

MAKE YOUR 1ST STEP

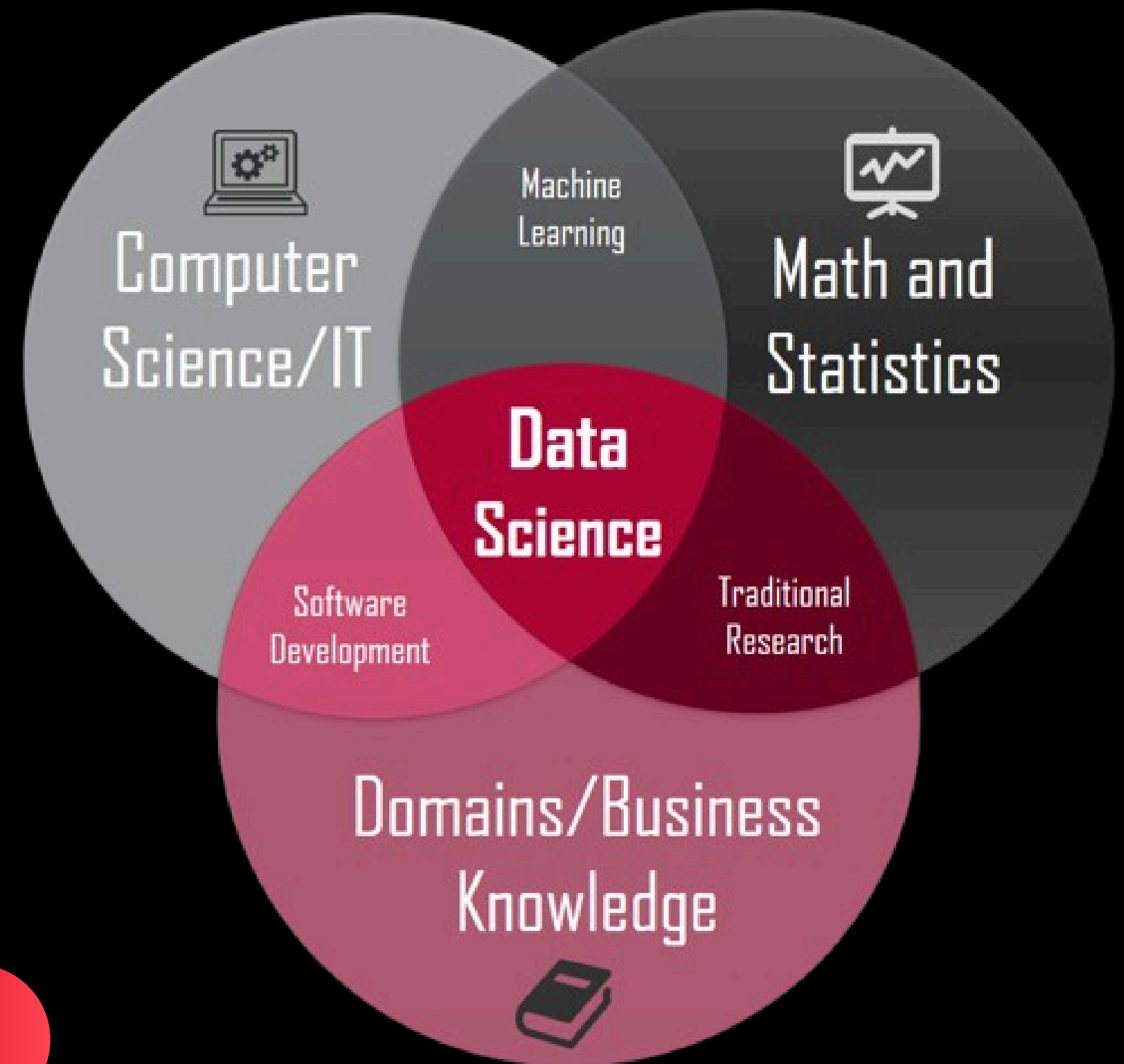
DATA SCIENCE IN ACTION: A BEGINNER'S GUIDE

A Comprehensive Overview of Techniques and Tools

By Emna Fazaa

WHAT IS DATA SCIENCE?

