



SNS COLLEGE OF TECHNOLOGY

Coimbatore-35
An Autonomous Institution



Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A+' Grade
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

COURSE NAME : 19CSO302 & Introduction to Data Analytics

III YEAR/ VI SEMESTER

UNIT – I INTRODUCTION

Topic: Data Analytics

P.Poonkodi

Assistant Professor

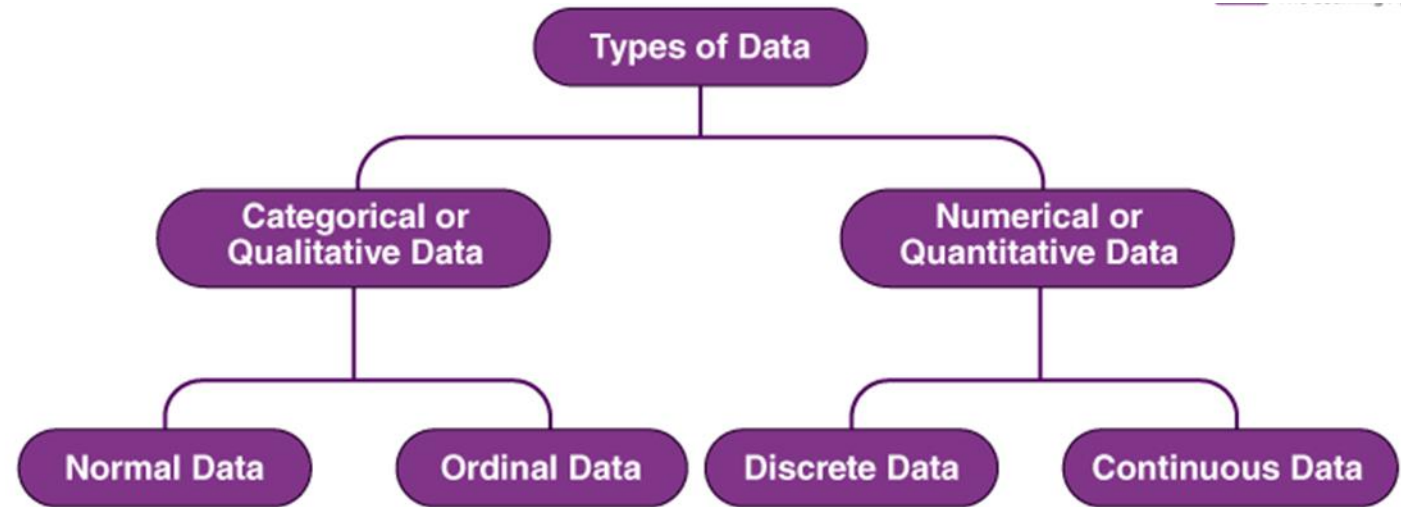
Department of Computer Science and Engineering





