

SNS COLLEGE OF TECHNOLOGY



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

Department of Computer Science and Engineering

Course Code & Title : 23AD0201 - Data Science Fundamentals

III YEAR / VI SEMESTER - EEE

Unit 1 - INTRODUCTION TO DATA SCIENCE

Topic : Data Science Process

K.Karthikeyan AP/CSE

RECALL IN TRANSPORTATION (DATA SCIENCE PROCESS)



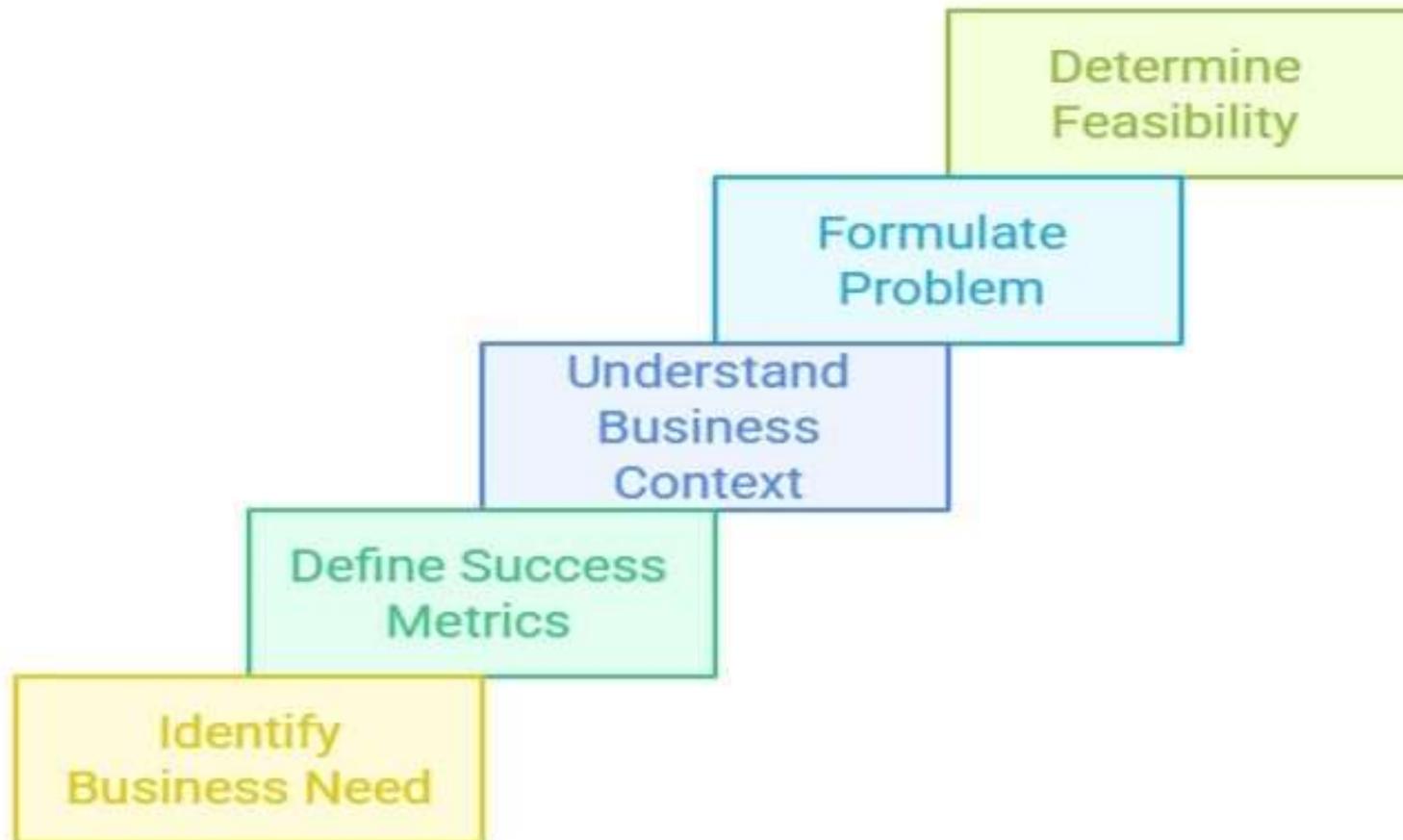
EMPATHY IN HOSPITAL MANAGEMENT (DATA SCIENCE PROCESS)



