Making the Invisible, Visible: **Technology and Data Insights to Strengthen Eye Health Systems**

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A Peek team member screening a lady's vision in her home in a remote village in Kitale province, Kenya
Photo credit: Rolex/Joan Bardeletti

CASE STUDY

AT A GLANCE

Company	Peek Vision
Social theme(s)	Health
Geography	Kenya, Botswana, Zimbabwe, Zambia, South Africa, Uganda, Tanzania, Ethiopia, Ghana, Nepal, India, Pakistan
Year founded	2015
Revenues	€4-5 million annually
Legal structure	Not-for-profit organisation
Clients	Governments, international NGOs, and large eye-care providers
Business model	Sales + Grants; 1/3 of revenue is from the sale of software and support services
Product/services	Peek develops a mobile eye-health screening and referral app that can be delivered in low-resource settings by non-specialists. It also offers a comprehensive data intelligence platform that helps NGOs and governments optimise eye health coverage across populations
Impact reach	To-date, programmes using Peek have screened 8M+ people, identifying nearly 1.6M with eye health needs and connecting 840K people with care, with over 100,000 people now screened each week. Peek partners see greater screening coverage, increased attendance at appointments, and services that cost less per person

Background

More than 2 billion people worldwide have a vision impairment and over 50% of these impairments remain undiagnosed or untreated. Untreated vision impairments have significant negative consequences for individuals, including delayed development, poor education attainment, lower rates of employment, and higher rates of depression.[1]

The impacts of poor eye health are also societal, resulting in an estimated loss of US$411 billion in productivity annually. Untreated and undiagnosed impairments are more prevalent in low- and middle-income countries and among vulnerable populations.[2] The estimated cost of addressing these issues—about US$25 billion—is far less, meaning that the return on investment for eye health is significant.[3]

[1] https://www.who.int/news-room/fact-sheets/detail/blindness-and-visual-impairment

[2] https://www.nature.com/articles/s41433-023-02815-2

[3] https://www.who.int/news-room/fact-sheets/detail/blindness-and-visual-impairment

About the Company

Peek Vision was founded by **Dr. Andrew Bastawrous**, an ophthalmologist and professor at the London School of Hygiene & Tropical Medicine. Bastawrous grew up with a visual impairment that went undiagnosed until the age of 12. He was inspired to become an eye surgeon, and later to start Peek, based on his personal experience of gaining improved sight as well as visiting his parents' home country of Egypt and seeing the inequities faced by families living in poverty. After working for two years in Kenya, he decided to devote his life to developing solutions for eyecare in low-resource settings. Peek has since grown to reach millions of people globally.

Vision Screening using Peek in a school in Kenya.
Photo Credit: Rolex/Joan Bardeletti

Sources of Impact

Customers: *Who is served?*

Peek serves **governments, international NGOs and large eye health providers** who are developing population-level eye health programmes

Workforce: *Who is employed?*

Peek currently has a staff of 49 employees. Through its partners, Peek also enables a much broader workforce of **frontline health workers** to perform vision screenings, increasing the number of people screened by up to 2.5x

Product/Service: *What is delivered?*

Peek's clinically-validated **smartphone app** enables anyone to perform vision screenings and refer patients to care. Peek also deploys a **data intelligence platform** that provides critical near real-time data to health planners to track patients' journeys to care and optimise services

Eco-System: *What relationships are developed?*

Peek brings together partners - **NGOs, governments and community resources** - to develop comprehensive data-driven eye health programmes powered by Peek technology
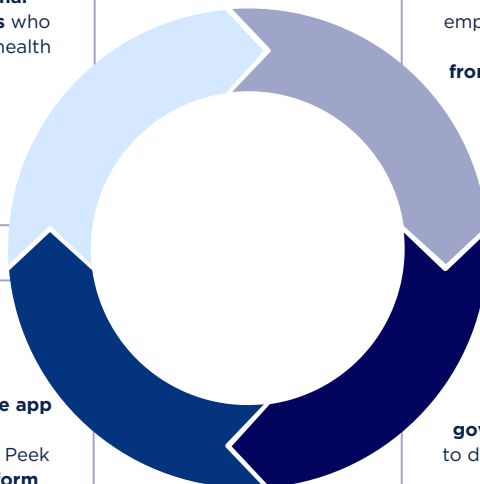
Innovation Activities

