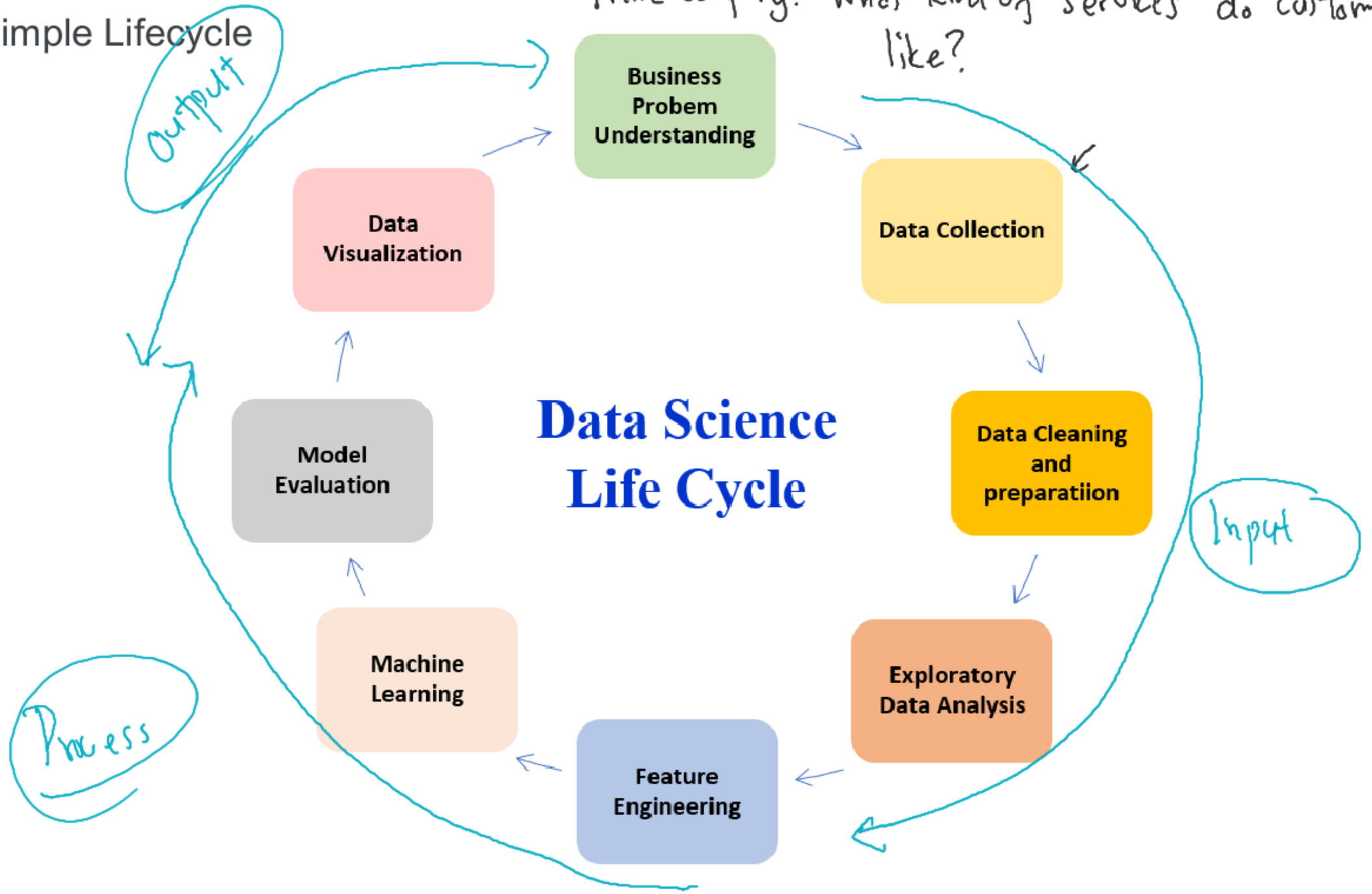