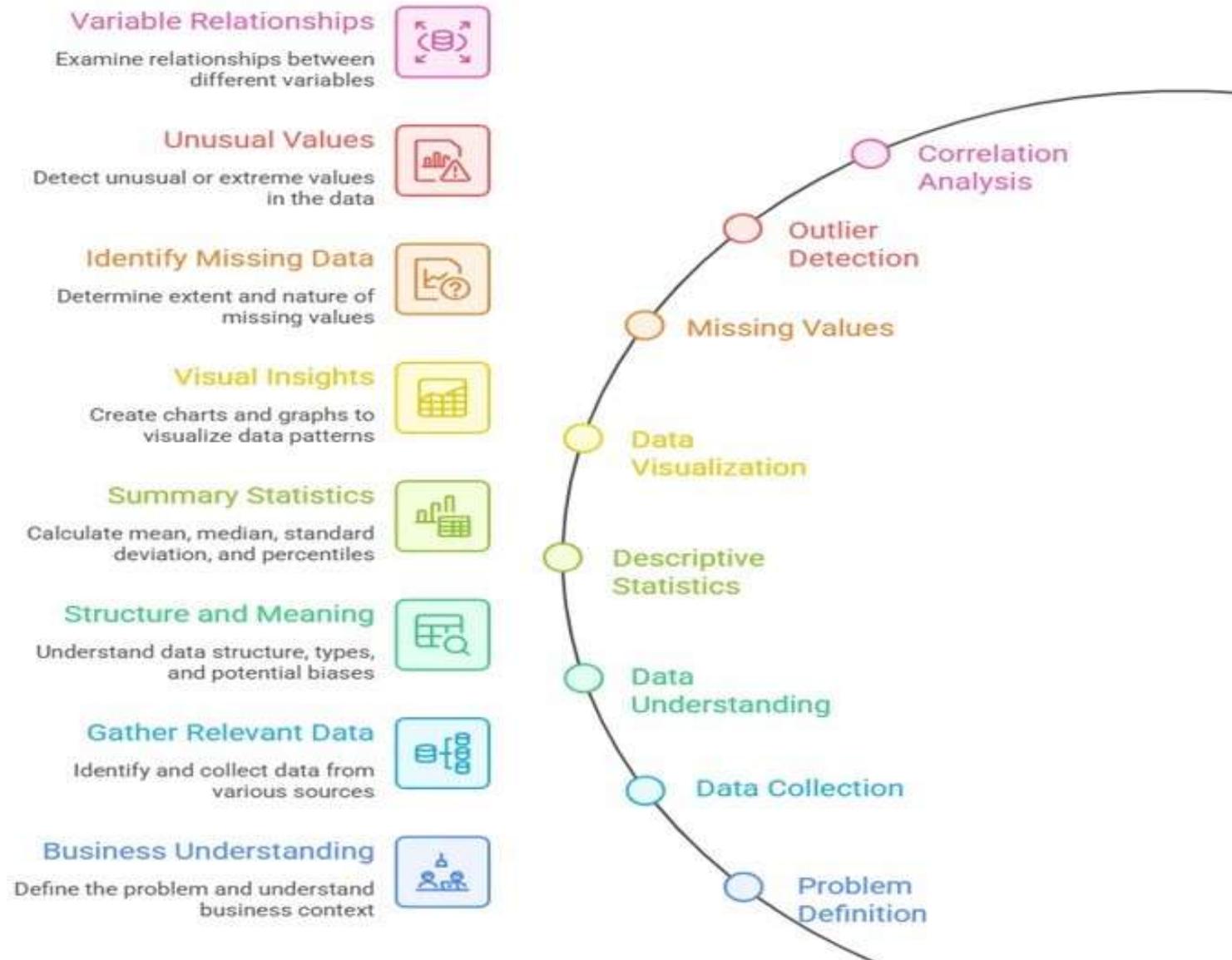
Data Science Process



Steps to Define a Data Science Problem

