Business Data Management

Mid – Term Submission

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

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Executive Summary:

Under Graduation is Fundamental part of our life, but getting Under graduation in stream that is essentially concurrent to market trend is important. From a business perspective, it is crucial for college to engage in proactive planning. strong marketing planning and maintaining a strategic mindset in order to attract more pupils, to establish a strong position in rank to other colleges present in city.

As I started earlier in proposal, a recently open Aishwariya college, is currently encountering challenges in terms of admission and its marketing related issues, which creates a direct impact on admissions, marketing image, profits and many more, but for this project we only maximum focus on Admission and its related problems.

This capstone project only and primary focus on Improvement and Analysis of Admission's at Aishwariya College. Our main objective is to understand the complexities of managing college in its core strength and marketing only related to admission.

The data was collected through meeting with faculty and admin team of college, which turned out to be a hugely pivotal to this entire process. Since after meeting with faculty, gives me more information, that help me to identify key problems and suggest potential solutions for this business to introspect their current approach and work efficiently as unit.

Tools and graphs and formulae that are used in this capstone project were present in Microsoft Excel and Google Sheet.

I have taken the past admission data of last 3 years from admin team of Ashwariya college.

This report Concludes with recommendations, some measure for increasing admissions. Additionally, it also includes consideration related to marketing for admissions.

Goals for Mid – Term are:

1. Identify streams with increasing and decreasing enrollment.
2. Analyze gender-based enrollment trends across different streams
3. Finding distance between students home and college from which maximum students came.
4. Percentage of students who change their stream.
5. Number of Faculty for specific stream.
6. Examine reasons for stream switching and suggest improvements

PROOF OF ORIGINALITY

Aishwarya College of Education
- Recognized by UGC under Section 2 (F) & 12 (B) of UGC Act, 1956
- Accredited by NAAC

NO.: ACE/Gen/25/034   Date: 28th Jan 2025

Subject : Authorization for Daiwik Rankawat 22F3000099 to use Aishwarya College data for Academic Research Purposes ONLY.

To whom so ever it may concern,

We, Aishwarya College of Education, hereby authorize Mr. Daiwik Rankawat with roll number 22F3000099, a student of Indian Institute of Technology, Madras to access and utilize the data from our Aishwarya college admin team, only for academic research at Indian Institute of Technology Madras.

We grant Mr. Daiwik Rankawat permission to use our given data for the purpose of academic research, including data analysis and any other research related activities required to accomplish his project. It is understood that the data will be used solely for academic purpose and will not be disclosed, shared or utilized for any commercial or non-academic activities without the prior consent of the college.

Principal,

Dr. Rishi Nepalia
Principal
Aishwarya College of Education
Jodhpur (Raj.)

Sector – 8, Near Lucky International School, Vivek Vihar Yojna, Jodhpur-342005 (Raj)
0291-2760175   info@aishwaryacollege.ac.in

(Authorization letter from college)

Classroom Photo

ALL OTHER PROOF AT (INCLUDING VIDEO) :

https://drive.google.com/drive/folders/1DBhQag9xHDa3PACpay6AqaMy0sePSgg_?usp=drive_link

Data Collection

- Admissions of 2021, 2022, 2023
  https://docs.google.com/spreadsheets/d/1EnVG9weGZxNvOYROkKXOpKjJC
  XSswy-
  a/edit?usp=sharing&ouid=100103770075595764197&rtpof=true&sd=true

