

EyeCheck Solutions: We exist to make vision care efficient, accessible, and low-cost

Kitchener , Canada

Rachel Friesen,...

<https://www.youtube.com/watch?v=sf671N8N5q0>

Year Founded:

2014

Organization type:

for profit

Project Stage:

Start-Up

Budget:

\$50,000 - \$100,000

Website:

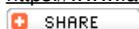
<http://www.eyecheck.co/>

Twitter:

https://twitter.com/eye_check

Facebook:

<https://www.facebook.com/EyeCheck-766501960072555/>



- [Community development](#)
- [Technology](#)
- [Health care](#)

Project Summary

Elevator Pitch

Concise Summary: Help us pitch this solution! Provide an explanation within 3-4 short sentences.

The reality is that a billion people lack access to vision care. EyeCheck wants to change that statistic by building affordable vision diagnostic tools that are faster, more mobile, and easier to use. The first generation of our device will identify prescription needs and various eye health issues.

WHAT IF - Inspiration: Write one sentence that describes a way that your project dares to ask, "WHAT IF?"

What if the eye care process was easier, more convenient, and affordable for everyone?

About Project

Problem: What problem is this project trying to address?

The process of an eye exam has now become commonplace for most of the developed world. However, 90% of those affected with visual impairment live in developing countries where eye care is inaccessible. The way we provide care via optometrists, ophthalmologists etc. has not changed in decades we still rely on the same slow and expensive techniques. EyeCheck is working to remove those barriers and ensure everyone has the right to clear sight.

Solution: What is the proposed solution? Please be specific!

EyeCheck is building a hardware diagnostic tool. Our hardware sweeps a thin beam of light across the patient's eyes and captures a video of their pupil response. We analyze the captured images using our image processing software embedded on board. Doing this we automate the gold standard vision screening procedure that can detect patient's eyeglass prescription and other health problems like cataracts and cardiovascular disease. We are focused on eradicating preventable blindness globally. Our technology brings objectivity, speed and mobility to a process that hasn't been changed in decades.

Awards

Velocity Fall Fund Finals, AC JumpStart, GTAN Start Competition, Engineers of the Future Trust, CDMN Soft Landing Program, Inc's 50 Emerging Global Entrepreneurs to Watch in 2015 and James Dyson's 20 Best Inventions of the Year in 2014

Impact: How does it Work

Example: Walk us through a specific example(s) of how this solution makes a difference; include its primary activities.

Our device doesn't require user input and will allow 10x the amount of patients to be seen. We're affiliating ourselves with B Corps who are certified to meet standards of social performance, accountability, and transparency. We're also developing our own social impact metrics tailored directly to our work in developing countries.

Impact: What is the impact of the work to date? Also describe the projected future impact for the coming years.

To date, we have completed our first round of beta testing in India where it became evident that our technology not only works in uncontrolled eye camp settings but that it is demanded. Through our time in India, we screened over 300 people and it gave us the needed data to start on our next

stage of development. It also allowed us to continue developing our technology to one day detect other eye problems like cataracts, glaucoma, and cardiovascular disease. This will help us resolve more health issues and have more of an impact in eliminating preventable blindness.

Spread Strategies: Moving forward, what are the main strategies for scaling impact?

At its full potential, EyeCheck will be used to determine eye prescriptions and detect other eye problems like cataracts, glaucoma, and cardiovascular disease. It will be used in eye camps around the world, allowing 10x the amount of patients to be seen per day. Patients will be able to get their eyes tested by anyone who has access to our technology. This means people in remote areas will not have to travel long distances to get their eyes checked.

Sustainability

Financial Sustainability Plan: What is this solution's plan to ensure financial sustainability?

EyeCheck's revenue model is sustainable for two key reasons. First, our hardware prototype currently costs less than a tenth of our competitors. We aim to continue keeping it more affordable, even while building a larger margin for the company as economies of scale develop. Second, the recurring stream of revenue from software subscriptions will help to fund on-going research and development, offering screening for new conditions and diseases.

Marketplace: Who else is addressing the problem outlined here? How does the proposed project differ from these approaches?

Our competitors include EyeNetra, Welch Allyn Spot, and GoCheck Kids. These competitors have built products that are too expensive and/or too difficult to use. Netra is our biggest competitor, but their technology requires patients to be close to the device, which makes it difficult to use for massive and sensitive age groups like children and the elderly.

Team

Founding Story

Limited access to eye care is a universal problem (especially in developing nations). The idea to solve this problem with technology started as Daxal Desai and Ashu Syal's third-year undergraduate design project, which they then decided to pursue as a venture.

Team

Every member of the team brings their own unique set of skills to the company. Our team is made up of engineers, international development, business, and optometry students. We have partnered with the University of Waterloo School of Optometry for the vision science element of our technology. Vivek Labhishetty works as a part-time employee and is a student at University of Waterloo's School of Optometry completing his PhD. Ashu Syal, Daxal Desai, and Rachel Friesen are the co-founders of EyeCheck. Ashu's role focuses on HR, finance, and all other areas. Daxal's skill set is focused technical development and on-the-ground analysis. While Rachel is responsible for business development, social impact analysis, and overseeing EyeCheck's three part-time business development and marketing employees. Lastly, there are three engineers from the University of Waterloo and one from Conestoga College that are working with Daxal on EyeCheck's product development.

CO-CREATION IDEA: Please offer a brief description of how you imagine a win-win partnership with Boehringer Ingelheim to better serve unmet needs in health. (Hint: Please mention the underlying business model envisioned that would make such a partnership sustainable.)

