



# CASE STUDY

## **Introduction**

This is a case study for **Zolo** a co-living space management company has a lot of interns/ fresh graduates & young professionals coming to stay in PGs/ hostels. I will perform analysis for a unique situation where it need to evaluate the best applicants for a particular hostel when there is high demand in the month of June/ July where there are more applicants for the hostel than its capacity.

## **Key Problem**

To find out the best applicants for a particular hostel from a given pool in the month of June/July when there is a high demand.

## **Approach**

For a given case study I prefer using most popular framework CRISP-DM (Cross Industrial Standard Process for Data Mining) for easy of data analysis process.

It mainly includes following steps through which we will be analysing and be able to build robust framework for a given case study.

### **1) Business Understanding:**

(a) Business objective:

1. Two types of applicants for PG's/ Hostels
  - i. Intern/ Fresh Graduates.
  - ii. Young Professionals.
2. High demand for the PG's/Hostel during month like June/July.

(b) Business goals:

1. To evaluate the best applicants for a particular hostel.

### **2) Data Understanding:**

(a) Private Data:

1. No private data provided by the organization to perform EDA (Exploratory data analysis) operations for this case study.

(b) Public Data:

1. I have taken data from below link to determine the duration for Internship which is required for analysis.

**Link:** <http://www.internships.com/employer/resources/setup/duration>

2. I have taken data for graduates in the year 2015-2016 from the All India Survey on Higher Education which is required to analyse no. of graduate student both male and female.

**Link:** [http://mhrd.gov.in/statist?field\\_statistics\\_category\\_tid=32](http://mhrd.gov.in/statist?field_statistics_category_tid=32)

3. I have built a sample data for companies in Manyata Embassy Business Park, Bangalore which is 650 m from zolo cosmos.

**Source:** Wikipedia.

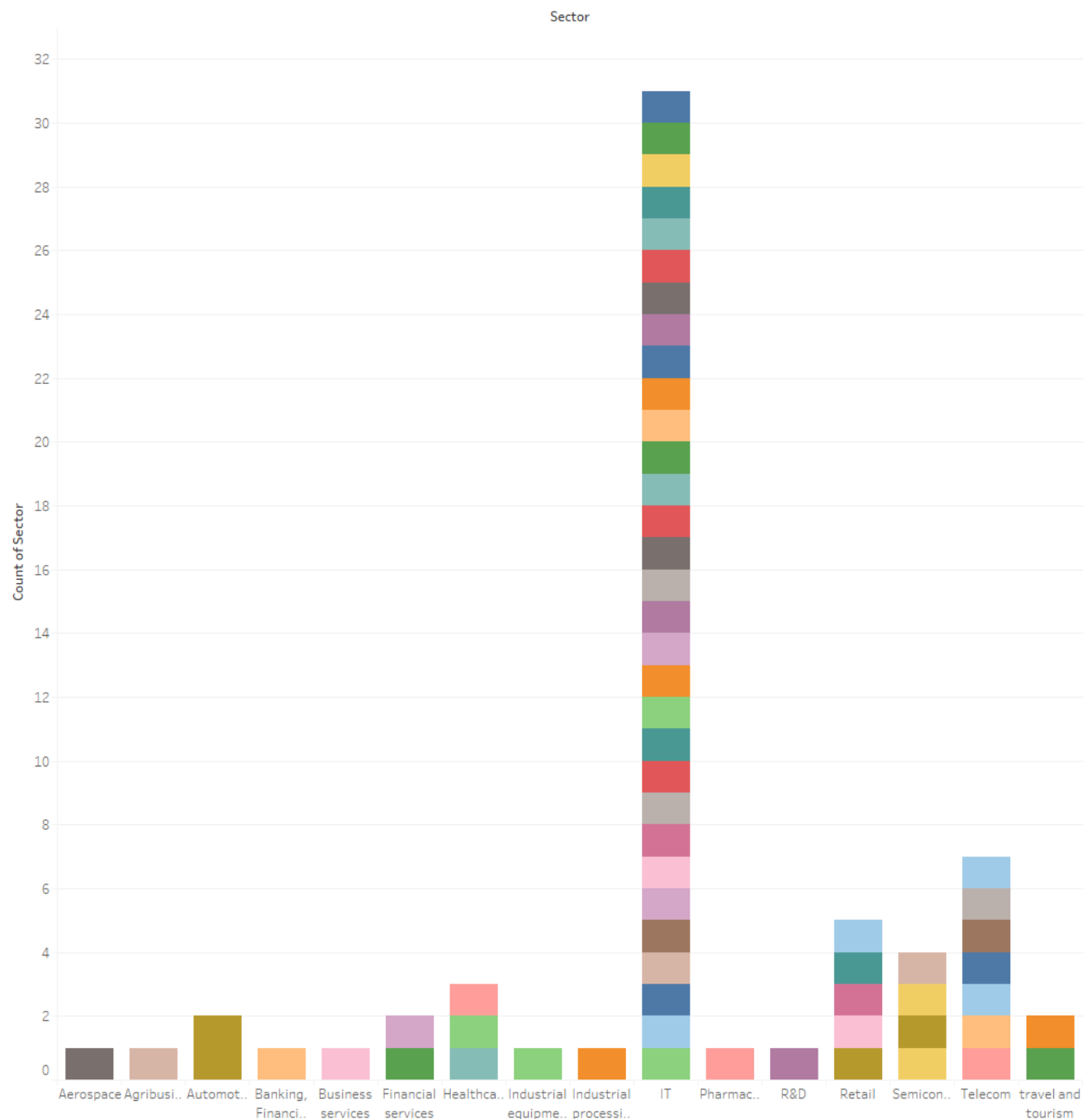
There are four more steps like **Data preparation, Data Modelling, Model Evaluation and Model Deployment** which will be appropriate for analysis on private data.

