



Institute of Rural Management Anand

Certificate Course on Business Analytics for Managers

September 4 - October 31, 2021

Course Co-ordinators:

Prof. Prashant Premkumar Nair

Prof. Jimut Bahan Chakrabarty

Prof. Rajeev A

About the Programme

How would you analyse a business problem with huge data? Does your reluctance to handle such problems arise from your aversion to multiple formulae and complex models? Statistical thinking is neither about using equations nor is it about using complex models to analyse data. It is much more about intuitive thinking than most people realize it to be. Statistical thinking is a way of understanding a complex world by describing it in relatively simple terms that nonetheless capture essential aspects of its structure as well as provide us some idea of how uncertain we are about our knowledge. Through this course, we will develop an intuitive understanding of the underlying reasons for variation in the data with the least possible reliance on formulae and complex models. This certificate course is designed to help you develop your skills in handling data, processing it for information, generate inferences from the processed information, interpret the factors causing variation in the data and make predictions. Armed with these tools a manager will be better equipped to take decisions in the wake of uncertainty.

Course Description

Module-1: Hello Data: The Basics

When we have data at our disposal, preparing the data for analysis and extracting some useful information at the same time becomes a challenge. In this module, we prepare the data for further analysis and make sense of the data by constructing appropriate summary measures, tables, and graphs. This module will demonstrate how to use the basic statistical tools and quantitative reasoning to extract meaningful information from the data and communicate your findings effectively.

Module-2: Familiarity with Uncertainty

Nothing makes a businessperson more nervous than not being able to anticipate customer demand, supplier delivery dates, or their employee's output. In the world of business, one often witnesses a spectrum of potential but uncertain possibilities. This module provides a framework to understand the language of uncertainty and how an informed decision can be taken acknowledging the uncertainty associated.

Module-2.1: Dealing with Uncertainty: Practical Applications

Decision tree is the most powerful and popular tool for classification and prediction. Decision trees are frequently employed in determining a course of action in finance, investing, and strategic decision making. In the field of decision analysis, decision trees are incredibly useful tools to lend a systemic and visual approach to an otherwise complex decision. With the help of problems and caselets, we will discuss the application of decision trees in day-to-day managerial decision making.

Module-3: Guessing Scientifically

If you are launching a new product in a particular segment, you might want to know the proportion of customers who have tried, or intend to try, a new product. It always helps a business to grow if it can scientifically guess one or more characteristics of a given population. This module will reveal the power of basic inferential techniques which can make valid generalizations from a small sample.

Module-4: Prediction and Relationships

How does a company's current sales level depend on its current advertising levels, the advertising levels of the competitors, and the company's past sales level? Understanding how different variables in our business processes are related to each other helps us predict and improve our business performance. In this module, we will explore the relationship between variables and learn to visualize, describe, and quantify the relationship and make a better prediction for the future.

Module-4.1: Forecasting

Demand Forecasting is one of the most important functions of the marketing and operations functions in an organization. There are various statistical methods available for forecasting demand. This module aims to equip managers with necessary understanding of various types of demand variations and methods to forecast while minimizing the errors.

Pedagogy

The course will entail lectures, classroom discussions, games, classroom exercises, group activities, real-life examples, and business cases to reinforce theoretical concepts.

Hands-on training will be provided to use these tools and techniques. Participants are requested to send the profile of their organization. Early receipt of the profile will help the course co-ordinators to provide meaningful inputs to participants individually during the course.

Who Should Attend

This course is designed specifically for junior, and middle level executives who deal with a lot of data to help them improve their productivity. This course will also be helpful for officers from manufacturing and service organizations in private and public sector undertakings, cooperatives, sectors such as franchising, wholesaling, restaurant, retailing, banking, entertainment, news media, leisure industry, transportation, courier, internet marketing and operations, consulting, investment advice and service.

Duration

18 sessions of 90 minutes each over a duration of two months. Sessions will be held between 02:00 pm and 06:00 pm on Fridays and Saturdays.

Course Fee

INR 50,000 (inclusive of 18% GST) per Indian participant
US\$ 2000 (inclusive of 18% GST) per overseas participant
The fee should be paid in advance through NEFT/ RTGS.

Delivery in Virtual Mode

The sessions will be conducted online through Zoom platform. To access the sessions, participants are required to have access to a personal computer/ laptop with a webcam and a stable internet connection. Participants are also expected to have access to Microsoft Office for various exercises during the training programme.

Certification

Certificate will be issued on successful completion of the course which will be established after assessment of the participants apart from attendance records.

Deadline for Confirmation of Participation: August 15, 2021