

## Project Title: Gesture based tool for sterile browsing of radiology images

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

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Define CS, fit into CC	<b>1. CUSTOMER SEGMENT(S)</b> <b>CS</b>  Doctors and nurses in Intensive Care Unit	<b>6. CUSTOMER CONSTRAINTS</b> <b>CC</b>  If the gestures are predicted wrongly, it may result in incorrect output.	<b>5. AVAILABLE SOLUTIONS</b> <b>AS</b> <small>In the existing solution, to browse the radiology images, external input devices has been used.</small> <b>Pros:</b> <ul style="list-style-type: none"><li>• Easy to handle</li><li>• Error free</li></ul> <b>Cons:</b> <ul style="list-style-type: none"><li>• It is not sterile free</li><li>• It might deviate the work</li></ul>	Explore AS, differentiate

Focus on J&P, tap into BE, understand RC	<b>2. JOBS-TO-BE-DONE / PROBLEMS</b> <b>J&amp;P</b> <ul style="list-style-type: none"><li>• While using the input devices, the user's hands might be infected with micro organisms.</li><li>• Since the users move from their work place to handle the device, it might deviate the work.</li></ul>	<b>9. PROBLEM ROOT CAUSE</b> <b>RC</b>  Many people will use the same device to browse the radiology images. Since the device cannot be sterilized frequently, there might be a chance for infection.	<b>7. BEHAVIOUR</b> <b>BE</b> <ul style="list-style-type: none"><li>• Appointed a separate worker who will operate the device.</li><li>• Used sterilizing techniques such as using wipes to clean the devices without causing any damage to it.</li></ul>	Focus on J&P, tap into BE, understand RC

Identify strong TR & EM	<b>3. TRIGGERS</b> <b>TR</b>  By seeing the other nearby medical centers and hospitals using a voice recognition software to browse the images.	<b>10. YOUR SOLUTION</b> <b>SL</b>  To operate the screen which shows the radiology images using a gesture based control system which helps the doctors to browse the images without moving from their work place using hand gestures.	<b>8. CHANNELS of BEHAVIOUR</b> <b>CH</b>  This type of proposed solution is completely an offline behavior where the images captured by the camera are sent as an information according to which the system will react.
	<b>4. EMOTIONS: BEFORE / AFTER</b> <b>EM</b> <ul style="list-style-type: none"><li>• Feeling insecure that the existing systems may affect the patients.</li><li>• Less confidence in their work.</li><li>• Less job satisfaction.</li></ul>		