**Project Title:** A Gesture-based Tool for Sterile Browsing of Radiology Images **Project Design Phase-I** - **Solution Fit**  **Team ID:** PNT2022TMID51374 **Team Size**:4 **Date:**28 October



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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Define**    **CS,**    **fi**  **t**    **into**    **CC** |  | | | | |  | | | **3. AVAILABLE SOLUTIONS AS**    Doctors use their hands to access the computer to zoom, scroll, rotate etc of radiology images by touching keyboard, mouse and screen. | | | **Explore**    **AS,**    **differentiate** |
| **1. CUSTOMER SEGMENT(S)** | | **CS** | |  | **2. CUSTOMER CONSTRAINTS** | **CC** |  |
| Hospital domain, especially used for doctors inside the operation room. | | | | | No breakdown of power and full internet access. | | |
| **Focus on**    **J&P,**    **tap**    **into BE,**    **understand RC** |  | | | | |  | | |  | | | **Focus on**    **J&P,**    **tap**    **into BE,**    **understand RC** |
| **5. PROBLEM ROOT CAUSE** | **RC** |  | **6. BEHAVIOUR** | **BE** |  |
| **4. JOBS-TO-BE-DONE/PROBLEMS** | J&P | |  | |
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| Directly related: Easy to use, can predict the hand gesture correctly and accurately.  Indirectly associated: Require high internet speed. | | |
| To keep the doctor sterile inside the operation room. | | | | | Doctors use their hands to access the computer by touching keyboard, mouse and screen to scroll, zoom, rotate the radiology images and this may lead to the spreading of infections inside the operation room. | | |
| Identify    strong    TR    &    EM | **7. TRIGGERS TR**  If the operation is done and successfully completed by using this project in a hospital, that makes other hospital to use. | | | | | **8. YOUR SOLUTION**  **SL**   1. Create a webpage to upload the images which needs in operation room. 2. It consumes less data and secures the information of the radiology images. 3. OpenCV is used to recognize the hand gestures that is used by the doctors. 4. Accurate result will be provided. | | | **9. CHANNELS of BEHAVIOUR**  **CH**          Online: To upload the radiology images in the created webpage.      Offline: Stores the result of the radiology images. | | | **Extract**    **online**    **&**    **offline**    **CH**    **of**    **BE** |
|  | | | | |
| **10. EMOTIONS: BEFORE / AFTER** | | **EM** | |  |
| .  Before: Spreading of infection.    After: Faster response, avoid spreading of infection. | | | | |