Meta – Data

- Data in above URL's is collected for a time period of past 3 years.
- The excel raw data consists of following meta – data / fields and from this
  some of that meta – data has been used for strategic analysis.
    1. Name of Student
    2. Gender
    3. Category (SC/ST/OBC-NCL/General)
    4. Date of Birth
    5. Pre – Qualifying Test (details), If given.
    6. House Address and Pin – code
    7. Class 10th Details
    8. Class 12th Details
    9. Program for which they are Applying
    10. Field of study
    11. Mode of Study
    12. Annual Family Income
- This was provided in the form of excel worksheet which is going to be used for
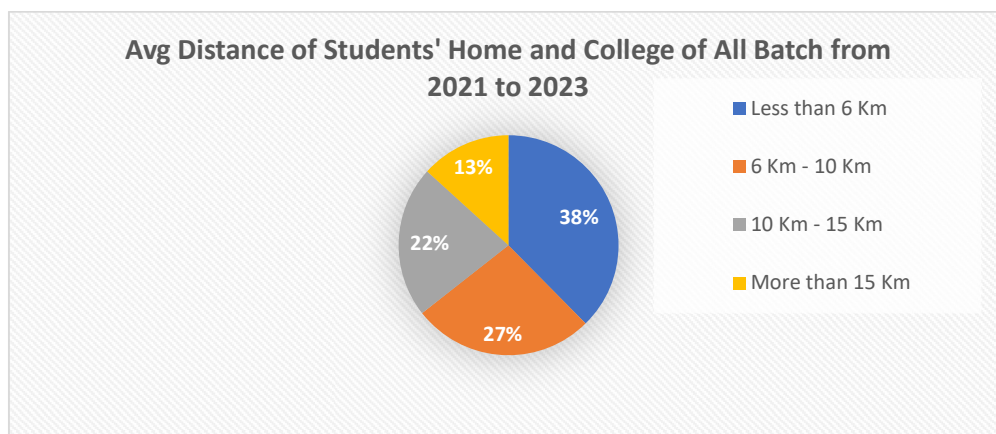 Capstone project.

