



Business Data Management

Project Proposal



Strategic Analysis and Enhancement of Admission Dynamics at Aishwarya College: A Case Study

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Declaration Statement

I am working on a Project titled “**Strategic analysis and Enhancement of Admission Dynamics at Aishwarya College: A Case Study**”. I extend my appreciation to Aishwarya College, for providing the necessary resources that enabled me to conduct my project.

I hereby assert that the data presented and assessed in this project report is genuine and precise to the utmost extent of my knowledge and capabilities. The data has been gathered from primary sources and carefully analyzed to assure its reliability.

Additionally, I affirm that all procedures employed for the purpose of data collection and analysis have been duly explained in this report. The outcomes and inferences derived from the data are an accurate depiction of the findings acquired through thorough analytical procedures.

I am dedicated to adhering to the principles of academic honesty and integrity, and I am receptive to any additional examination or validation of the data contained in this project report.

I understand that the execution of this project is intended for individual completion and is not to be undertaken collectively. I thus affirm that I am not engaged in any form of collaboration with other individuals, and that all the work undertaken has been solely conducted by me. In the event that plagiarism is detected in the report at any stage of the project’s completion, I am fully aware and prepared to accept disciplinary measures imposed by the relevant authority.

I understand that all recommendations made in this project report are within the context of the academic project taken up towards course fulfilment in the BS Degree Program offered by IIT Madras. The institution does not endorse any of the claims or comments.

Signature of Candidate: 

Name: (Daiwik Rankawat)

Date: 29th June 2023

Executive Summary:

I collected the data from a Newly opened Aishwarya College, the college is located at Near Lucky International School, Vivek Vihar Yojna, Jodhpur. The primary reasons for me to select that college are:

- The College is located near to me.
- Owner (Dr. R.L. Mathur) of that college is my Dad's Friend.
- Owner understands my proposal but share only limited data of students.
- My elder brother was graduated from that college.

The main purpose of this project is to identify the problem related to admission at college by analysing admission growth on some factors that is obtain from data taken from Aishwariya college and extracting meaningful insights from it. The proposal provides information like organization background to the problem. It also gives the problem-solving approach, data collection, data analysing tools used to solve business problem.

Data Collection:

- For data collection I personally gathered information from the excel sheets provided by the admin team of Aishwarya College. Since college have a large amount of data and it becomes difficult to handle so I ask admin team to give only admission data.
- So till date, I have collected around 3 years of admission data. Therefore, I can get the meaningful conclusion.
- I take the following Fields of data of student that are admitted in years (2021, 2022, 2023).

The Fields are given below:

- Name
- Fathers Name
- Mothers Name
- Gender
- Category (SC/ST/OBC-NCL/General)
- Date of Birth
- Pre – Qualifying Test (complete details), If given.
- House Address
- Class 10th Details
- Class 12th Details
- Program for which they are Applying
- Field of study
- Mode of Study
- Schema of Examination

- Family Income
- Date of Admission

Organisation Background:

Organisation Name: Aishwarya College

Year of Inauguration: 2018

- Aishwarya College open in 2018. It's college of Under Graduation.
- The owner Dr. L.N. Harsha, Dr. R.L. Mathur, Mr. Bhupendra Singh Rathore are founder of Aishwarya college they invested about approx. ~ 4 Cr. INR each to start the college.
- About more than half of the amount goes to build infrastructure and rest goes in recruitments and salaries.
- As a result of my conversation with Owner, admin, and teaching staff, I realize that from last few years admission into this college start dropping. This is due to since, year by year the number of admissions start falling down.



(Aishwarya College image)

Problem Statement (Listed as Objective):

From my interaction with team of college and some general observation of record of admission of past 3 years, I found that following points are main reason and give high impact on admission of particular year.

- Shifting Program Popularity
- Stream Switching / Cross-Stram
- Program Saturation and Under-Subscribed Program
- Program Demand vs Supply
- Program Faculty
- Gender Imbalance
- Geographic Concentration
- Campus security and safety

Background of Problem:

After a lot of discussion with faculty of Aishwarya college, it was observed that several challenges exist:

- Shifting Program Popularity: There is a change in program popularity each year it depends upon market trend.
- Stream Switching / Cross-Stram: After implanting of New Education Policy 2020 act (Naee Shiksha Neeti) , many students we changing their stream according to their interest or market trends.
- Program Saturation and Under-Subscribed Program: As I interact with staff of Aishwariya college, I realise that some program are start saturating, and student also start showing less interest over the years and in some programs of college are becoming under subscribed programs.
- Program Demand vs Supply: Some programs are high in demand over the years and for these programs there are lack of capacity of college.
- Program Faculty: due lack of strong faculty base in program and lack of experts students are not liking it.
- Gender Imbalance: Some program attracts more male students over female students or vice -versa and this creates a gender imbalance.
- Geographic Concentration: Due to lack of powerful and tactical marketing college is less enable to attract more students than the capacity.
- Campus security and safety: Due to presence of college outside of main city many parents may concern about their child's safety and security as college is lack of transport facility.

