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| **1.PATIENTS SEGMENT**   * The abnormality or the presence of lesions can be detected using the fundus image of the patient’s eye. * The early detection important for the diabetic patients as diabetic retinopathy is irreversible. * Hence early detection and diagnosis is a concerned solution. | **6.CUSTOMER CONSTRAINTS**   * Lack of awareness of such severity. * Utilizes a strong healthcare infrastructure, advanced technology, and adequate funding. * Not Cost effective for the annual screening. | **5. AVAILABLE SOLUTIONS**   * Laser treatment to treat the growth of new blood vessels at the back of the eye (retina) in cases of proliferative diabetic retinopathy. * Eye injections - to treat severe maculopathy that's threatening your sight. |
| **2. PROBLEMS**   * Severity of the eye illness due to diabetic retinopathy * High chances of losing vision. * Keen diagnosis to be done on diabetic patients. | **9. PROBLEM ROOT CAUSE**   * Diabetic retinopathy is caused by changes in the blood vessels of the retina, the light-sensitive layer of tissue at the back of the inner eye. * Blockage of the tiny blood vessels that nourish the retina, cutting off its blood supply. | **7. BEHAVIOUR**   * Early detection of diabetic retinopathy using the fundus images. * Consumes less time on detection than in the manual examination. * High accuracy in detection of lesions. |
| **3. TRIGGER**  The triggers in diabetic retinopathy patients are:   * Spots or dark strings floating in your vision (floaters) * Blurred vision. * Fluctuating vision. * Dark or empty areas in vision. * Vision loss.   **4. EMOTIONS: BEFORE / AFTER**   * Before: Adverse emotional responses include fear, anxiety. vulnerability, guilt, loss of confidence, anger, stress and self perception issues. * After: Early detection and diagnosis gives sense of hope among patients | **10. SOLUTION**   * Our solution is to make use of a deep learning model that detects the severity of the diabetic retinopathy among diabetic patients with fundus image screened. * The apt diagnosis to be done after the early detection. | **8.CHANNELS OF BEHAVIOUR**   * Regular checkups and examinations are to be done in the regular interval time. * Proper diagnosis should be done. |