Descriptive Statistics

I have meticulously gathered an extensive 3 years of admission dataset, from 2021 –
2023 and based upon collected data, here are some statistics analysis that are
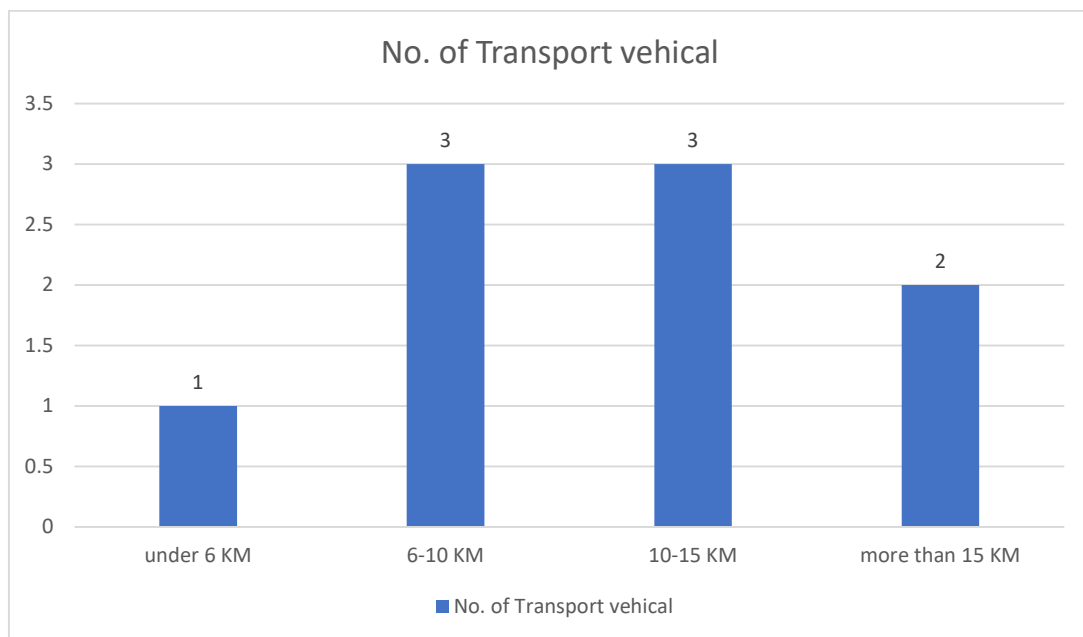conducted for finding solutions.
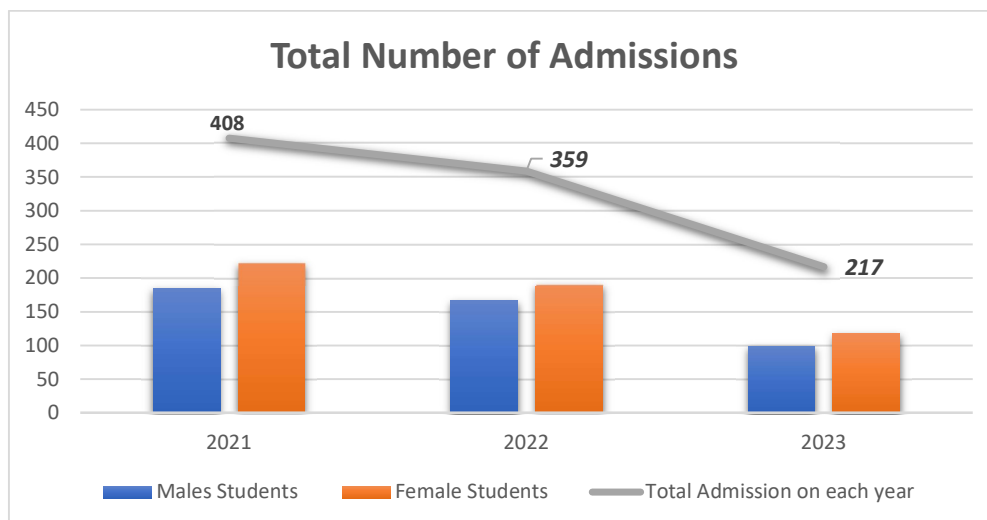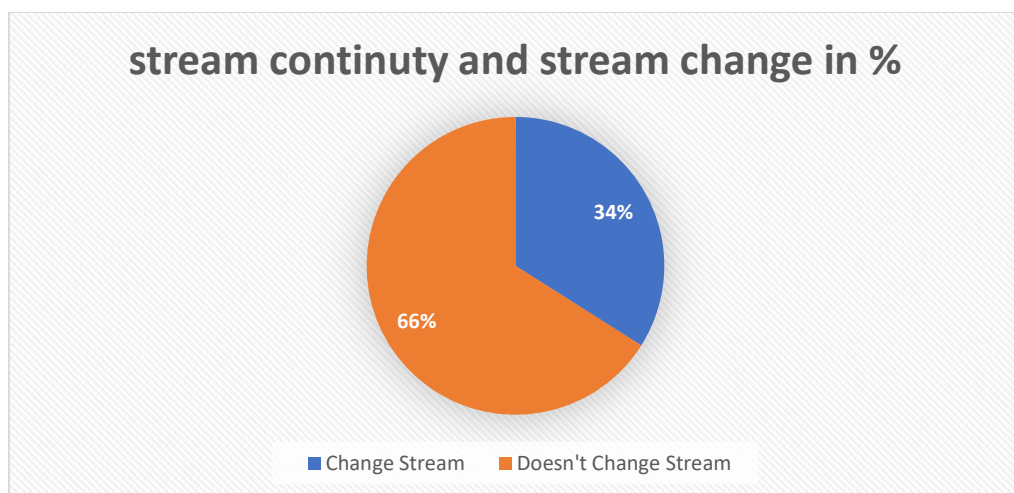
(3.1) Number of Admissions over the year
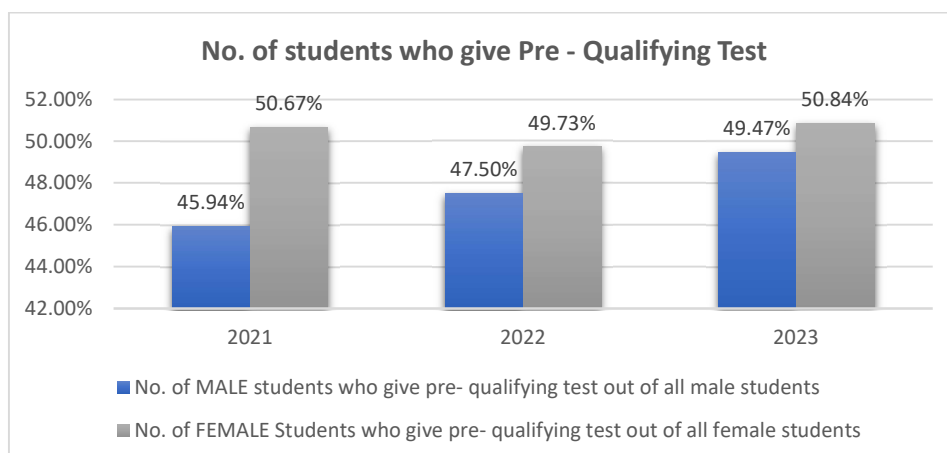
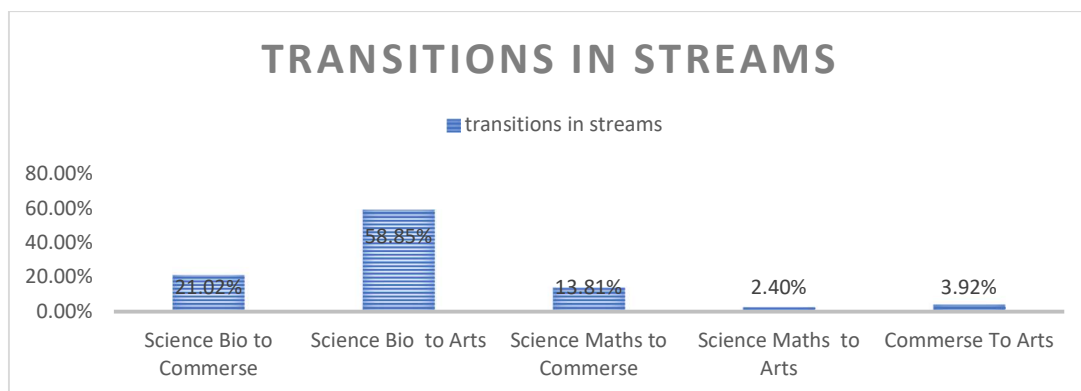(3.2) Number of student who give pre – qualifying test.

