

MDP 24: Data Analysis with R-Programming

Introduction

Managers in today's global and fast changing environment face lot of challenges. They are responsible for achieving targets of their profit centers. Their key deliverables can be conducting data mining, arranging the data, doing data analysis, come with data interpretation and finally recommendation for the final decision making. The managers develop all strategies based on data analysis.

Objectives

- To become comfortable with data handling and its analysis
- Sharpen the statistical understanding with its application in real world
- To play with data and recommend the new insights to participants
- Able to offer services as Data Analytics (DA) expert to market domestic and globally

Contents

The program will cover the following aspects:

Context and rationale of origin of Data Analytics (DA)

- Role Research and DA
- Research Process and Proposal Development
- What is Data Analytics (DA)
- Origin of DA
- Use of R-Programming
- Benefits of R-Programming

Evaluation of R-Programming and its Comparison with other Tools

- Evaluation of R-Programming
- How to down load R- Console and Studio
- Merits of R-Programming

Hands on R-Software and compare it with SPSS using demo during the session

Descriptive Statistics

- Focused on existence of various types of data, dealing with frequency distributions, measures of central tendency, dispersion.
- t test, f test and chi square testing

Hands on R-Software: descriptive statistical analysis

Hypotheses Testing

- Using descriptive statistical tools

Application of Advance Statistics

- Application of simple and multiple linear regression
- ANOVA
- Logistic regression
- Time Series
- Random Forests

Hands on R-Software: Advance statistical analysis

Report Writing

- Types of Reports

- Art of writing the report

Pedagogy

The program would use a mix of pedagogy such as discussions, case method, presentations etc.

Target Participant Profile

The program is meant for Managers and General Managers of large and medium organization.

Duration

3 days

Program Directors



Dr. Neeraj Singhal is an Associate Professor in the area of Strategy and International Business. He has around 20 years rich experience in industry as well as academia. He is an alumnus of IIM Ahmedabad and IIM Indore. He is an established researcher also who has published in national and international journals of repute.



Dr. Rajneesh Mahajan is an Associate Professor in the area of Marketing He has around 23 years rich experience in industry as well as academia. He is DAAD Fellowship holder to carry out PhD work at Georg August University, Göttingen, Germany and first Ph.D awardee of Delhi Technological University, Delhi. He is an alumnus of IIFT and IMI Delhi, India. He is an established researcher also who has published in international journal of repute. Previously he was worked in Business Development and Supply Chain Management with Mother Dairy, Fritolay India (PepsiCo.).