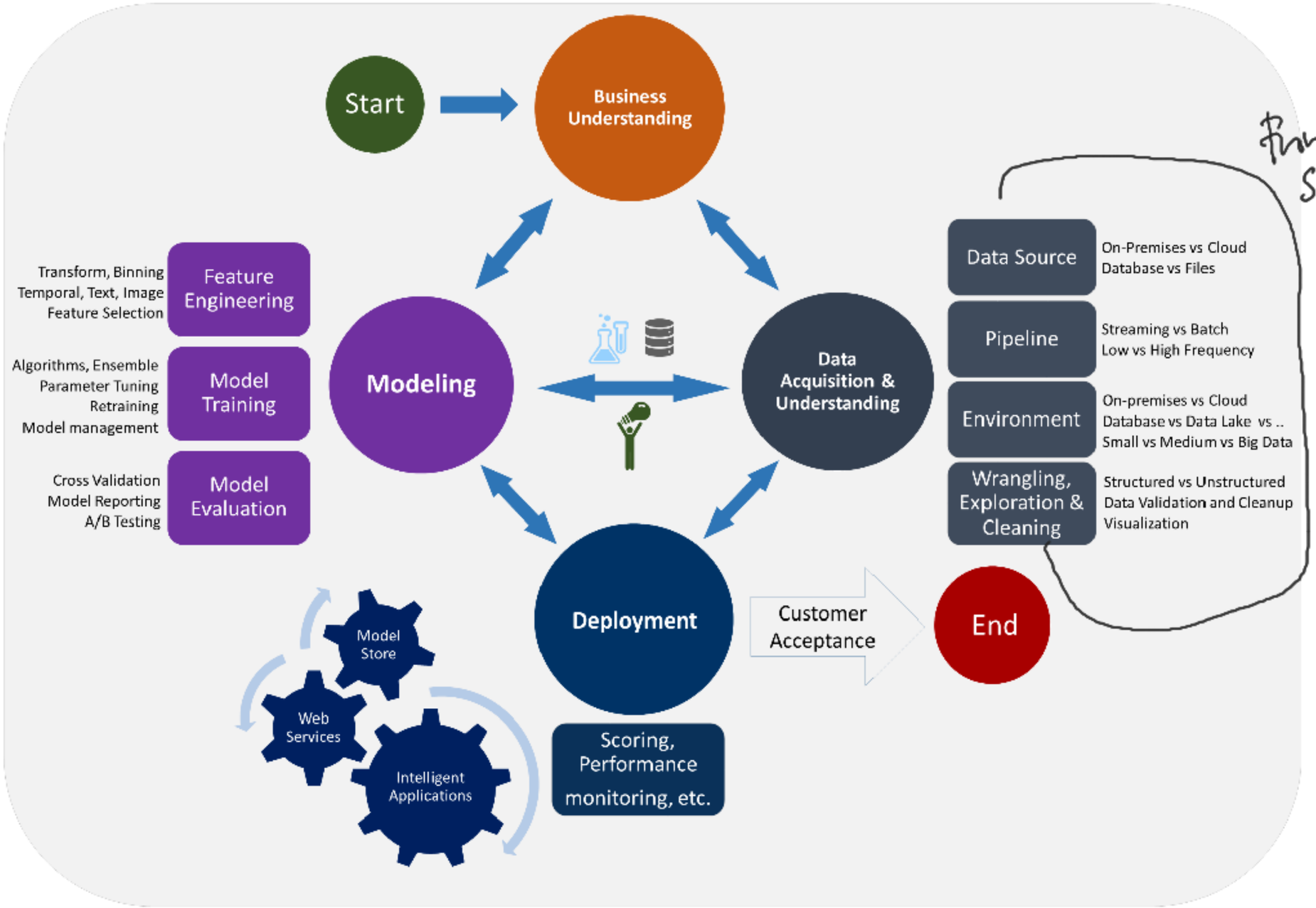
Simple Lifecycle

