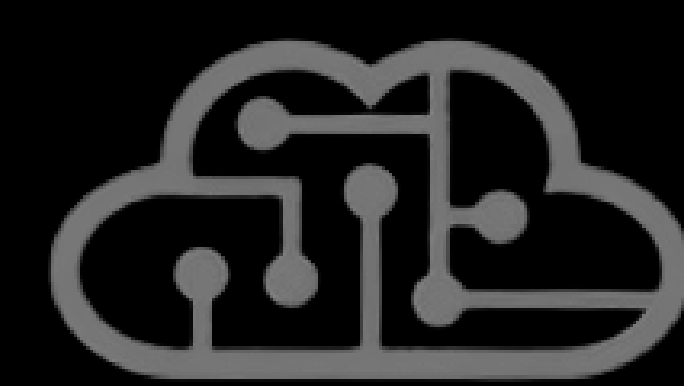




STARTING YOUR FIRST MACHINE LEARNING PROJECT





Before starting a project

We get a lot of questions before we start a project like

- How much knowledge should I have?
- Which concepts should I learn?
- How to get an idea?

How much knowledge should I have?

- Basic concepts are enough.
- Just remember what you know and what you need to learn.
- Don't worry about achieving something perfectly the first time



Which concepts should I learn?

- Machine Learning is interdisciplinary
- You don't need to be perfect at everything
- Just learn the basics which are required like Python, a bit of math and Machine Learning/Deep Learning basics for the project you are planning to do.

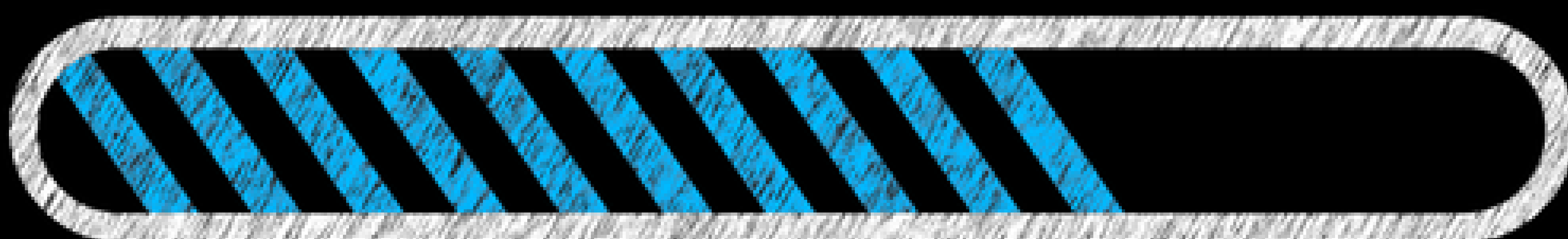


How to get an idea?

- If you are a complete beginner go with the projects which are already built by others (Learn from them)
- Check your surroundings
- Participate in hackathons, competitions like on kaggle
- Finally decide whether the problem you chose is machine learning-friendly or not.

