Smart Analytics: Informed Decision-Making Using R and Python

BA03

Program Overview

There is enormous amount of data that are being generated every min, that can be analysed with suitable techniques to make better forecasts. Typical examples would be frequent items purchased, restaurant reviews, movies watched and several others that can be analysed by relevant company managers to gain better understanding of individuals preferences and choices. However, managers require better tools and techniques for analysing such raw data to gain insights. R and Python are two such tools that are available freely with a variety of packages and modules, allowing us to perform in-depth analysis with a wide flexibility to gain a better understanding. Such in-depth analysis in turn can help managers to develop strategies, targeted to specific market segments. For example: R and Python allows several packages that can help managers to understand a trend in a data set through selecting suitable visualization through graphs. Furthermore, people post pictures of restaurants and their preferred food images on social media, that when analysed appropriately would aid in inventory management for restaurants. Online reviews are a great source for understanding people's behaviour and therefore an in-depth analysis can help managers to understand people's preferred food items, tourism destinations and several others.

Objectives

- Improved clarity regarding handling of different forms of data in R and Python
- Improved comprehension towards the flexibility offered by different packages in R and Python
- Analysing different data through appropriate visual tools.
- Enhanced understanding of online reviews to make improved decisions

Contents

- Introduction to R
- Data Visualization
- Logistic Regression
- Discriminant Analysis
- Clustering
- Text Mining
- Introduction to Python
- Linear and Multiple Regression
- Principle Component Analysis
- Decision Tree
- Association Rule
- RecommenderSystems

Pedagogy

The program uses practical datasets, case studies and hands-on sessions to learn the important packages in R and Python for handling different data types and making inferences.

Key Takeaways

Participants will be able learn R and Python to gain better insights.

Who should Attend?

This program is meant for working professionals who wants to make better decisions, using a variety of free tools like R and Python. The programme is for professionals who wants to make a career in data science and analytics.

Program Director

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