Project Title: AI Based Nutrition Analyzer for Fitness Enthusiasts **Project Design Phase-I - Solution Fit Template**

Team ID: PNT2022TMID14614

Define CS, fit into CC

CS

1. CUSTOMERS SEGMENTS

Nutrition analyzer applications are used mainly by fitness enthusiastic and people with some health constraints focusing to eat certain vitamins and nutrition.

CC

6. CUSTOMER CONSTRAINTS

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

AS

5. AVAILABLE SOLUTIONS

which solutions are available to the customers when they face the problem
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

Explore AS, differentiate

Focus on J&P, tap into BE, understan

J&P

2. JOBS-TO-BE-DONE / PROBLEMS

To building a model which is used for classifying the food which depends on the different characteristics like color, shape, texture etc. Here the user can capture the images of different foods and then the image will be sent to the trained model. The model analyses the image and detect the nutrition content based on the food like (Fruits ,Vegetables ,Rice ,Wheat, e.t.c..).

RC

9. PROBLEM ROOT CAUSE

People in current era are facing many health complications at their young ages

BE

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)

Focus on J&P, tap into BE,

Identify strong TR & EM

3. TRIGGERS TR

Seeing neighbours following certain diet plans by downloading applications .

4. EMOTIONS: BEFORE / AFTER EM

Unhealthy, unaware of nutrition intake > correct compositions of nutrition and vitamins intake, proper diet plan, suggestions for consumption of food.

10. YOUR SOLUTION SL

1.Create custom dataset(Pre-trained COCO model)
2.Image annotation(ImgBox)
3.Building the model:
(i)Mask Region based-Convolutional Neural Network(Mask R-CNN)
(ii)Instance segmentation

8. CHANNELS of BEHAVIOUR CH

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

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

Focus on J&P, tap into BE, understand RC