DSC5211B : Analytics for Consulting: AY 2016-17 : Semester 2

Background and Introduction to the Course

In today's world where customer is the king, a customer is flooded with choices (whether it is, milk in a super market shelf or course options in a university or information when searched through search engines like Google.) We are facing an entirely new scenario- instead of dearth of data, we have too much of data.

In such situations some of the giants like - *Netflix, Marriott's, Boston Red Sox, Capital One or Amazon* –all of them had one common denominator- all excelled in their ability to manage their data, make sense out of data and strategize based on data. They were masters of **data analytics**. They could successfully use data analytics as a strategic competitive tool. This was first brought to focus by Davenport in his book 'Competing on Analytics'.

Thomas Davenport, in his article titled "Competing on Analytics" in Harvard Business Review, 2006, has said "*Some companies have built their very businesses on their ability to collect, analyze and act on data. Every company can learn from what these firms do.*"

Analytics has become a key tool to tackle a whole range of business problems- be it pricing, selecting which market to launch a product, deciding what storage capacity to build or planning when to start or stop production.

Course Objectives

The focus of this course is learning Analytics – data based decision making – the art of analyzing, making sense out of and strategizing from data - whether you are flooded with or when faced with little data.

The belief in this course is Analytics talent in 21st century is as important and significant as programming language was in 1980's and 1990's.

We will address the course from a consulting perspective – as we deal with a wide range of industry segments, as well as varied interactive functional areas and approach situation. We will address the issues as a consultant would address it using the gamut of analytics tools.

Course Plan

We will, through the sessions, handle varied decision making situations - situations involving strategic decisions with lots of data as also with very little data.

The course will encompass all relevant aspects of Business Analytics – viz.

- Descriptive Analytics
- Inferential Analytics
- Predictive Analytics and
- Prescriptive Analytics.

We will dwell into detailed aspects of data / decision modelling tools like linear programming, Monte Carlo simulation etc. as well as forecasting, guesstimating and predictive modelling tools. During the course, we will use extensively Microsoft Excel as the analytics support tool.

As a part of the course the student will undertake analyzing some live data going through the entire gamut of compilation, analysis and decision making.

Assessments

This is a 100% CA course.

Component	**Weight**
Individual assignment	10%
Group work and submission	10%
Class group presentation	10%
Group analytics project	20%
Final individual examination - 13th week Saturday	50%
Total	**100%**