Boehringer has established itself as a lead innovator in the pharmaceutical sector. While EyeCheck exists to enhance people's quality of life by building the most powerful diagnostic tool known to man. An EyeCheck and Boehringer partnership will allow Boehringer to expand the methods that it provides care. While giving EyeCheck access to large data sets that will help us build and perfect our technology to ensure users are getting a proper diagnosis. Through co-creation of our diagnostic tools, Boehringer can also prevent the conditions that it is treating with its pharmaceutical programs. Together we can resolve more health issues and be on the forefront of consumer-centered diagnostics.

NEEDS: Based on your response above, please specify which of the following resources, operations or expertise by Boehringer Ingelheim you imagine leveraging to actualize the proposed co-creation opportunity. Please check all that apply. (Hint: while financing is often critical to scale, we are also interested in understanding what other assets or expertise could be leveraged).

Distribution Channels, Research and Development, Specific Disease Expertise, Technology Expertise, Access to Capital.

EXPLANATION OF NEEDS: Please explain your choices in more detail.

As EyeCheck builds out its future generations of technology it will need access to the disease information that Boehringer encompasses. In addition, EyeCheck is always looking to leverage potential capital sources for co-development.

OFFER: What are the main assets you may contribute in a co-creation partnership with Boehringer Ingelheim that would better serve unmet needs in health?

Deep understanding of an unmet need in a specific market/context, Insights into marketing, Insights into behavior change.

FOCUS AREAS: Which of the following best describes the main focus of your project? (select all that apply)

Improving the affordability of healthcare (e.g., microinsurance, reducing the economic cost of care), Increasing physical access to healthcare to people with restricted mobility or restricted access (senior people, people with disability, remote or difficult areas, etc.).

SECONDARY ENTRY FORM

Please share what your organisation and Boehringer Ingelheim will Co-Create together

Boehringer has established itself as a lead innovator in the pharmaceutical sector while EyeCheck exists to enhance quality of life by building the most powerful diagnostic tool in the market. Through co-creation of our diagnostic tools, Boehringer can also prevent the conditions that it is treating with its pharmaceutical programs. Together we can resolve more health issues and be on the forefront of consumer-centered diagnostics. EyeCheck's core technology can help to ensure earlier detection and earlier opportunity for BI products to be delivered to the right people.

Please specify what your Co-Creation will result in:

a new product, a new service, a new market/customer group.

If you selected "other" above, please explain:

Please provide a 1-2 sentence summary of your Co-Creation idea

We are building affordable vision diagnostic tools that are faster, more mobile, and easier to use than anything else on the market. The first generation of our hardware diagnostic tool will have the potential to identify prescription needs and various eye health issues such as cataracts.

How does this project link to the core mission of your organisation?

Our mission is to break down time, distance, and financial barriers to provide a future for everyone to see clearer. With the creation of our vision diagnostic tools, this will enable us to fulfill the core mission of our organization. Our technology will be used in healthcare settings and eye camps around the world, allowing 10x the amount of patients to be seen per day. Patients will be able to get their eyes tested by anyone who has access to our technology.

Beyond social impact, how does this project link to Boehringer Ingelheim's core business?

Our vision is to become a leader in eye care through our innovations. This aligns with BI's vision of "Lead and Learn" delivered through "Value through innovation". We also align with BI because we continually seek to learn, expand, and find more opportunities to collaborate and develop further.

What are the specific inputs and actions that each side will contribute to this Co-Creation idea based on each of your unique competencies and experiences?

My organization will contribute: We will allow BI to tailor the scope of our hardware devices development (ie suggesting diseases to identify) which will allow Boehringer to expand the methods that it provides care. EyeCheck can be the backbone on which a whole host of guided therapies can be delivered.

Boehringer Ingelheim will contribute: The co-creation opportunity would make use of veteran knowledge in the company to advance a culture and history of making a difference. By giving EyeCheck access to large data sets which will help us build and perfect our technology to ensure users are getting a proper diagnosis.

Please describe the potential revenue model for this Co-Creation idea.

EyeCheck's revenue model is sustainable. Currently, our hardware prototype costs less than a tenth of our competitors. Over time, we believe that our finished product will remain more affordable than our competitor's products while building a larger margin for the company as economies of scale develop. The first generation of our hardware diagnostic tool will have the potential to identify prescription needs and various eye health issues such as cataracts. Pre-sales would be in Spring 2016. At that time, we will be finishing up our beta testing phase and will use the beta phase to kick start pre-sales. It will be a one-time purchasing fee, with optional paid software upgrades in the future.

What possible risks or challenges do you foresee?

EyeCheck's future is not free of barriers. We are creating a technology, which will have to conform to international health and safety standards as well as certain local standards. We mitigate this risk by working with experts from health delivery and vision science very early and often. We also work with people who have carried out similar projects (i.e. Engineers without Borders). With them we have held ourselves to a high standard of safety and accuracy. Another major barrier is in identifying delivery partners, who can scale with our goals of changing vision care across the planet.

Is there anything else you would like to share about your Co-Creation idea?

n/a

How much input do you hope to receive from Boehringer Ingelheim?

I'd like to implement together, I mostly need strategic advice.

If you selected "other" above, please explain:

Besides Boehringer Ingelheim, what other types of partners might be valuable to carrying out your Co-Creation idea, and why?

United Health Group, Kaiser Foundation Group, Wellpoint Inc. Group, Aetna Group, Lions and Rotary Clubs, Orbis International, United Nations, Humana Group, Helen Keller, Optometry Giving Sight, WHO, The Fred Hollows Foundation, CNIB, Prevent Blindness, Health Savers, Mayo Clinic, The Cleveland Clinic, Sunnybrook Health Sciences Center and Mount Sinai.

Source URL: <https://www.changemakers.com/makingmorehealth/entries/eyecheck-solutions>