Airline company: What kind of services do customers like?



Data Science Lifecycle

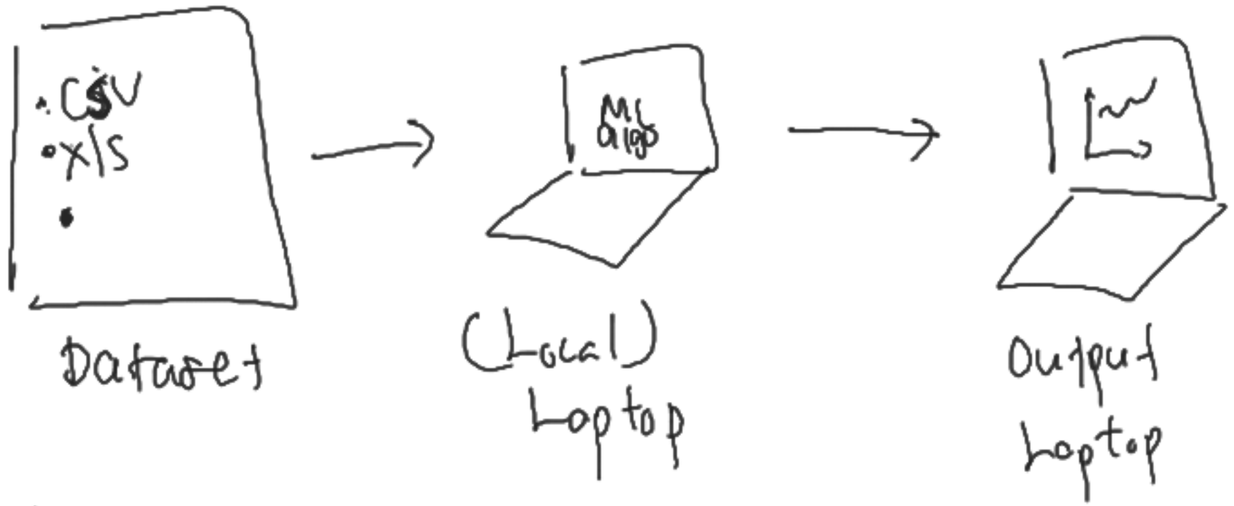
Complex



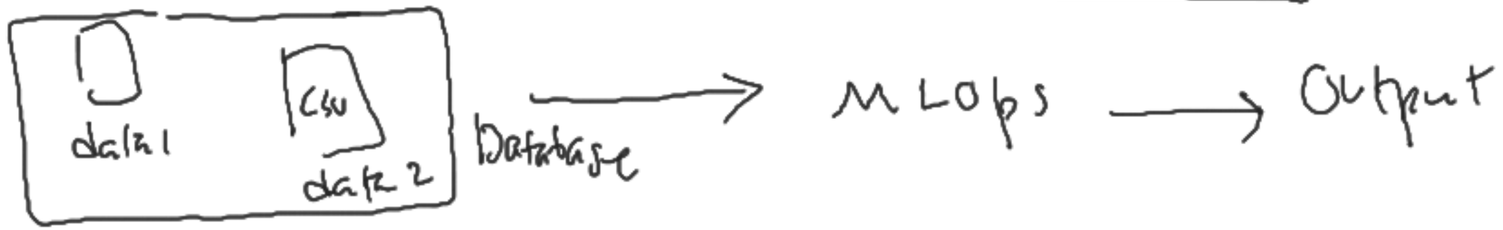
From Software Eng teams

A Typical lifecycle

- Individual (You) doing Data Sc



