

# WORKSHOP ON HR ANALYTICS USING 'R'

**AT SCMHRD,  
HINJAWADI, PUNE**



  
**SYMBIOSIS INTERNATIONAL UNIVERSITY**



## HIGHLIGHTS OF THE WORKSHOP

- Covers all industry-relevant analytics techniques with the right mix of theory and hands on sessions. Learn to use R and RStudio from Day 1!
- Well-paced sessions to make the learning experience less taxing.
- Workshop Duration: 3 days – Ideal for understanding basic and applications of analytics techniques and practicing all techniques learned during the course of workshop itself.

## ABOUT SCMHRD

Born out of the vision of Dr. S. B. Mujumdar in 1993, **SYMBIOSIS CENTRE FOR MANAGEMENT & HUMAN RESOURCE DEVELOPMENT (SCMHRD)** is one of the renowned B-Schools of the country. SCMHRD was initially known primarily for its HR program which is deemed to be the third best in the country. But in recent times, it has also carved a special niche for itself in the fields of Marketing, Finance, Operations, Business Analytics and Infrastructure Management. Also SCMHRD is the first B-School in the Symbiosis family pursuing AACSB accreditation, and it is now in the final stages for it.

Analytics as a field is gaining importance in all areas of management. We have tried to combine our expertise in the area of human resources and analytics. This has led to the current offering of a program in HR – Analytics.

## HR ANALYTICS

There has been a growing awareness about the use of Analytics in the Human Resources domain. The goal of Human Resource Analytics (HR Analytics) is to provide an organization with insights about employees in order to facilitate the achievement of business goals efficiently.

With the advent of large amounts of data, this goal has become more challenging – while many organizations are sitting on vast amounts of data about their employees, turning that data into useful information presents a challenge to those not versed in the techniques that Analytics can provide.

## R AND ANALYTICS

R is a mature open source tool for statistical analysis that incorporates the latest cutting-edge algorithms for data analysis. It is eminently suited for the kinds of analyses that HR professionals require

– to name a few:

- Employee Profiling and Segmentation
- Employee Attrition and Loyalty Analysis
- Employee Sentiment Analysis
- Sophisticated data visualization techniques

With its ability to read data from practically any existing data source, R provides a complete Analytics solution for the discerning professional. The most recent survey by Rexer Analytics shows that the tool use of R exceeds that of the next three most popular software combined!

R has the reputation of being difficult to learn, but this workshop will quickly get the participants familiar with the most common tasks they need to do using R with the kind of data that HR professionals handle every day.

## OBJECTIVES OF THE WORKSHOP

The workshop will aim to provide a practical understanding of the core ideas behind HR Analytics. This will include the basic statistical ideas that form the basis of the techniques used. These sessions will be reinforced by hands on sessions with R using RStudio. No prior knowledge of R will be assumed. The basic ideas from Statistics and Probability Theory that underpin the techniques used will be introduced from scratch. The practical sessions will include the use of real-life datasets.

## TOPICS COVERED IN THE WORKSHOP

- Fundamentals of Statistics
- Introduction to R (and R Studio)
- Working with DataFrames in R
- Introduction to Analytics : Predictive models
- Classification : predicting employee retention
- Cross Tabulation of data
- Regression Analysis and related models
- Survival Analysis
- Text Analysis
- Sentiment Analysis with text
- Other Tools and Technologies

## DELIVERABLES

- Certificate for successful completion of the workshop
- Enable to use the HR tools immediately at workplace

## RESOURCE PERSON'S PROFILE



**Dr. Ravi Kulkarni (PhD)**  
**Professor, Analytics**  
**Teaching and industry experience is of 35 yrs.**

He is a data scientist and an applied mathematician. He has vast experience in teaching statistical tools. He is also the mentor of the MBA - Business Analytics program of SCMHRD. He has conducted numerous workshops on applications of statistical modeling and believes in teaching through examples that illustrate the core concepts involved in data analysis.



**Dr. Manish Gupte (PhD)**

He has a master degree and a PhD in economics from Purdue University, USA. He is the Chief Data Scientist of Data Metica and also the founder of Mechanism Analytics. He is associated with various organisations as a consultant data scientist. He has also been a visiting professor at the Grand Valley State University, Michigan USA before joining Oracle as a senior scientist in Massachusetts, USA.

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