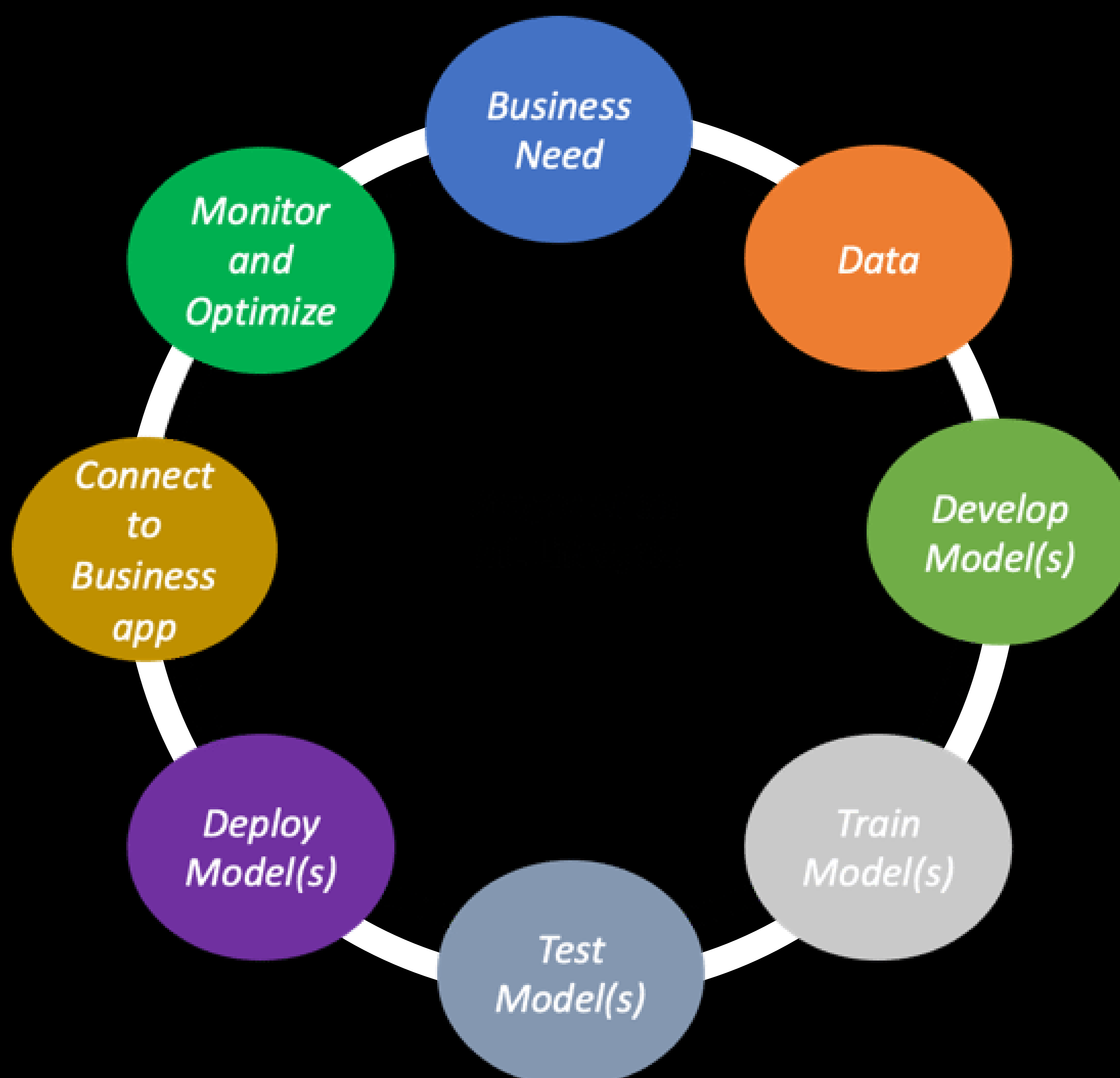


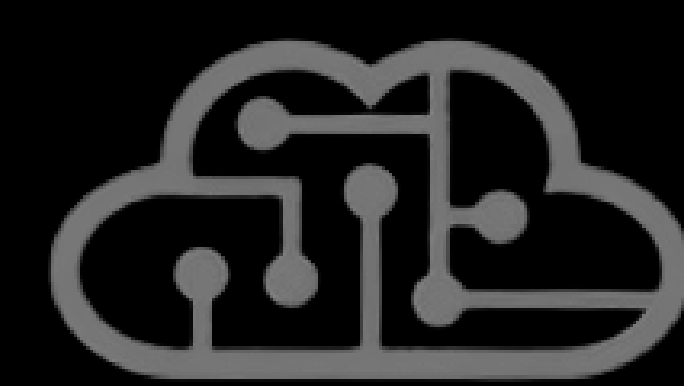
IDEA LOADING...



Project Flow

- Frame the problem
- Get the data
- Explore and Prepare the data
- Modelling
- Deploy



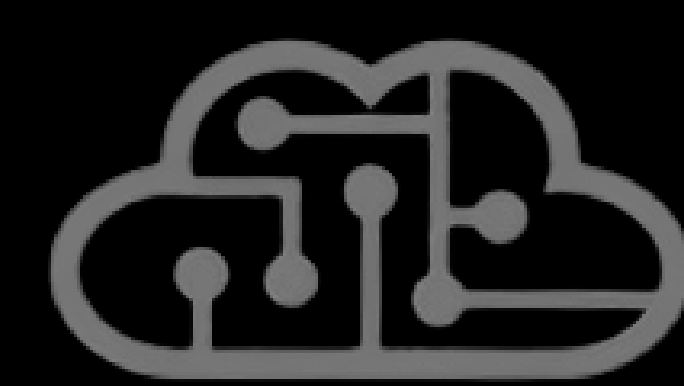


Frame the problem

- State the problem you are trying to solve (It is not an easy step)
- Define the business objective
- Determine the target variable and potential features
- Success metrics

