

DSL810-Assignment 4- Statistical DATA

REAL WORLD APPLICATIONS & LESSONS LEARNT

Actually the statistical method of handling multiple numbers and in combination with other different parameters & its effects on numbers was never easy Job for me till attending this course. In my Apartment, a small departmental store keeper always used to complain about his goods getting wasted or unsold or vegetables becoming stale. There are around 150 flats in the apartment and buyers are almost unchanged and pattern of buying based on seasons are also almost can be studied. Using Anova method shop keeper can study the whole pattern & rethink the way his ideas on buying goods for selling and even some readymade tailored tools may be available on internet, which I will try to introduce him and get it implied for his business and simultaneously I may create a portal for him to feed data and analyse his stuffs.

1) Google Ads:

Google uses the statistics to take survey of number of peoples clicking on the ad links prompted in their webpage based on which they are providing relevant data links to the searches or clicks you click. Many online webpages works on this basis of statistics. Survey are conducted. [\(Source\)](#)

2) Exit Polls:

Most of the elections exit polls are conducted with the help of Statistic and sampling data. In recent days, the analogy used by statistic experts predicts the Election results most accurately. Recent exit polls are almost 90-95% accurate. And also used in share markets to predict the direction of stocks flow and also in Crypto currency blockchains.

3) Weather Forecast:

The Meteorology Department all over the world have become much more sophisticated using scientific Statistics. The data is retrieved from various sources all over the places, satellites, ground sensors, radars etc and all are handled statistically in a structured way and predictions nowadays are completely flawless.

4) Air pollution:

Different AQI monitoring tools are located all over the places or zones exposed to Air Pollution. And from the data collected, the Statistical tools were used to interpret and model air pollution data. The prediction includes, overall different component of air particles, like No₂, So₂, PM₁₀, Pm_{2.5} etc..and respective effects on human health hazard and global environment. Necessary precautions and cautionary advices are formulated well ahead of critically bad Air Quality Index, using statistical tools. And awareness is created.

5) Covid-19 Vaccine Trials & pandemic situation Analysis.

Using the statistical data, the propagation or status of Pandemic in all over the world are analysed time to time. And in the lines of preparation & administrating of vaccines,

the different combinations of component structures and its effects are also numerically evaluated based on the statistics of the behaviour of certain drugs over the period of time.