## Data Analysis

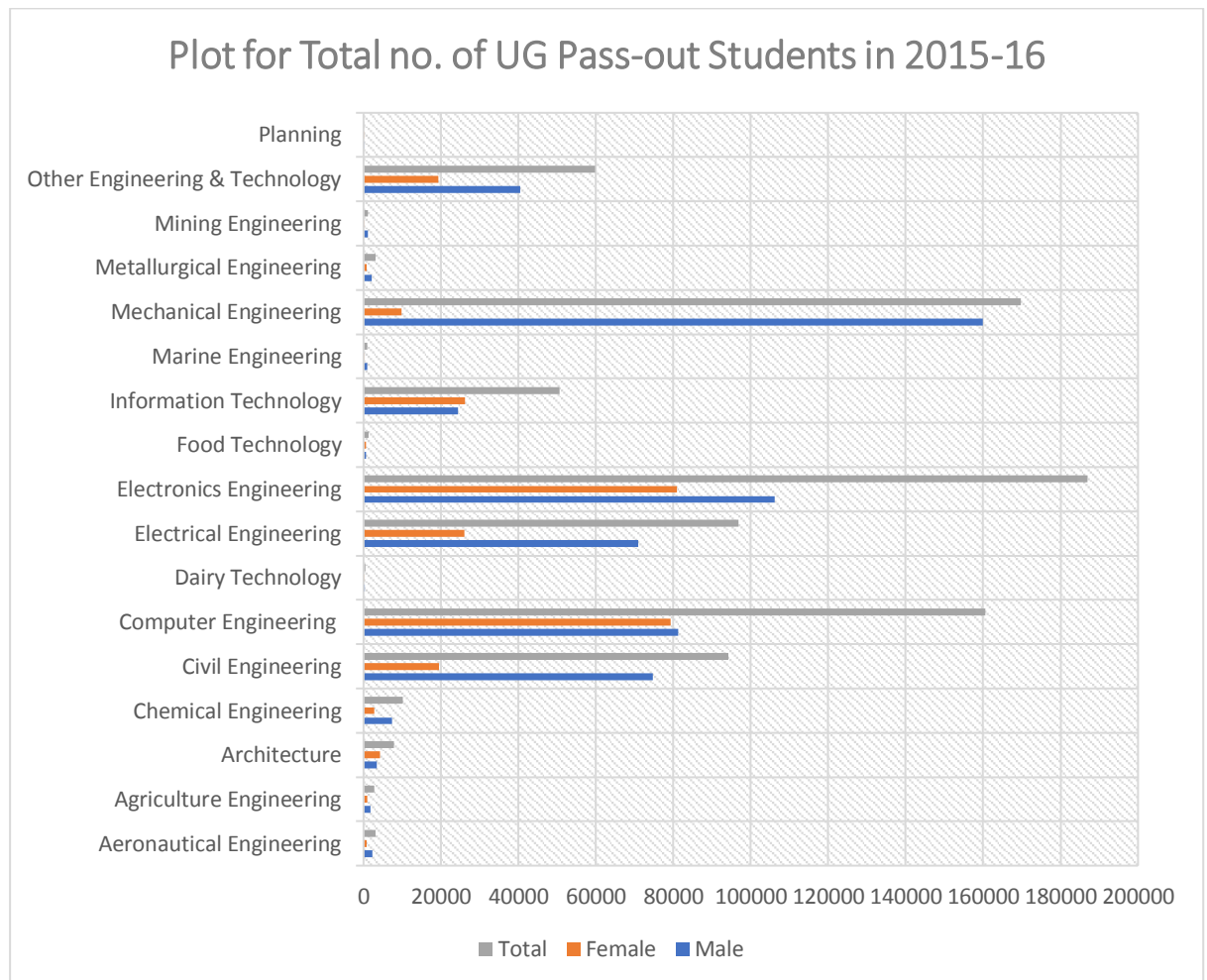
**Done some analysis based on facts available from public data.**

- 1) For an internship duration we can consider it to be between 10 weeks i.e. approx. 2 months to 6 months based on the available public data.
- 2) By below sample data we can consider that most of the zolo PG's/ Hostels are near to IT companies.

