

Project Design Phase-I
Problem – Solution Fit – University Admit Eligibility Predictor

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Team ID	PNT2022TMID12607
Project Name	Project – University Admit Eligibility Predictor
Maximum Marks	2 Marks

Problem – Solution Fit Template:

The Problem-Solution Fit simply means that you have found a problem with your customer and that the solution you have realized for it actually solves the customer's problem. It helps entrepreneurs, marketers and corporate innovators identify behavioral patterns and recognize what would work and why

Purpose:

- ☐ Solve complex problems in a way that fits the state of your customers.
- ☐ Succeed faster and increase your solution adoption by tapping into existing mediums and channels of behavior.
- ☐ Sharpen your communication and marketing strategy with the right triggers and messaging.
- ☐ Increase touch-points with your company by finding the right problem-behavior fit and building trust by solving frequent annoyances, or urgent or costly problems.
- ☐ **Understand the existing situation in order to improve it for your target group.**

Define CS, fit into CC

1. CUSTOMER SEGMENT(S)

CS

Who is your customer?

- The possible students who have completed their under graduation and hold an UG degree.
- The students who have undertaken exams like GRE and TOEFL exams.
- A wide range of students having low to financial resources.

6. CUSTOMER CONSTRAINTS

CC

- Searching the right and best-suitable college from the wide range of options of colleges that are available for admissions.
- Reduce the students' concern and fear of getting admission in their dream university.
- Reduce cost incurred to travel or communicate with respective universities
- Output the feasibility of getting admission at a desired university.

5. AVAILABLE SOLUTIONS

AS

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

- The currently available solutions do not serve the complete purpose. They lack essential criteria that needs to be considered while predicting the feasibility of getting admission in the desired university.
- Lacks dynamic nature and scalability.
- Incomplete training information.
- Absence of powerful ideas like polynomial and logistic regression and other machine learning algorithms.

Explore AS, differentiate

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.

- The major task is to design a university admission prediction system and to provide a probabilistic insight into the university rating, cutoffs, intake count and the students' university preferences.
- It is indeed a cumbersome task for students to find their best-suited university and course for their further post graduation.
- The students are to be provided with a list of universities where admission is feasible so that the student can choose from the list.
- The system must do the aforementioned tasks effectively as well as efficiently.

9. PROBLEM ROOT CAUSE

RC

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 regulations.

- There may not be a single place where the students can find all the admission related information of the universities.
- The students may not be aware of the eligibility criteria of various universities in and around the world.
- The admission criteria of the colleges may not be consistent with the information provided by agents.
- The agents may use untrustworthy information.
- A student may mistakenly anticipate of certain admission by checking the previous year's eligibility criteria.

7. BEHAVIOUR

BE

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)

- Direct:** The students will try to visit all the universities that he/she wishes to get admission and contact the students studying at the desired university. Get notified about the criteria to get admission and also take necessary measures to meet the criteria.
- Indirect:** Pay for an agency that helps the students to find the required criteria in the desired universities and visit only those selective universities and get the job done.

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

Identify strong TR & EM

3. TRIGGERS

TR

- Students often get tensed and anxious about their admission chances of their desired universities,
- The students' peers may get lot of colleges to choose from, with lesser time and effort and lesser expenses.
- Triggered by 'word of mouth'

4. EMOTIONS: BEFORE / AFTER

EM

- Before:** Insecure and unaware of the process, suffering to select the best-suited university. Rapacious agent and missing out of possible universities
- After:** Secure, user-friendly and aware of process. Reduced cost and does not miss out feasible universities.

10. YOUR SOLUTION

SL

- The focus is to reduce the time, effort and money spent on finding the universities where admission is feasible for pursuing higher education.
- The input to the system are student's academic details which includes CGPA, Scores in GRE, TOEFL, resume, LOR, SOP and other university eligibility features.
- The system uses a pre-trained machine model (ML, IBM Cloud and Watson Studio) to predict the feasibility of admission in desired university based on the provided student data.
- The output of the system is the list of possible universities for the student to apply for admission.

8. CHANNELS of BEHAVIOUR

CH

8.1 ONLINE

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

- The students may browse the Internet to research about their desired universities and get to know required information.
- This is a time-consuming task and may miss out some universities of interest

8.2 OFFLINE

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

- Visit the desired universities in person and gather admission details.
- This incurs extra effort and expenses.

Extract online & offline CH of BE