

PROJECT ID

:

PNT2022TMID18647

PROJECT NAME

:

Deep Learning Fundus Image Analysis for Early Detection of Diabetic Retinopathy

# Experience journey map

Use this framework to better understand customer needs, motivations, and obstacles by illustrating a key scenario or process from start to finish. When possible, use this map to document and summarize interviews and observations with real people rather than relying on your hunches or assumptions.

|  |  |   |   |   |   |
|--|--|---|---|---|---|
| <div>STEPS</div> <div>What does the person (or group) typically experience?</div>  | <div>Free checkup can be done in places like malls</div> <div>By hearing from the person who already got benefited with this product</div> <div>awareness camp can be established</div> <div>awareness can be created through social media</div>   | <div>people will get excited after getting to know the recent results which in turn reduces the complexity rather than usual treatment</div> <div>They will feel quite nervous about the results</div>                    | <div>As the model classifies and identifies the type of Retinopathy the patient might feel nervous, the doctor would be doubtful if the result will match his/her hunch.</div> <div>While using the model, the user may be immersed in it if they find the application to be convenient to work with.</div> | <div>User will be amazed and thrilled to get fast and accurate results as previously this task was time-consuming.</div>  | <div>User may be excited to interact with business partners to implement model at a large scale.</div>  |
| <div>Interactions</div> <div>What interactions do they have at each step along the way?</div> <div>People: Who do they see or talk to?</div> <div>Places: Where are they?</div> <div>Things: What digital touch points or physical objects would they use?</div> | <div>[Interaction with a place] Users may require hospitals and clinics about existing products</div> <div>[Interaction with a person] They talk to people who have already undergone retinopathy treatment and gather the information that is needed for their disease which is specialized in this treatment</div> <div>[ Interaction with a thing ]</div> | <div>[Interaction in a place] They are supposed to be in the hospital while undergoing treatment</div> <div>[Interaction with a person] Users may interact with the patients for whom the disease are diagnosed for</div> | <div>The doctor/lab technician interacts with the computer /device classifying the disease.</div>   | <div>If the user is a doctor/hospital professional they would have to interact with the patients to inform the results.</div> <div>Patients may recommend the product to other patients.</div>        | <div>There will be more patient-doctor interactions or more patients would visit this particular hospital as it gives fast accurate results.</div> <div>They try how to expand their products with other business partners.</div>                   |
| <div>Goals &amp; motivations</div> <div>At each step, what is a person's primary goal or motivation? ("Help me..." or "Help me avoid...")</div>  | <div>This product saves time for the patient to wait for their results</div> <div>The cost for finding the disease using this product will be less</div>   | <div>"Helps to get less time consuming solution."</div> <div>"Help me avoid a complicated procedure."</div>   | <div>"Hope handling of the model is easy."</div> <div>Uploading data should be easy and quick.</div>  | <div>Help me avoid data leakage.</div>  | <div>Help me extend the solution to other business partners.</div> <div>Help me develop the model into a large scale solution.</div>  |
| <div>Positive moments</div> <div>What steps does a typical person find enjoyable, productive, fun, motivating, delightful, or exciting?</div>  | <div>Surveying people and exploring various solutions might interest some people</div> <div>If anyone from crowd volunteered to take the checkup, they might set an example for others which will in turn motivate others to start involving themselves</div>  | <div>Reduces direct contact with clinic staff</div> <div>If Retinopathy is identified in early stages then it can also be cured earlier.</div>  | <div>User does not have to do any arduous task thus will feel relaxed as the process is automated.</div> <div>As the results arrive in a few seconds, user saves valuable time and may parallelly work on other tasks.</div>  | <div>The model could be extended to detect other diseases too which would lead to faster diagnosis.</div>   | <div>The solutions which implemented will save lots of cost which may delight the hospital management.</div> <div>As the solutions would provide quick accurate results, patients would be more relieved as they don't have to wait for long.</div> |
| <div>Negative moments</div> <div>What steps does a typical person find frustrating, confusing, angering, costly, or time-consuming?</div>  | <div>The user may get vague responses which may cause frustration</div> <div>After going through the advertisement some might fear the consequences that will happen in the future .</div>   | <div>Clinicians can be given a lab manual which tells how to handle the equipment</div> <div>Due to gossip between common people, people may fear to share their medical data</div>                                       | <div>As not all people may be educated, if UI of the application is not user friendly user may be frustrated.</div> <div>As the process may require registration of user and is cost effective customer might have data privacy concerns.</div>   | <div>If the process gets complicated user may get irritated.</div> <div>If other competing hospital managements adopt the same product, and make mistakes it might affect the user's bussiness.</div> | <div>If the model prediction does not match the doctors diagnosis, it may cause confusion and stress,</div>   |
| <div>Areas of opportunity</div> <div>How might we make each step better? What ideas do we have? What have others suggested?</div>  | <div>Might give TV advertisements to make people more aware</div> <div>may try to adopt Digital marketing methods to spread awareness</div>  | <div>Clinicians can be given a lab manual which tells them how to handle the equipment</div> <div>Explanation of the process can be done through videos</div>   | <div>Navigation comments and chatbot like tools to guide user.</div> <div>Can engage users in some activity like games while waiting for the result.</div>  | <div>Sending notifications or emails to the respective patients and doctors about the predicted results.</div> <div>Extend server storage to handle increased user traffic</div>                      |   |