Peek engages in several activities that drive innovation, both in the communities they serve as well as the larger eco-system:

INNOVATION ACTIVITIES

Task-shifting to people closer to communities: In traditional eye health programmes, specialist eye health workers perform vision screenings. Peek's app shifts this task to non-specialist community workers, bringing services closer to people in their homes, communities and schools, and freeing up specialist resources

Providing access to data to drive decision-making: Many healthcare providers lack access to high quality data to inform decision-making. Peek provides real-time digitised population level-data about eye health to inform health systems and policies

Reducing the 'total cost of solving the problem': In some large-scale programs using Peek , the cost per patient is about six times cheaper than a standard program without Peek. Peek lowers the total cost of eyecare, starting with the cost of patient acquisition

Key Innovation Challenges & Learnings

Peek is not just a smartphone application, it is a software and data intelligence platform that enables eyecare providers to track patients from screening to provision of care and identify any barriers to access. Growing from an app to a platform has involved challenges and learnings:

- **Circumventing challenges with new products and services:** Peek has expanded its product and service offerings as it has learned more about the issues in eye health. As CEO Andrew Bastawrous describes, *"A big part of what we're doing is joining the dots between different roles. You've got those who provide eye drops, those who provide glasses, those who do surgery. They may all be in different places. Our role is ensuring every part of the system is connected to optimise the path to care for the patients, getting more of the right patients to the right services at the right time. In each of those places, somebody is using our application and they've been trained by us to do that."*

- **Expanding partnerships to ensure access to service:** Peek's app dramatically increases screenings, driving demand for services. However, patients may still be lost to follow up or struggle to access services. Peek chose to develop partnerships to ensure that increased demand is always combined with access to service. Head of Global Partnerships Farhana Rehman-Furs says, *"We always say our policy is no screening without service. We work with some incredible partners who have the experience and network to ensure that once people with vision problems are identified and referred using Peek, then there are services to treat them."*

Featured Programme: Kenyan Ministry of Health & CBM International

In 2022, Kenya launched the Vision Impact Project (VIP), funded by CBM and BMZ to reduce the prevalence of visual impairment and avoidable blindness in 7 counties across the country.

In its first two years, powered by Peek technology, the project has trained 900 screeners who have screened 2.7 million people in schools and communities and connected 456K people to further eye care services. The project has generated important evidence for decision making and has improved infrastructure, connecting more than 800 health facilities, 3500 schools, and 1000 community health units.
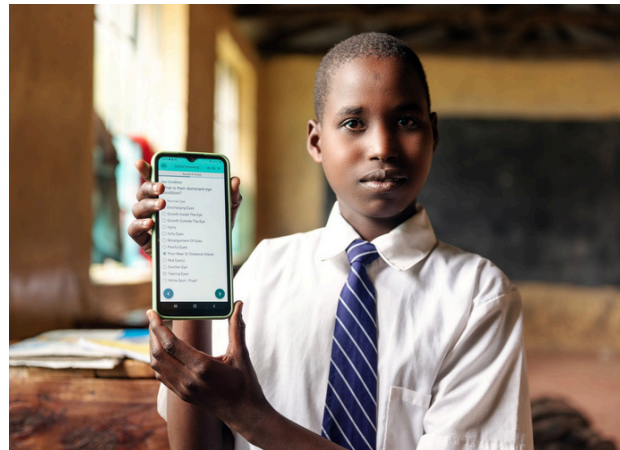
Sheila; a pupil who attended a vision screening as part of the Vision Impact Project; poses with Peek Capture.
Photo Credit: CBM