



# BUSINESS ANALYTICS & DATA MINING MODELING USING R PART II

## **PROF. GAURAV DIXIT**

Department of Management studies  
IIT Roorkee

**INTENDED AUDIENCE:** UG & PG engineering students: all branches, MBA students, Professionals working in or aspiring for Business Analyst, Data Analyst, Data Scientist, and Data Engineer roles

**PREREQUISITES:** Business Analytics & Data Mining Modeling Using R

**INDUSTRY SUPPORT:** Big Data companies, Analytics & Consultancy companies, Companies with Analytics Division

## **COURSE OUTLINE :**

Objective of this course is to impart knowledge on use of data mining techniques for deriving business intelligence to achieve organizational goals. Use of R statistical computing are included to build, assess, and compare models based on real datasets and cases with an easy-to-follow learning curve.

## **ABOUT INSTRUCTOR :**

Prof. Gaurav Dixit is an Assistant Professor in the Department of Management Studies at the Indian Institute of Technology Roorkee. He earned his doctoral degree from the Indian Institute of Management Indore and an engineering degree from Indian Institute of Technology (BHU) Varanasi. Previously, he worked in Hewlett-Packard (HP) as software engineer, and Sharda Group of Institutions as project manager on deputation. Gaurav's research focuses on information technology (IT) strategy, electronic commerce, electronic waste, data mining, and big data analytics and provides insights on business and social value of IT. His research has appeared in quality journals & conferences, including Resources, Conservation and Recycling, Journal of Global Information Technology Management, Sustainable Production and Consumption, Journal of Information Technology Management, DIGITS conference, India Finance Conference, Indian Academy of Management conference, and Academy of Management conference.

## **COURSE PLAN**

**Week 1** : Unsupervised Learning Methods : Association Rules

**Week 2** : Unsupervised Learning Methods : Cluster Analysis

**Week 3** : Time Series Forecasting: Understanding Time Series and Regression-Based Forecasting Methods

**Week 4** : Time Series Forecasting: Smoothing Methods and Conclusion