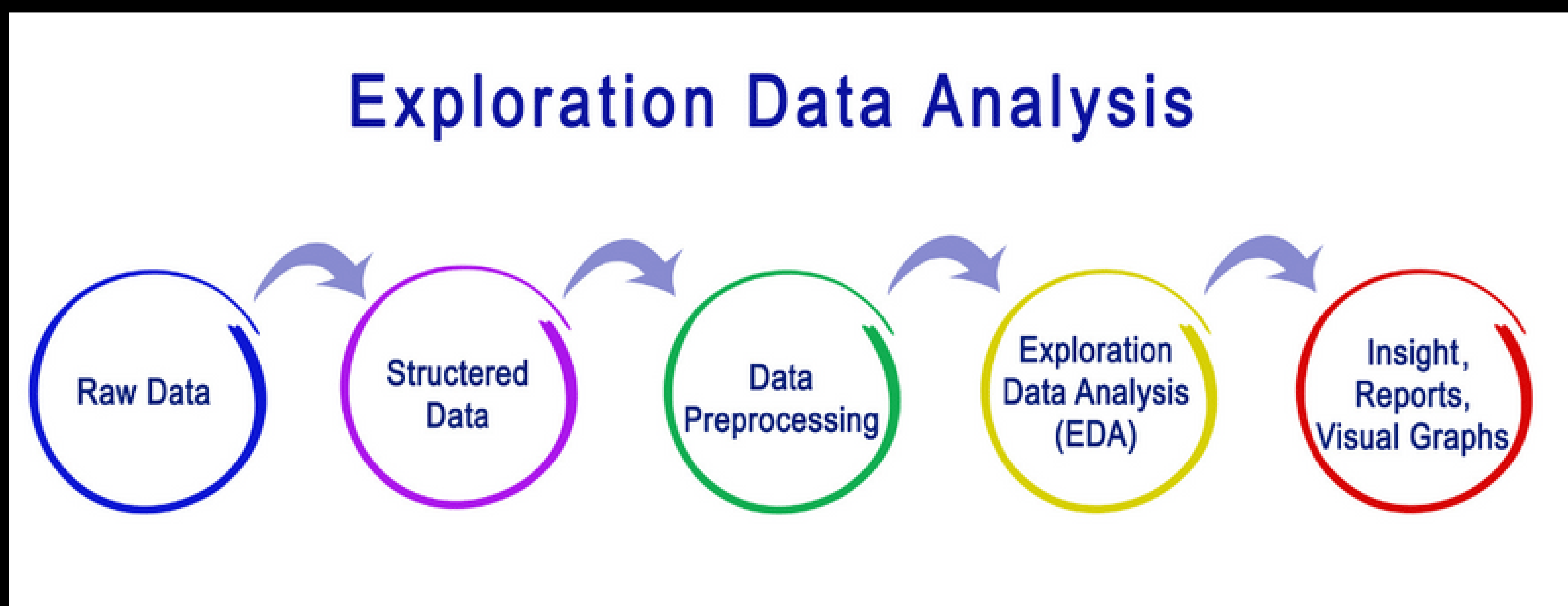
Data

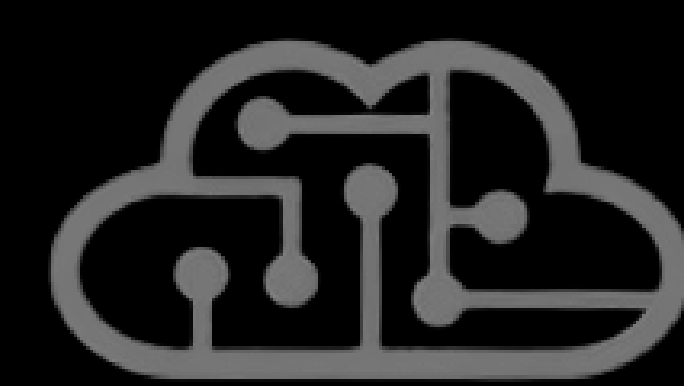
- How to get the data?
- Check for the availability of the same data or similar data on kaggle or any other websites.
- Create your own data



Explore and Prepare the data

- The goal of this step is to try and gain insights from the data.
- You can also do an in-depth analysis of the data.
- Time to apply data transformations you identified as being worthy in the previous step. (Data cleaning, feature selection & engineering, feature scaling etc...)





Modelling

- Which algorithm to choose? (Hit and trail or choose the one which suits the data (a bit of domain knowledge is required))
- Train your model
 - Fine-tune it
- Evaluate your model
- Debug the model

Deploy

- Make it accessible to everyone
 - Web application
 - Mobile application
- Consider components other than ML (Data pipelines, devops etc...)