

1. Predictive Analytics: Concept, Use Cases & Most Popular Tools

I. Introduction to Predictive Analytics

- What is Predictive Analytics?
- Evolution from Descriptive → Diagnostic → Predictive → Prescriptive Analytics
- Key Benefits and Challenges

II. Predictive Analytics Techniques & Concepts

- Supervised vs. Unsupervised Learning
- Regression Analysis (Linear, Logistic)
- Classification (Decision Trees, Random Forest, SVM)
- Time Series Forecasting
- Anomaly Detection

III. Industry Use Cases

- Predicting Customer Churn (Telecom, Banking)
- Demand Forecasting (Retail, Supply Chain)
- Fraud Detection (Finance, Insurance)

IV. Popular Tools for Predictive Analytics

- Python (scikit-learn, Pandas)
- Power BI