1.Customer Segments (S)

Anyone with any kind of diabetes can get diabetic retinopathy — including people with type 1, type 2, and gestational diabetes (a type of diabetes that can develop during pregnancy). Your risk increases the longer you have diabetes. Over time, more than half of people with diabetes will develop diabetic retinopathy

6. Customer Limitations EG; Budgets, Devices 5. Available Solutions pros and cons

Budget, Complexity of the device, Environment, Accuracy, Reliability

You can reduce your risk of developing diabetic retinopathy, or help stop it getting worse, by keeping your blood sugar levels, blood pressure and cholesterol levels under control. This can often be done by making healthy lifestyle choices, although some people will also need to take medication.

2. Problems/Pains ·Its Frequency

Of the 25 million adults and children living with diabetes in the US, approximately 75% of them will develop diabetic retinopathy within 10 years of their diagnosis. Diabetic retinopathy is not painful, and you may not notice symptoms until your vision has been damaged permanently.

9. Problem Root / Cause

Diabetic retinopathy is caused by high blood sugar due to diabetes. Over time, having too much sugar in your blood can damage your retina — the part of your eye that detects light your eye (optic nerve). Diabetes damages blood vessels all over the body.

7. Behaviour Its intensity

The abnormal blood vessels associated with diabetic retinopathy stimulate the growth of scar tissue, which can pull and sends signals to your brain through a nerve in the back of the retina away from the back of the eye. This can cause spots floating in your vision, flashes of light or severe vision loss.

3. Triggers to act

Retinopathy can affect all people living with diabetes and becomes particularly dangerous the longer it is left untreated, eventually resulting in blindness.

4. Emotions Before/After

Adverse emotional responses include fear, anxiety, vulnerability, guilt, loss of confidence, anger, stress and selfperception issues. However, the research to date is largely qualitative in nature, with most quantitative studies being

10. Your Solution

Deep Learning Fundus Image Analysis for Early Detection of Diabetic Retinopathy

8. Channels of Behaviour

To assess the accuracy of artificial intelligence (AI)-based screening for diabetic retinopathy (DR) and to explore the feasibility of applying Al-based technique to community hospital for DR screening.

Offline

The offline Al algorithm on the smartphone marked the images as referable diabetic retinopathy (RDR) or non-RDR, which were then compared against the grading by two vitreoretinal surgeons to derive upon the sensitivity and