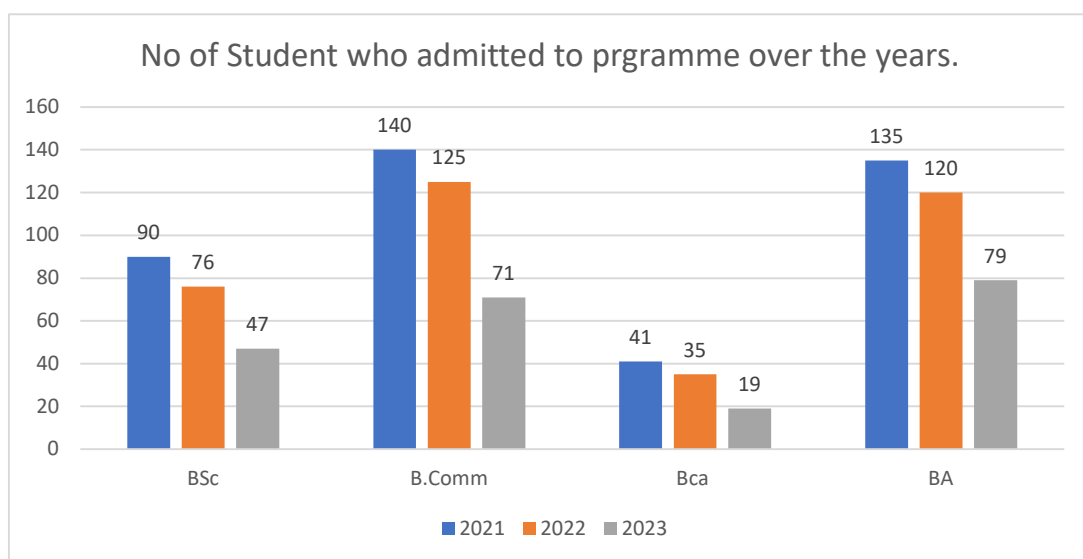(3.3) Average distance from students home to college.

