Project Title: AI-based localization and classification of skin disease with erythema Project Design Phase-I - Solution Fit Template Team ID: PNT2022TMID00107

The most common and effective means of erythema detection is visual inspection of the skin. However, for people with darkly pigmented skin, erythema can be masked by melanin. Tissue Reflectance Spectroscopy (TRS) is a noninvasive method of quantifying skin color

PROS- It Provides information about tissue hemoglobin concentrations and oxygenation status.

Cons- It takes a lot of time

Our customers are those people aged between 10-55 yr who are affected by severe skin diseases like erythema and skin cancer

The main constraint is financial support, as skin is important to be cared in regular time interval by skilled skin specialist.

second factor stands for limitations in their basic diet for curing the skin disease and maintaining the cycle for longer period of time.

third factor is their time, the person goes through multiple diagnostics for learning about the skin disease which might takes a long time to be identified depending on the resources they use.

The main constraint is financial support, as skin is important to be cared in regular time interval by skilled skin specialist.

second factor stands for limitations in their basic diet for curing the skin disease and maintaining the cycle for longer period of time.

third factor is their time, the person goes through multiple diagnostics for learning about the skin disease which might takes a long time to be identified depending on the resources they use.

The most common and effective means of erythema detection is visual inspection of the skin. However, for people with darkly pigmented skin, erythema can be masked by melanin. Tissue Reflectance Spectroscopy (TRS) is a noninvasive method of quantifying skin color

PROS- It Provides information about tissue hemoglobin concentrations and oxygenation status.

Cons- It takes a lot of time



We help our customers to identify the problem/disease that they are affected with the help of modern technology such as AI/ML.

The major causes of the erythema are

1. Herpes simplex virus

2. Mycoplasma pneumoniae

3. cytomegalovirus

At first, people start searching in internet for solutions and asking neighbors for medicines and tablets to cure by themselves in case home remedies don't work they reach out to the doctor and take the personal care.



|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **3. TRIGGERS TR**  What triggers customers to act? i.e. seeing their neighbour installing solar panels, reading about a more efﬁcient solution in the news.  Basically people start to act or approach us when they find some unusuality in their day to day life for eg take a skin disease like erthyema.Erythema nodosum usually is caused by a reaction to a drug, an infection (bacterial, fungal, or viral), or another disorder such as inflammatory bowel disease. Typical symptoms include fever, joint pain, and characteristic painful red bumps and bruises on the person's shins and another example is skin cancer  Anyone who spends considerable time in the sun may develop skin cancer, especially if the skin isn't protected by sunscreen or clothing. So if our customers face these kind of problem they will start to take some measures. | **10. YOUR SOLUTION SL**  If you are working on an existing business, write down your current solution ﬁrst, ﬁll in the canvas, and check how much it ﬁts reality.  If you are working on a new business proposition, then keep it blank until you ﬁll in the canvas and come up with a solution that ﬁts within customer limitations, solves a problem and matches customer behaviour. | 1. **CHANNELS of BEHAVIOUR CH**    1. **ONLINE**   What kind of actions do customers take online? Extract online channels from #7   * 1. **OFFLINE**   What kind of actions do customers take ofﬂine? Extract ofﬂine channels from #7 and use them for customer development. |  |
| **4. EMOTIONS: BEFORE / AFTER EM**  First and foremost, benefit from this model is the reduction of time consumption  for identification of any unknown skin disease.  Treatment can be proceeded even without the presence of a skin specialist and  hence the chances for avoiding major effect on the skin is reduced to a millennial  Online:  Their first move is to go and look up for the symptoms and effects of the disease that affected them. Looking for a home remedy solution from network or online skin specialist blogpost etc.  Offline:  They physically reach out to a skin specialist to gain knowledge about the skin disease and take remedy from them first hand.  How do customers feel when they face a problem or a job and afterwards?  i.e. lost, insecure > conﬁdent, in control - use it in your communication strategy & design.  After: Skin diseases have an adverse impact on psychosocial well-being and can lead to more depressive symptoms, social isolation, loneliness and decreased quality of life. |