely have improper correction in the range of +/- 0.50 diopters needing more precise vision care. Our primary market is the 35,000 optometrists and 25,000 ophthalmologists in the U.S. and the additional 200,000 eye care professionals worldwide. The global need for vision correction is approximately the same as the US. The global market development is significantly less than the US.

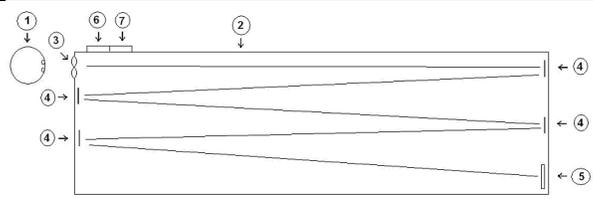
Market Opportunity

Dyop® applications include, but are not limited to:

- annual software license to eye care professionals
- providing licensed vision screening to the approximately 16,000 school systems in the US and their counterparts globally
- providing rapid and more precise vision screening for State Motor Vehicle Departments
- military and commercial applications for precise and efficient vision screening
- perception enhancement in applications such as traffic signals and auto tail lights
- precise chromatic acuity and chromatic refraction allow a new dimension in the understanding and diagnosis of vision

Product

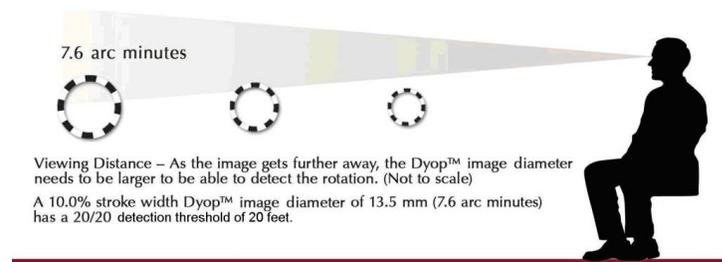
Dyop® visual acuity and refraction test are available on-line and through acuity software and equipment vendors as the primary method of market distribution. Other applications of the Dyop® concept will be color screening, mass vision screening situations (schools, military, motor vehicle tests, industrial vision testing, vision disability testing), diagnostic and color perception, as well as non-acuity applications such as computer display validation and distance sensing. Those applications and patents will be pursued once the clinical trials for visual acuity and refraction are completed. A Dyop® Certification program and video will train and certify optometrists and ophthalmologists as to the procedures and business benefits of the Dyop® software program.



- Item 1 – Test subject
- Item 2 – Viewer display container
- Item 3 – Adjustable lens viewing apparatus. For enhanced applications, the lens adjustment would allow for testing of pupil distance, cylinder, and axis as well as sphere for acuity measurement.
- Item 4 – Mirror(s)
- Item 5 – LED/LCD type screen for generating the animated dynamic optotype images
- Item 6 – Controller for selecting the appropriate animated dynamic optotype image selection and magnification
- Item 7 – Controller for selecting the appropriate astigmatic adjustment

Milestones

- May 2007 – discovery of induced visual dyslexia
- September 2007 – discovery of the animated image concept
- August 2008 – filing of the animated image (Dyop®) USPTO provisional patent
- August 2009 – filing of the animated image (Dyop®) USPTO utility patent
- September 2010 – initial scientific validation by Pacific University
- February 2011 – animated image (Dyop®) USPTO patent publication
- December 2011 – animated image (Dyop®) USPTO patent granted
- February 2012 – animated image (Dyop®) PCT patent granted
- October 2013 – First round of Dyop® validation at AAOpt.
- May 2015 – Second round of Dyop® validation at ARVO.



Competition

Current vision testing does not have the level of precision, performance capability, or level of efficiency of Dyop® tests. Current computerized vision testing systems still depends upon the perception of static images which rely on the interpretation by the eye care professional even more than the perceptions of the patient. Additionally, approximately 80% of eye care professionals still use imprecise projection or printed image systems, failing to realize that the increased precision and efficiency of computerization more than justifies the added expense.

Dyop® testing requires only a computerized image and can be used on almost all operating systems regardless of monitor size. The annual Dyop® refraction test license will also provide eye care professionals with an approximately eight week ROI.

Visual acuity measurement and the use of Dyop® testing for visual acuity, unlike other medical, is not controlled by either state or federal regulations due to the current “state of art” being the use of static images which has remained essentially unchanged since first developed in 1862. We not only expect insurance practices to approve the use of Dyops® (since the optotype used for visual measurement is not specified), but we are expecting that future insurance practices will specify Dyops® for visual measurement.

Profit Potential

The potential profits from Dyop® commercialization are significant based upon the global frequency of vision testing and the ROI to vision practitioners. The financial profits, however, are exceeded by the cultural and productivity benefits from Dyop® applications in terms of better education, better work performance, and accident reductions from increased visual performance. People with an increased visual ability are better able to learn how to read, and more likely to be socially integrated into 21st Century culture, thereby reducing crime and increasing individual and cultural productivity. Further studies of Dyop® applications should also enhance our ability to better understand both how we perceive images as well as how we think.

Five-Year Financial Projection

	Year 1	Year 2	Year 3	Year 4	Year 5
ECP Dyop® Annual Licenses	400	2,000	5,000	9,000	15,000
Revenue	\$1,600,000	\$8,000,000	\$20,000,000	\$36,000,000	\$60,000,000
Pre-tax income	\$800,000	\$4,000,000	\$10,000,000	\$18,000,000	\$30,000,000
Net income	\$520,000	\$2,600,000	\$6,500,000	\$11,700,000	\$19,500,000
Total revenues last 5 years	\$0				