- Data Science is an **interdisciplinary field** focused on **extracting insights** from data by combining mathematics, statistics, computer science, and business acumen
- The goal of every data science project is to **translate** vast amounts of data into actionable **insights**.



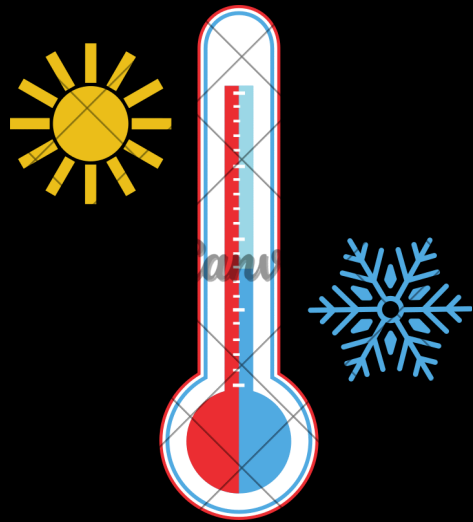
WHAT IS DATA?

INTRO

HANDS ON APP

NEXT STEP

Data Sources



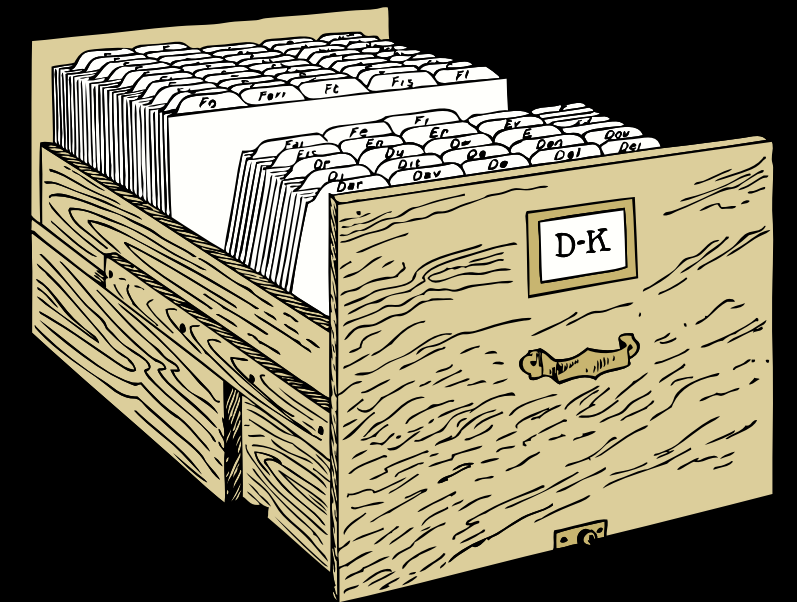
Sensors



Social Media

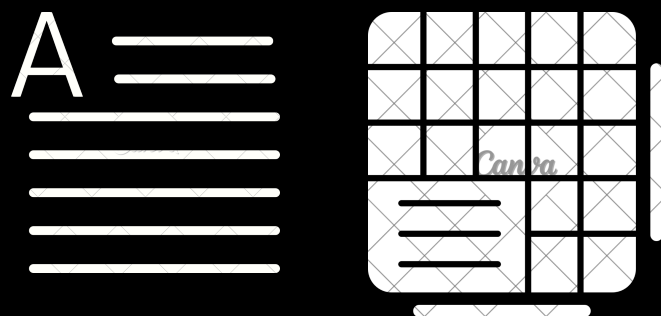


Surveys



Historical Archives

Data Types



Textual

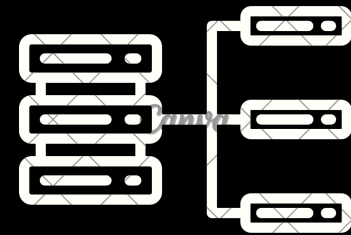


Visual

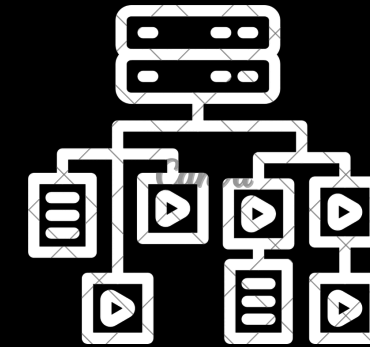


Audio

STRUCTURED VS UNSTRUCTURED DATA



Structured Data



Unstructured Data

Format

Tabular, rows and columns

No specific format

Storage

Relational databases (SQL)

