G-Meet Session on Guesstimates - JU E-Cell Consultancy Wing

Name of event : Live interactive session on Guesstimates, held by JU E-Cell Consultancy Wing

Date : 26th June 2021

Venue : Virtual meeting (Conducted through Google Meet)

Brief description of the event : Discussion on the topic of Guesstimates.

About the initiative : Guesstimates are a vital element of every consulting or analytics interview, whether you're appearing for your Summer Placement Interviews or Final Interviews.
It provides a glimpse into your problem-solving and critical-thinking talents to the panellists. The emphasis is on the strategy rather than the correct answer.

Definition of Guesstimate : Guesstimate is a part of consulting as well as case studies, where you have to make realistic guesses in absence of sufficient information. So, it's not the number that matters, but rather the approach.

1st Guesstimate problem : How many teacups are sold in Kolkata everyday ?

Key Factors to consider while approaching :

- Population of Kolkata
- Approximate percentage of children and adults
- Classification of people according to their age groups
- Average number of cups consumed everyday by people across different age groups

Sample Solution :

- Let us assume the population of Kolkata is 15 million.
- Out of the 15 million let us consider 80% are adults and 20 % are children (assuming children do not take tea)
- Out of the 12 million adults, let us assume 80% consume tea at some point which approximately comes out to be around 10 million.
- Assuming out of the 10 million 70% are college and office goers who on an average consume 3 cups of tea per day.
- The remaining 30 % are retired citizens who on an average take 2 cups of tea per day.

  - ❖ Total teacups sold :
    - For college and office goers : 7*3=21 million cups everyday
    - For retired citizens : 3*2=6 million cups everyday
    - Hence total no. of teacups sold : 21+6=27 million cups everyday

2nd Guesstimate problem : How much revenue does Kolkata Metro generate in a day ?

Key factors to consider while approaching :

- Peak and non-peak hours
- Total no. of routes
- No. of people per train
- Frequency of train arrival
- Average fair

Solution :

- ❖ Weekdays (More relevant) :

  The following datas are based on assumptions.

  - Avg. no. of box per metro : 6
  - Avg. fair : Rs. 20/-
  - Avg. no. of people per box : 150

- ❖ Peak hours :

  - [8 AM - 11 AM] and [5 PM - 9 PM]
  - Hence, total = 3+4 = 7 hrs

- Assuming metro in every 3 minute, total no. of metros (both way) in peak hours :
  (7*60*2)/3 = 280 (approx)
    - No. of passengers in one metro = (6*150) = 900
    - No. of metro rides = (5*280) = 1400
    - Total no. of passengers = (900*1400) = 1.26 million
    - Revenue from peak hours = (1.26 million*20) = Rs. 25.2 million/-

- ❖ Non-peak hours :

    - [6 AM - 8 AM] and [11 AM - 5 PM] and [9 PM - 11 PM]
    - Total = 2+6+2 = 10 hrs
    - Assuming metro in every 6 minute, total no. of metros (both way) in non-peak hours : (10*60*2)/6 = 200 (approx)
        - No. of passengers in one metro = (6*100) = 600
        - No. of metro rides = (5*200) = 1000
        - Total no. of passengers = (600*1000) = 0.6 million
        - Revenue from non-peak hours = (0.6 million*20) = Rs. 12 million/-

- ❖ Total Revenue : Hence, total revenue = (25.2+12) = Rs. 37.2 million/-

End Note : *The approach is more important than the numbers*

Moderated by : Neelarghya Saha and Samriddhi Roy