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

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1. CUSTOMER SEGMENT(S)

CS

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

This tool is used by doctors and surgeons while operations.

Our customers are doctors, especially surgeons.

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.

Our model may be expensive, because we are using high tech cameras and sensors. And there should be power and the internet for using this project.

5. AVAILABLE SOLUTIONS



Explore AS, differentiate

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

Doctors are using their hands for zooming the Radiology images ,scrolling and Rotating those images via computer by touching components of the computer system. Thus which results in causes of Germs transfer to that patient.

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.

Doctors are using their hands to browse through the radiology images such as MRI or videos. This led to problems like risk of infection, not being able to concentrate or time consuming.

9. PROBLEM ROOT CAUSE



What is the real reason that this problem exists? What is the back story behind the need to do this ich?

his job?

i.e. customers have to do it because of the change in regulations.

Doctors while doing operation they should not touch any equipment rather than their operating tools which will cause infections.

Thus we are giving this model 'Browsing through the images obtained using radiology using hand gestures rather than using mouse, keyboard'.

7. BEHAVIOUR

BE

What does your customer do to address the problem and get the job glone?

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)

Directly related:

The Doctors will sometimes employ his assistant to adjust the radiology images. The surgeon will give him command to operate while he is performing a surgery, which is not efficient.

Indirectly associated:

Our model requires Internet facilities.

"Föcus on J&P, tap into BE, understand

3. TRIGGERS



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

Knowing how much time and effort it saves while performing a lifesaving act will triggers the customers.

4. EMOTIONS: BEFORE / AFTER



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:

- Fear about spreading of infections as there is a possibility of contamination.
- Worried about the patient.

AFTER:

- Getting full concentration on the job.
- There is no spreading of infections, accurate and faster responsive.

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.

Our solution is to design a gesture based tool for browsing. The surgeon only has to show his hand gestures and the machine will detect the hand gestures and change the images accordingly.

In some cases the hand gesture shown by the surgeon may not be predicted by the deep learning model correctly. To overcome those situations, once the model recognises a hand gesture another hand gesture must be shown by the surgeon to confirm whether the predicted hand gesture is correct or not. This improves the overall accuracy of the model.

8.CHANNELS of BEHAVIOUR



8.1 ONLINE

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

To upload the radiology images in the webpage.

8.2 OFFLINE

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

Customers should place the monitor in an appropriate way such that the image is clearly visible to the surgeon in the device.

Stores the result of the images.