(3.4) No. of Transport vehicles for students from students home to college.
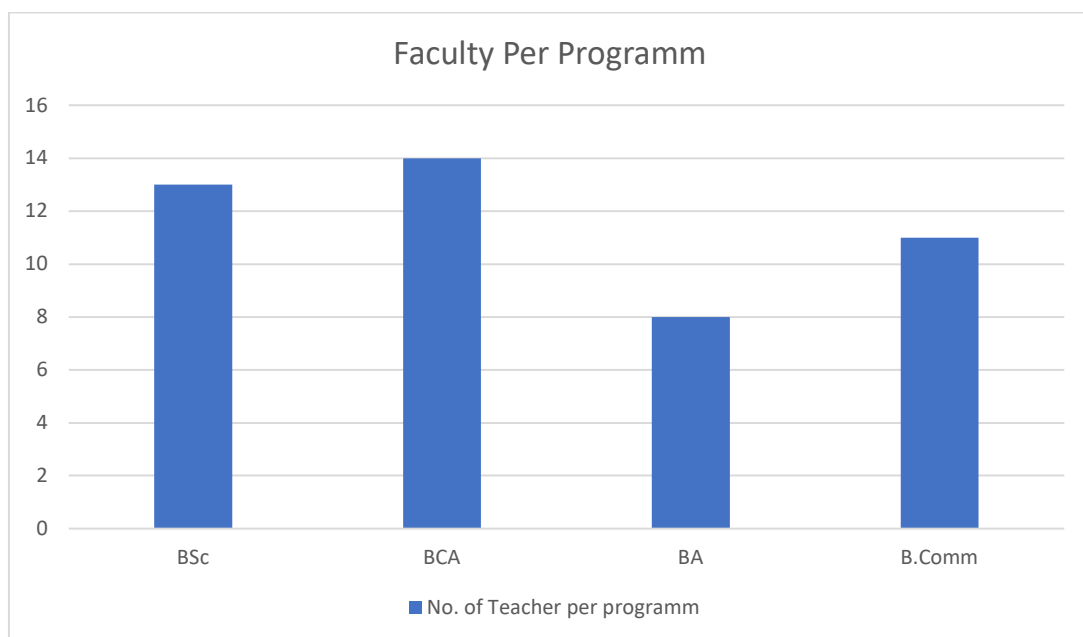

(3.5) Number of students with their stream

(3.6) Transition of students from their stream

(3.7) No. of students in specific degree

(3.8) Faculty per program

Detailed Explanation of Analysis Method:

To analyze admission trends at Aishwarya College, I utilized Microsoft Excel as the primary tool. The methodology focused on extracting key insights from admission data spanning three years (2021-2023).

1. **Data Cleaning and Pre-processing:**
   - Eliminate reductant metadata
2. **Conditional Analysis using Excel Formulae:**
   - To determine the number of students opting for specific streams and degrees, I used the **IF(AND())** function. For Ex.
     IF(AND(Q384="Science (Bio)",U384="B.A."),"1")
     This formula identified students who chose **Science (Biology) as their stream and enrolled in the B.A. program**. A similar approach was applied to analyze Maths, Commerce, Arts, and other fields of study

3. **Trend Analysis & Descriptive Statistics:**
   - Used **COUNTIF()** to determine how many students transitioned between different streams over the years.
   - Analyzed the percentage of students taking pre-qualifying tests using Pivot Tables.
   - Measured the average distance from students' homes to the college to understand accessibility factors.
4. Graphical Representation:
   - Bar charts were created to visualize admission trends for each stream over three years.
   - Pie charts were used to depict the percentage of students who switched streams.
   - Line graphs demonstrated the increase or decrease in overall student admissions

Results and Findings:

1. **Overall Enrollment Trends:**
   Student enrollment remained steady from 2021-2023, with Computer Applications and Commerce growing, while Arts declined.

2. **Gender Distribution:**
   Female enrollments outnumber males, especially in Commerce and Computer Applications, while Science and Arts see more male students

3. **Pre-Qualifying Test Impact:**
   51% of students take the test, those who do have a higher acceptance rate. Participation in the test has increased over the years.

4. **Local vs Outstation Students:**
   70% of students are from Jodhpur, while 30% come from other regions, influenced by facilities and program reputation.

5. **Financial Background and Support Needs:**
   Most students come from middle-income families, and scholarships must be need to introduce.

6. **Mode of Study Preference:**
   Offline learning is the clear preference, with minimal interest in online or hybrid education.

7. **Faculty–to–Student Ratio:**
   ratio quality is maintained, but Computer Applications needs more faculty due to rising demand.

8. **Stream Switching:**
   Many students switch fields, especially in Science and Arts, indicating a need for better career counselling.