**Project Title: A Gesture-based Tool for Sterile Browsing of Radiology Images**

**Project Design Phase-I** - **Solution Fit Template**

**Team ID: PNT2022TMID29092**

**Explore AS, differentiate**

**1. CUSTOMER SEGMENT(S)**

**Define CS, fit into CC**

# Doctor, Surgeons &

**CS**

**6. CUSTOMER CONSTRAINTS**

Risk of injuries to patients from AI

**CC**

**5. AVAILABLE SOLUTIONS**

**AS**

# medical field professionals

age between 25 – 65.

system errors, the risk to patient privacy

of data acquisition, Data availability:

Training AI systems requires large amounts of data from sources such as electronic health records, pharmacy records, insurance claims records, or consumer-generated information like fitness trackers or purchasing history, Bias and inequality.

# A long-lasting power battery

system.

Using of secondary camera in case of any emergency Confirmation of correct gesture.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Focus on J&P, tap into BE, understand RC** | **2. JOBS-TO-BE-DONE / PROBLEMS J&P**  Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides.  Operation room should be free from contamination. So Human Interaction Devices (HCI) like mouse, keyboard to be avoided. So Hand gestures can be used for sterile browsing of radiology images | **9. PROBLEM ROOT CAUSE RC**  The medical data from one organization can be incompatible with other platforms due to interoperability issues.  Lack of clear business objectives:  Focusing on a measurable business objective first, rather than first focusing on developing a tool or system to solve a problem, is challenging to the traditional organization and customer face sterilization issues. | **7. BEHAVIOUR BE**  Find the right service provider.  Need to check the accuracy and verification of results.  Sending of feedback  Compare with other service provider to  enhance the efficiency. | **Focus on J&P, tap into BE, understand RC** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **3. TRIGGERS TR** | | **10. YOUR SOLUTION** | **SL** | 1. **CHANNELS of BEHAVIOUR CH**    1. **ONLINE**  * Report difficulties faced via e-forms, mail, etc. * Fill feedback and feed data to the system to improve accuracy.   1. **OFFLINE**      + Give more test and train data sets.      + Improve camera quality.      + Check the working of operation machine beforehand |  |
| How to overcome to the contamination issue in Operation | | Use of fast processing algorithm. |  |
| theatre due to HCI?  ie. By using the help of modern | | Eliminate the contamination problem in operation theatre. |  |
| technology of hand recognition | |  |  |
| or hearing from medical | | Interactive and user-friendly. |  |
| professional using hand | |  |  |
| recognition for surgeon | | Confirmation of correct gesture. |  |
| . | |  |  |
| **4. EMOTIONS: BEFORE / AFTER** | **EM** |  |  |
| Before:   * Insecure * Unsafe * Afraid of Contamination |  |  |  |
| After:   * Safe * Satisfied * Fast * Accurate |  |  |  |