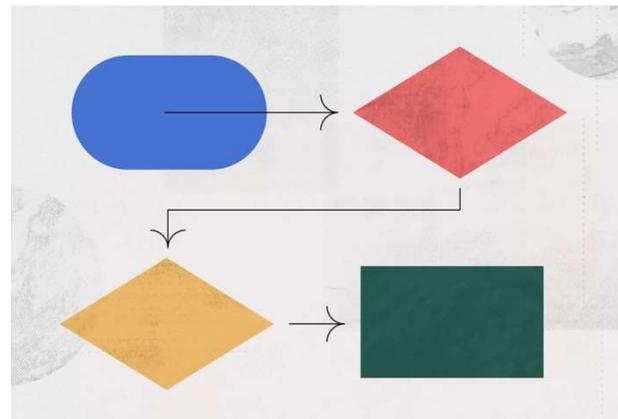
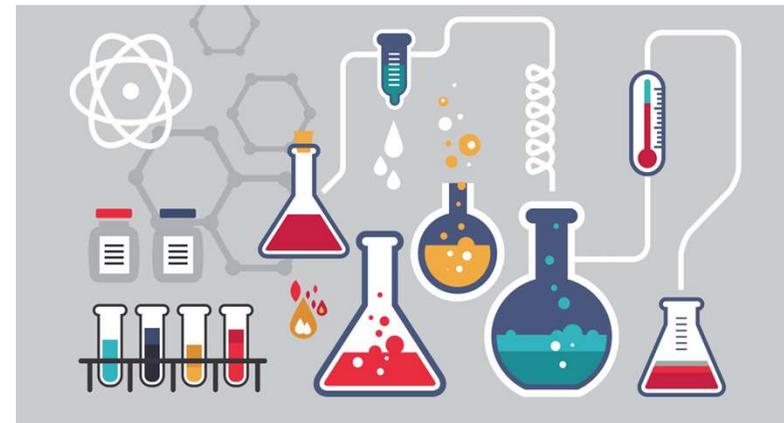