Non-relational databases (NoSQL)

Examples

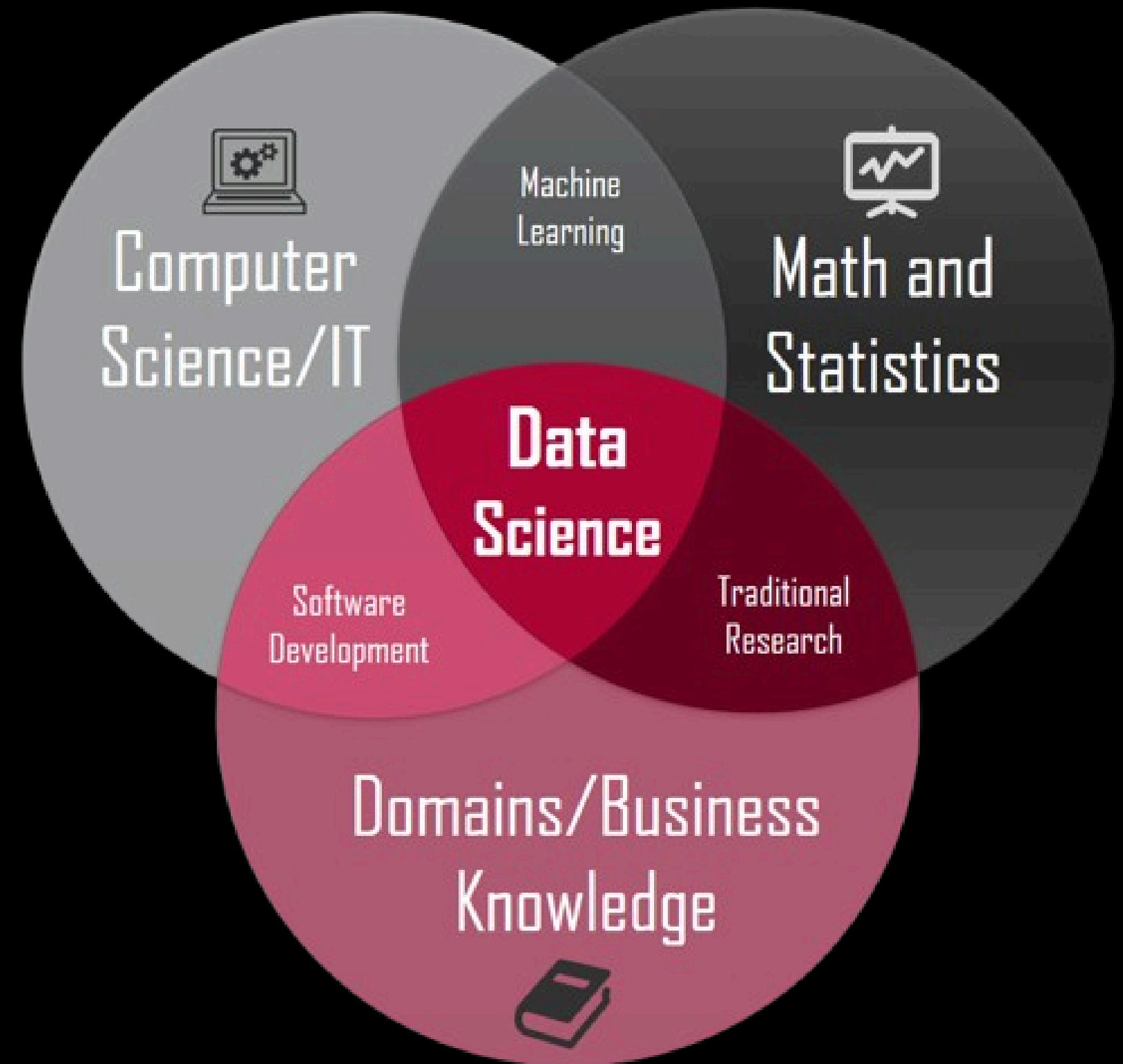
Sales , employee records

Social media posts, emails, videos



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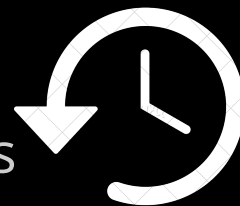
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WHY DS IS IMPORTANT ?

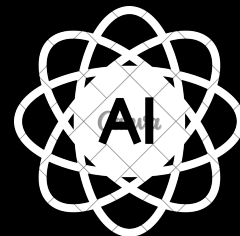
● Understanding History

- Informed Decision-Making
- Identifying Trends and Patterns



● Automation & Problem solving

- Predicting disease outbreaks
- Optimizing supply chains



● Predicting the Future (Forecasting)

- Enhancing Customer Experiences
- Operational Efficiency
- Competitive Advantage



● Application Fields

- Healthcare: Predicting disease outbreaks or optimizing treatment plans.
- Finance: Credit scoring and risk management.
- Marketing: Targeted advertising and customer segmentation.

