

DATA ANALYTICS SECOND SESSION

Date: July 3rd, 2021

Time: 6:30 PM

Speakers:

- **Vishal Agarwal, Jadavpur University (UG3), JU E-Cell member.**
- **Sourodeep Chowdhuri, Jadavpur University (UG3), JU E-Cell member.**

Brief description of the conversation:

The session started with Sourodeep Chowdhuri, our very own Senior and E-Cell member, enlightening us on Data Analytics. He went on to explain the term KPI with a better example of us being accustomed to. He talked about different KPIs for preparation of competitive exams which included time management, regular revision and appearance in mock tests. He then related KPIs for quantitatively measuring a company's progress. Average Order Size, sales, Conversion Rate, Bounce Rate were discussed to track a company's progress towards their objective.

Then the importance of an advertisement was brought up for better reach and awareness of a company and its products and services. CTR, a measure of the response of the audience towards an advertisement campaign was analyzed. Certain ways to be implemented which would boost the CTR were cited. They included the advertisements to be eye-catching, to be reaching the interested audience and must be promoted on a proper platform.

Important terms related to an advertisement program i.e. CPC & CPA were thoroughly discussed. Cost effectiveness of an advertisement Program is measured in terms of CPC and CPA.

CPC represents the total cost allocated for designing an ad and carrying out the advertisement campaign per individual clicking on it.

CPA represents the amount of money spent on gaining one new lead.

The theory of LTV i.e. Lifetime Value was explained. Backed up with facts and statistics he explained that it is much more economically beneficial for a company to retain an existing customer rather than trying to acquire a new one. To make sure that an individual remains a loyal customer to the company in the upcoming years, Customer Welfare must be prioritized. The company has to work according to the tastes of the customers and also regularly keep bringing new line of products.

Sales funnel was briefly explained with a diagram depicting different stages of acquiring customers through an advertisement campaign. Thus the important inference that was cited was that, that even if the company has an elite line of products, if it is not reaching the interested customers and audience, the company would be losing out on a major part of the market.

The Analytics portion was ended with an engaging real world question involving preferences of 2 banks establishing their ATMs at 2 different places. It was thoroughly explained and discussed with the participation of everyone attending the session.

Vishal Agarwal, studying in the 3rd Year in our very own Jadavpur University, took over the session then and stated the real life applications of statistical data and how they are used by different companies to gather information about their audience, market and competitors and take measures accordingly.

The session started with topics on descriptive statistics.

The topics that were started with were raw data, frequency distribution and histogram. Then we moved onto the topic 'Measures of Central Tendency'. It started with definition and discussed more on its mathematical subtopics like arithmetic mean, median, box plot and mode.

What was particularly interesting is that tough topics like mean, median and mode were aided with examples. What we had only implemented on pen and paper were linked to solving and analyzing real life problems.

Then finally we arrived on the topic 'Measures of Dispersion' wherein the subtopics taught were range, IQR, standard deviation, skewness, kurtosis and coefficient of variation.

The importance of standard deviation and coefficient of variance was very well explained with the concept of measure of spread and measure of variation. The terms were made more interesting for us with the example of the risk involved in some shares being brought up and variation in prices of petrol across USA and Vietnam being compared irrespective of currency differences.

It was a very insightful and informative lecture given by Vishal dada and we were amazed how flawlessly he was explaining each and every topic!

We have been explained everything from scratch . But the seniors have always encouraged us to learn something new from outside so that there can be a healthy environment where all members of the E-Cell, whether seniors or juniors, can share their knowledge with each other and this will be very fruitful for everyone.

There were also discussions on the importance of Python programming language and Microsoft Excel and how they play an important role in data analytics.

The best part of the session was that the session was very interactive and all our doubts were cleared with utmost care.

I am personally very delighted to attend the session and am eagerly waiting for the future sessions!!