Data Analytics

- Types
- Characteristics
- Tools
- Applications





Data Analytics

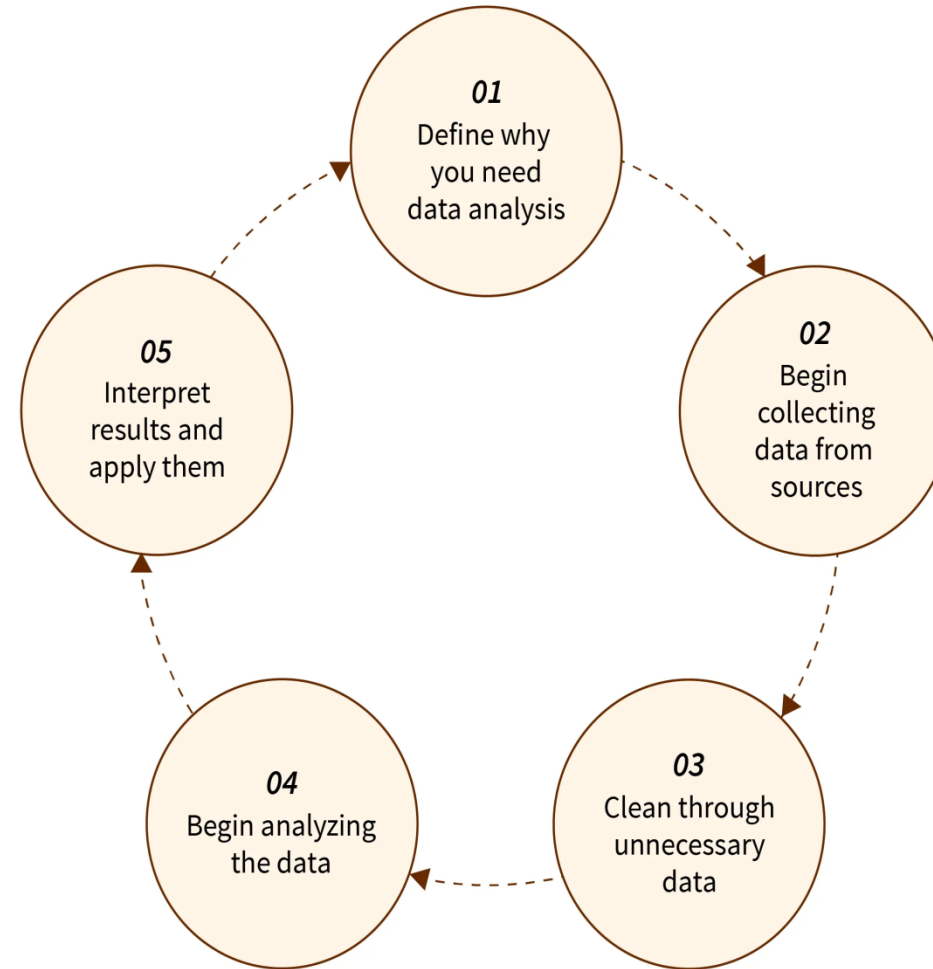


- Data Analytics is the field of **collecting, processing, and analyzing datasets** to detect underlying trends and patterns that can conclude, make predictions, forecast, and drive decision-making.
- **Data Analytics** should not be confused with **Data Analysis**. These terms can look similar but they are not the same. Data Analysis is part of the Data Analytics field. Besides Data Analysis, the Data Analytics field also includes Data Science and Data Engineering.
- So, Data Analysts, Data Scientists, and Data Engineers, all are part of the Data Analytics field and work towards a common goal which is processing the data and making businesses data-driven in their decision-making



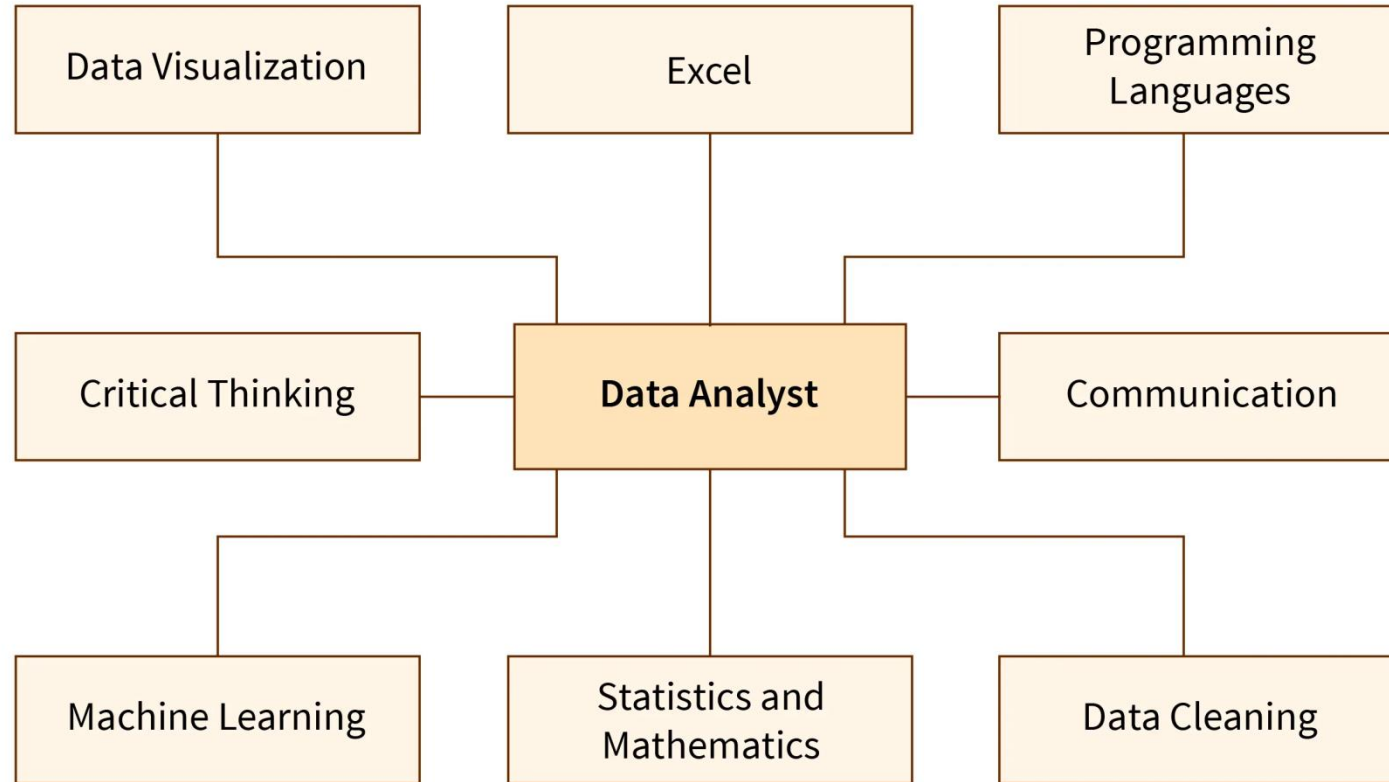


Data Analytics-Stages





Data Analytics Skill





Types



- 1. Predictive data analytics**
- 2. Prescriptive data analytics**
- 3. Diagnostic data analytics**
- 4. Descriptive data analytics**





Data Analytics Tools



- **Tools used to describes about collection of maps, diagrams and charts to visualize data**
 - **Data Mining**
 - Rapid Miner
 - Orange
 - Knime
 - **Data Visualization**
 - Tableau
 - Google Charts
 - Data Wrapper
 - **For Business**
 - MSBI
 - Google Analytics
 - Spotfire





Applications



- **Delivery Logistics**
- **Health care industry**
- **Transportation**
- **Fraud detection**
- **Security**
- **Customer interaction**
- **Education**
- **Excel Finance**
- **Python**





References



- Runkler TA, “Data Analytics: Models and algorithms for intelligent data analysis”, Springer, Third Edition 2020