As a result, I found that these points are create a major problem in increment of admission year by year. So, to solve this problem I concluded that the best way to solve this I have to use the information, skills, and tools that were taught in my course is to identify appropriate and workable solution through a complete structured analysis of the organisation.

Problem Solving Approach:

Details about the methods use with Justification:

The primary type of data that I collected is time series data so I will be having good scope for plotting all sorts of trend lines and scatter plots. Using the intense power of pivot tables, I can plot why charts and staggered histograms to find insights from the data that I have collected and by using the ratio that were taught in the course I am planning to compute key financial quantities which I believe can help to solve the organization problem.

Details about the Intended data collection with Justification:

1. *Students' General data:* In this I collected the some general information of students like Name, gender, Locality or Location and etc.
Justification: This data is essential to find what is male to female ratio, from which locality the maximum students are coming and etc condition to perform analysis better for good results.
2. *Student Performance data:* I collected the students' data of last 3 years.
 - Class 10th/12th Percentage: This data can help me to understand academic factor in program choosing, stream switching and etc.
 - Standardize Test Score: If a student did not gives a test or give tests like JEE, NEET or CLAT, this data will use to analyze the impact on program selection in the admission process.
Justification: This data is essential to understand if academic performance is linked to program popularity, stream switching.
3. *College Program Data:* I gathered the information of each programs offered by the college. The following details were collected from the college:
 - Program Name: This is going to help me in identifying and analysing the program that which is oversubscribed and which is under subscribed.
 - Field of Study: This will allow me to analyze the trend in students that how students from different academic stream are choosing programs with specific field.

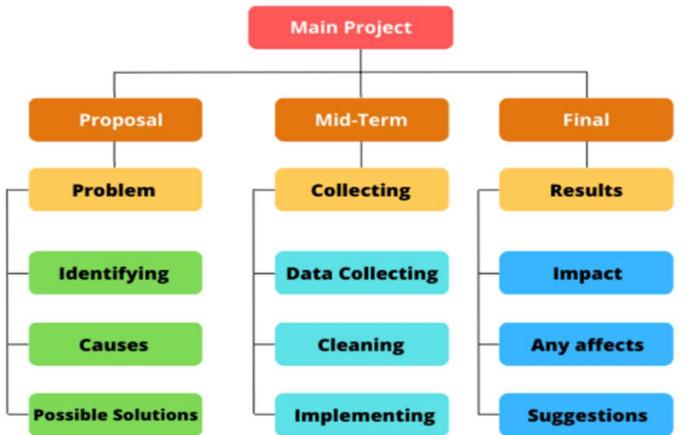
Details about the analysis tools with Justification:

Since the type of data collected is time – series data, So for that I am using following tools:

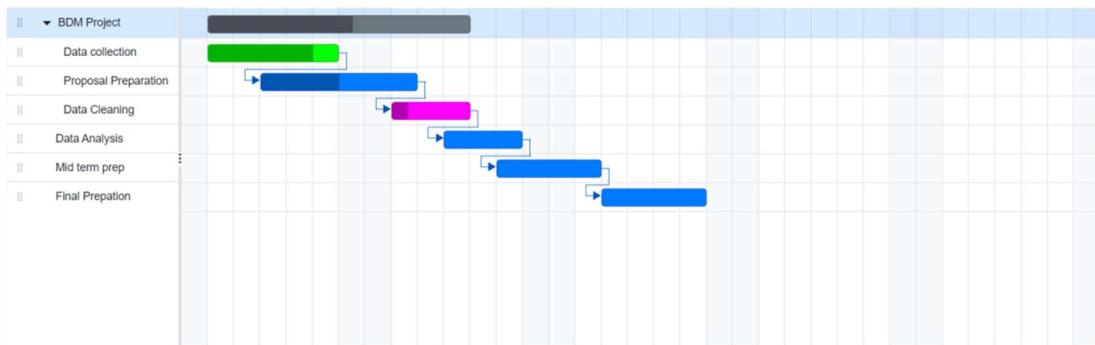
- Microsoft Excel: For basic data cleaning, descriptive statistics, graphs. Excel is always available and powerful for analysis.
Some are Pivot Tables for filtering and computing row/columns wise
- For data visualization I am primarily using: Pie charts, stacked Histograms, Scatter plots, etc.

Expected Timeline:

Since, I have successfully collected 3 years of admission data, which will be first clean, analyzed.



Gantt Chart



Expected Outcome:

- Delivering a Analysed Report: This project will result a detailed report on analysed college's admission data only over the past 3 years. It will highlight some points like the key trends, patterns, and factors that were related to program popularity.
- Identifying areas for improvement: This report will identify specific areas where the college can focus to increase admissions:
 - **Program Optimization:** Recommendations for dealing program problems like saturation, under-subscribed.
 - **Tactical Strategies:** Giving suggest for smart marketing in less efforts to attract students.
 - **Empowering College by Diversity:** This report will ensure that college can make decisions that can improve not only the admission but increase diversity in terms of region, background, genders also.