CS

J&P

TR

# 1. CUSTOMER SEGMENT(S)

Who is your customer? i.e. working parents of 0-5 y.o. kids

Surgeons, Doctors and Patients

### 6. CUSTOMER CONSTRAINTS

What constraints prevent your customers from taking action or limit their choices of solutions? i.e. spending power, budget, no cash, network connection, available devices

Multiple hands detected within same frames Connectivity issues between devices Inconsistency in focus and concentration of surgeon Availability of devices

### 5. AVAILABLE SOLUTIONS

CC

RC

Which solutions are available to the customers when they face the

or need to get the job done? What have they tried in the past? What pros & cons do these solutions have? i.e. pen and paper is an alternative to digital notetaking

Wearable devices can be used to detect hand gestures Voice commands can be used to manipulate radiology images

Team ID: PNT2022TMID52351

AS

BE

Manually manipulating radiology images

### 2. JOBS-TO-BE-DONE / PROBLEMS

Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides.

Monitoring patients scan images Restricting the operations performed on images Maintaining sterility

## 9. PROBLEM ROOT CAUSE

What is the real reason that this problem exists?
What is the back story behind the need to do
this job?
i.e. customers have to do it because of the change in

Background noise Difficulty in maintaining sterility Inability to handle various images by manual key press

### 7. BEHAVIOUR

What does your customer do to address the problem and get the job done?
i.e. directly related: find the right solar panel installer, calculate usage and benefits; indirectly associated: customers spend free time on volunteering work (i.e. Greenpeace)

When the customer is not aware or unclear about the gestures provided as an input in an effective manner in order to get the desired accuracy

# 3. TRIGGERS

What triggers customers to act? i.e. seeing their neighbour installingsolar panels, reading about a more efficient solution in the news.

The need to switch between patient and device is not required

Ease of equipment interaction during surgery

#### 10. YOUR SOLUTION

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 inthe canvas and come up with a solution that fits within customer limitations, solves a problem and matches customer behaviour.

To make use of hand gestures to manipulate radiology

#### 8. CHANNELS of BEHAVIOUR

ONLIN

 $\mathbf{SL}$ 

What kind of actions do customers take online? Extract online channels from #7

Perform various image manipulation operations on the scan during surgery and training periods

OFFLINE



## 4. EMOTIONS: BEFORE / AFTER

 $\mathbf{EM}$ 

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.

**Before:** To move away from patients and towards the devices for manipulating the scans

After: Easy to focus and concentrate on the surgery without the need to switch between patients and device for manipulating the scans

images

To maintain sterility during surgery
To make simple UI that manipulates the scan using hand gestures

What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development.

Perform image manipulation techniques on already available scans in database to train the AI model

Identify strong TR & EM