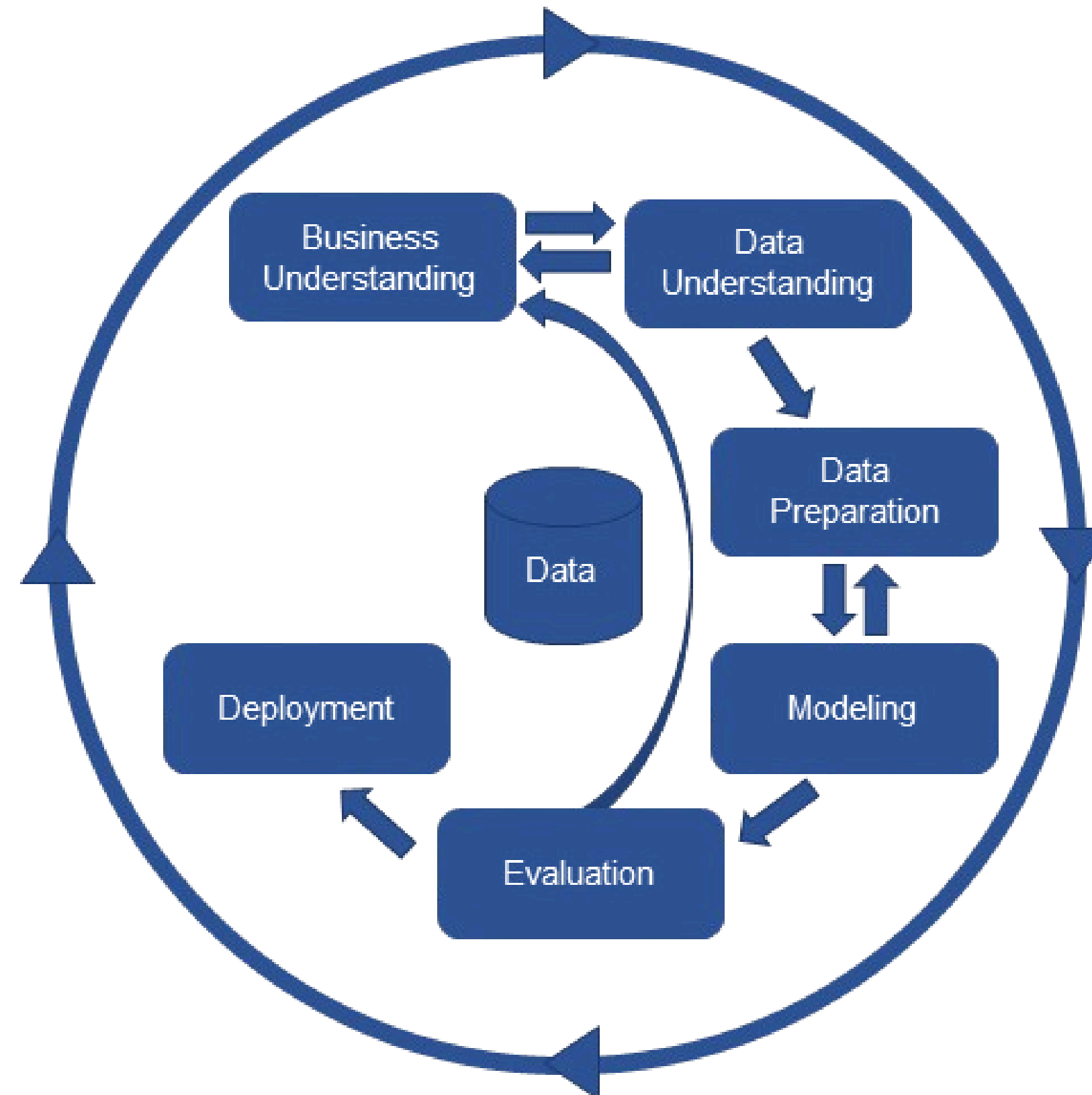


JOB ROLES

- **Data Scientist, Data Analyst, Data Engineer, Machine Learning Engineer, Business Intelligence Analyst, Data Architect, Statistical Analyst, Data Quality Analyst, AI Research Scientist..**