Type of companies in Manyata Embassy Business Park, Bangalore



- 3) Based on the analysis done on pass - out student in the year 2015-16 we can consider that there are total of 21% of engineering pass outs who are in search of job are internship. The no. of student graduating from college will change every year but we can consider the percentage will be approx. same.



- 4) We can see that there is hike in the job openings based on the below article so there is much chance of people getting hired compared to previous years.  
<https://economictimes.indiatimes.com/jobs/indias-job-market-set-to-turn-the-corner-in-2018-as-campus-placements-show-spurt/articleshow/62001845.cms>
- 5) We can also find that there is more no. of female student pass - out every year compare to that of male students based on above plot.

## **Assumption**

Data Points:

- 1) Availability of PG/ Hostel near pool of companies or work place.
- 2) Availability of Women PG/ Hostel for female applicants.
- 3) High or Low Rental price for PGs/ Hostels.
- 4) Location of PGs/Hostels.
- 5) Balance between no. of Intern/Fresh graduates or Young Professionals applicants.
- 6) Strength (number of applicants) of types of applicants.
- 7) Duration of stay based on type of applicants.
- 8) Willing to pay high rental price during high demand (in the month of June/July).
- 9) Availability of facility like Wi-Fi, Food, maintenance and basic needs.
- 10) Types of PG's/Hostels like space, no. of rooms etc.
- 11) Ability of an applicant to pay rental price on time.
- 12) Background check.

Based on above data points and data analysis which we did on public data we can come up with a framework which will help us in finding best applicants for the hostel.

### **Assumptions for choosing best applicants:**

#### **Assumption 1:**

**Availability of PG/ Hostel near pool of companies or work place** where he has got his internship or if the applicant is actively searching for a job who is a fresh graduate if the volume of applicants is high compare to that of young professionals since we found that approx. 25% of Engineering pass out every year by data analysis so it's obvious that there will be more applicants compare to that of young professionals and if the availability of hostel is more than the no. of applicants like young professionals then we can consider intern/ Fresh Graduates as best applicants.

**Location of PGs/Hostels** also matters because if an intern/ fresh graduate finds a job elsewhere and he will not stay for longer period in which case we can consider young professional as best applicant since he will apply to PG's/ Hostel if its near to his work place or company and he will stay for longer period.

#### **Assumption 2:**

**Availability of Women PG/ Hostel for female applicants** we can consider it same as *assumption 1* but here we need to consider availability of women hostel for female applicants.

#### **Assumption 3:**

**High or Low Rental price for PGs/ Hostels** It also depends on the applicants who is ready to pay the extra money during high demand period, there is a thumb rule in business i.e. price is directly proportional to demand and inversely proportional to supply i.e. if demand is more then there this is always rise in price.

Let's consider if an intern or fresh graduate are in large volume let's say 100 applicants and there are 20 young professionals but there are 100 rooms available. If 100 applicants are ready to pay high rental price then we can consider them as a best applicant and also vice versa is also possible.

**Willing to pay high rental price during high demand (in the month of June/July) same as above.**

**Assumption 4:**

**Duration of stay based on type of applicants** we found that by data analysis that Interns will have their internship for a duration of about 2 months to 6 months max so we can consider it as least priority for this kind of applicants until and unless he is will to pay high rental price for six month which can be equal to the total rental price for 12 months which is payed by young professionals.

**Assumption 5:**

- Availability of facility like Wi-Fi, Food, maintenance and basic needs.
- Types of PG's/Hostels like space, no. of rooms etc.

The above is least considered for choosing the best applicant because its very rare that applicant will cancel his application later if there is no availability of facility if there is very high demand for the Hostel especially if the applicant is an intern/ Fresh graduate. Some cases young professional may require this facility so he may cancel or he may not continue to stay in hostel for long time.

**Assumption 6:**

- Ability of an applicant to pay rental price on time.
- Background check.

There is some situation where we need to evaluate if the applicant can pay the rental amount on time or not at such situation we can consider that Intern/ fresh graduate who are not earning has there are looking for a job and they are at the initial stage of their career and they are not going to stay for longer period its always preferred to choose young professionals who are already earning over the inter/ fresh graduates.

I have mentioned background check because applicants are strangers and he can be any person who can spoil the reputation of the company weather he is an Intern/ Fresh graduate or Young professional. It's always preferred to do background check before accepting the best applicant for a hostel by asking valid ID and supported documents. If he is a young professional then there is bit of a relief since companies will already be done all the background check before giving the job. So, we can conclude young professional as a best applicant at is situation.

**Conclusion:**

We can conclude that based on above assumption we can choose either Intern/ Young Professional as a best applicant for the hostel.

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