Data Acquisition and Exploration Process

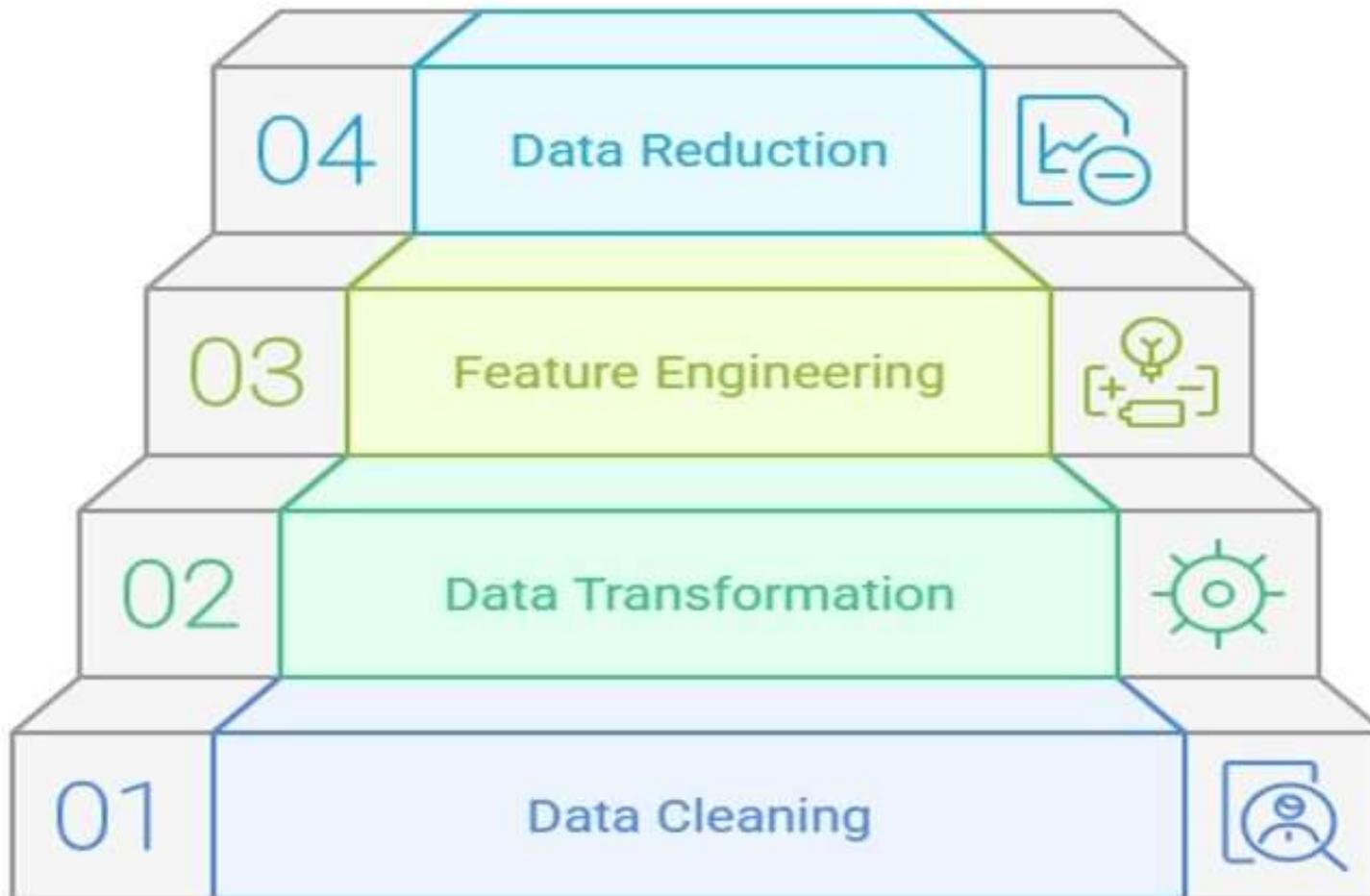


Activity

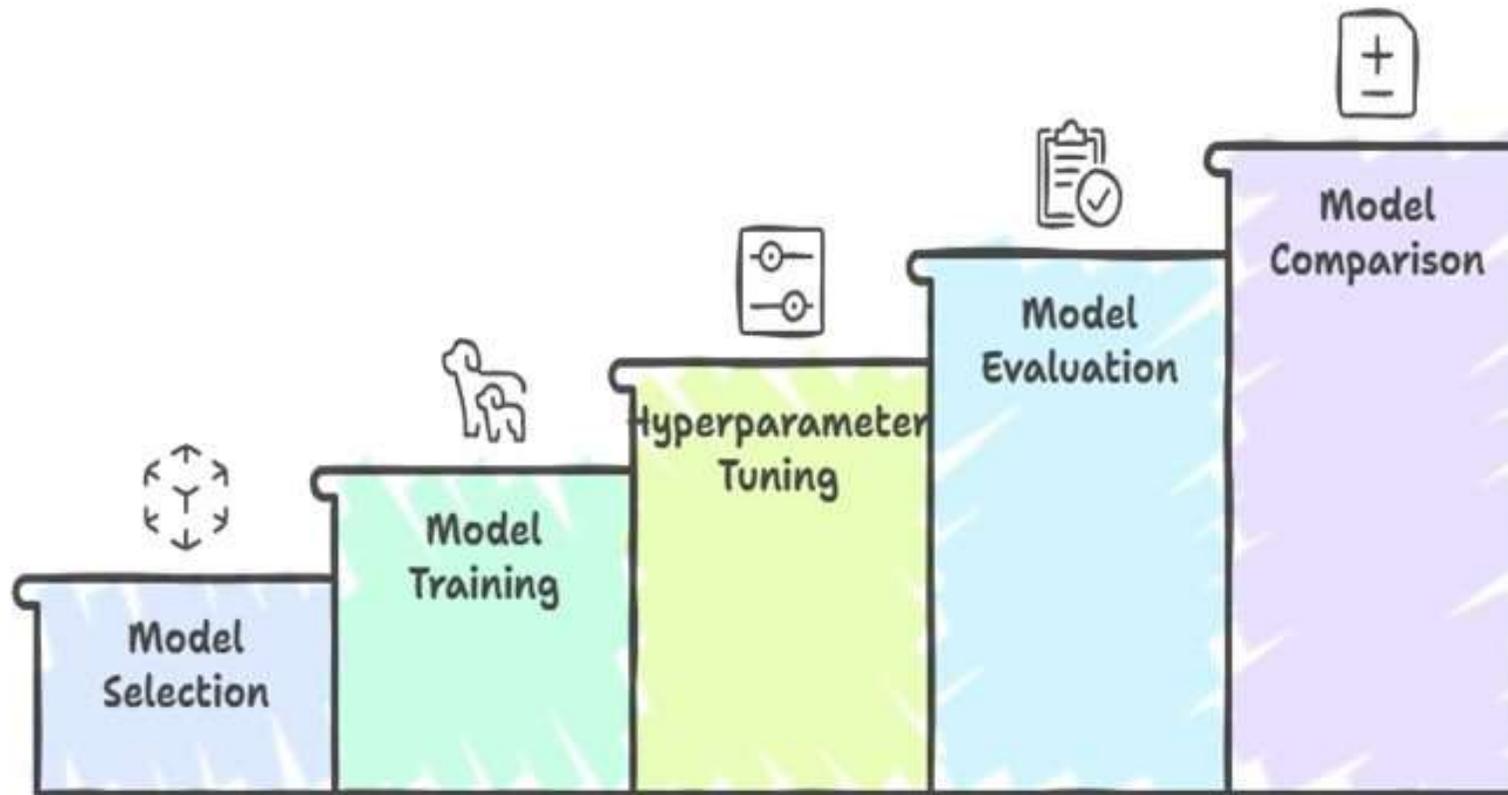
Connection



Steps to Prepare Data for Modeling



Steps to Build and Evaluate Machine Learning Models



MIND MAP



ASSESSMENT

Data Science Process – MCQs

1. What is the first step in the Data Science Process?

- A. Data Cleaning
- B. Data Collection
- C. Problem Definition
- D. Data Modeling

Answer: C. Problem Definition

2. Which step involves gathering raw data from different sources?

- A. Data Cleaning
- B. Data Collection
- C. Evaluation
- D. Deployment

Answer: B. Data Collection

REFERENCE BOOKS

1.Allen B. Downey, “Think Stats: Exploratory Data Analysis in Python”, Green Tea Press, 2014.

2.Sanjeev J. Wagh, Manisha S. Bhende, Anuradha D. Thakare, “Fundamentals of Data Science”, CRC Press, 2022.

3.Chirag Shah, “A Hands-On Introduction to Data Science”, Cambridge University Press, 2020.

4.Vineet Raina, Srinath Krishnamurthy, “Building an Effective Data Science Practice: A Framework to Bootstrap and Manage a Successful Data Science Practice”, A press, 2021.