Best Paying Job In The World

LET'S GET OUR HANDS DIRTY !



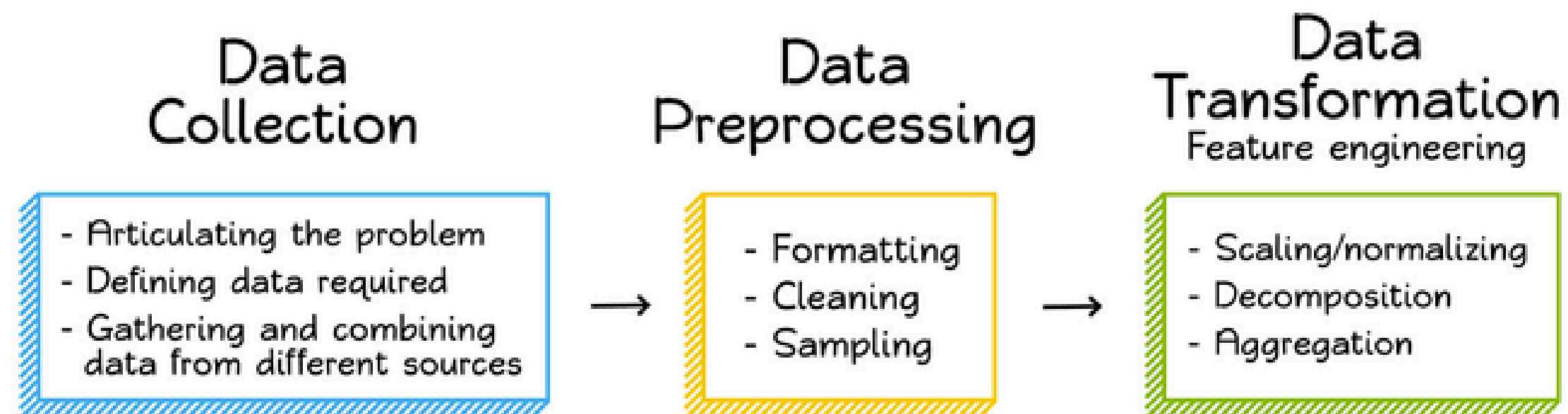


**CONGRATS YOU BUILT YOUR FIRST
DATA SCIENCE PROJECT !**

NEXT STEP ?

- Getting Familiar with Data Preparation

Data Preparation Process



Best of Luck

THANK YOU