- Companies / Soft dev team doing Data Sc



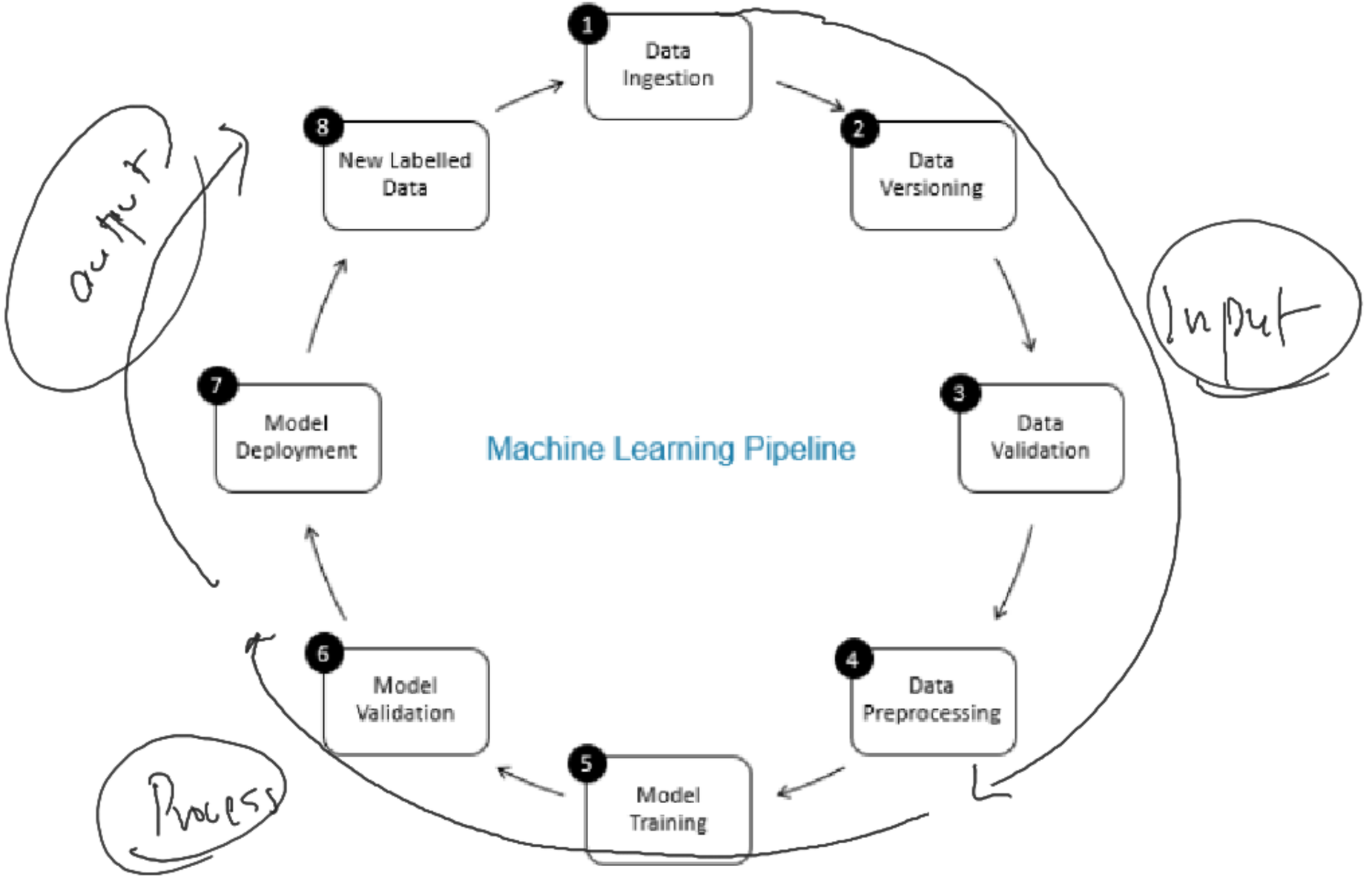
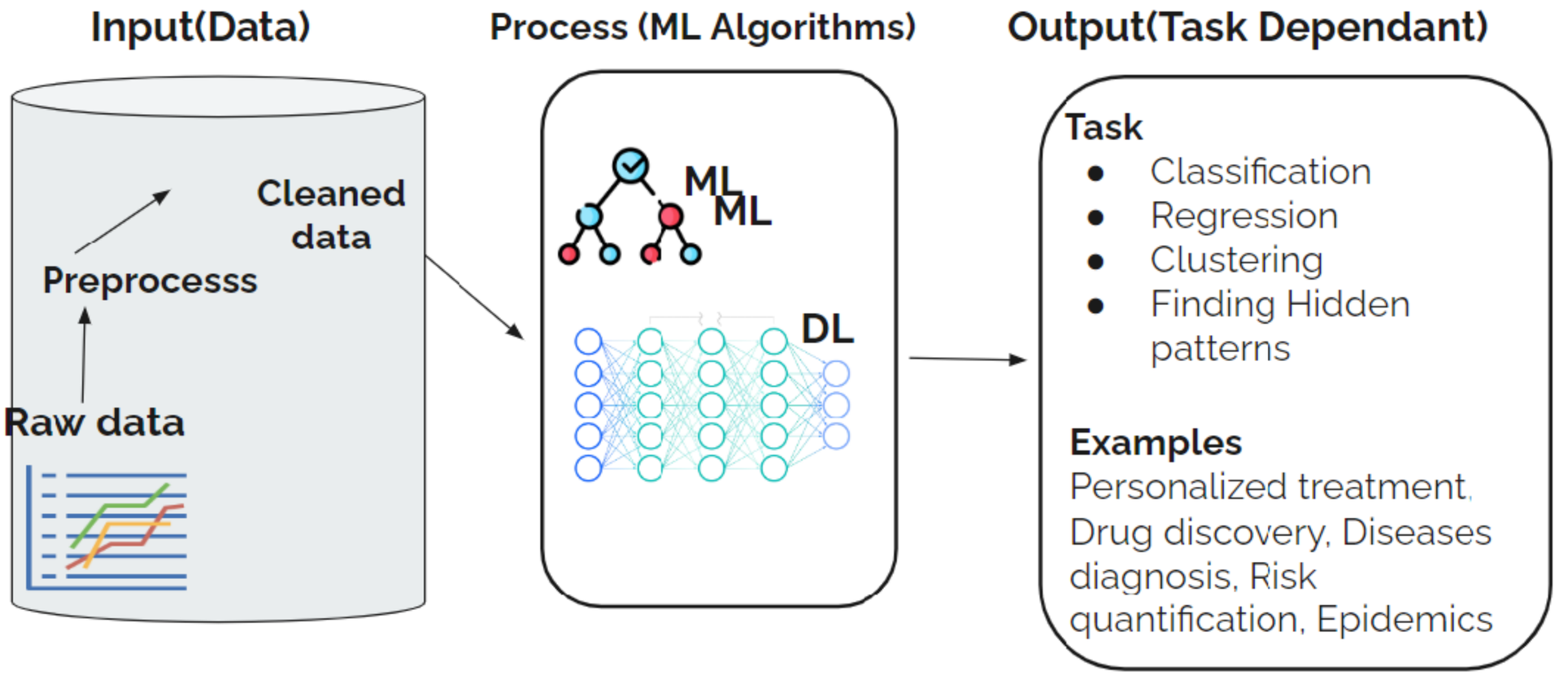


Fig 1: Components in Machine Learning Pipeline

My ML (simplified) lifecycle



Types of Data Professionals

Where are you?

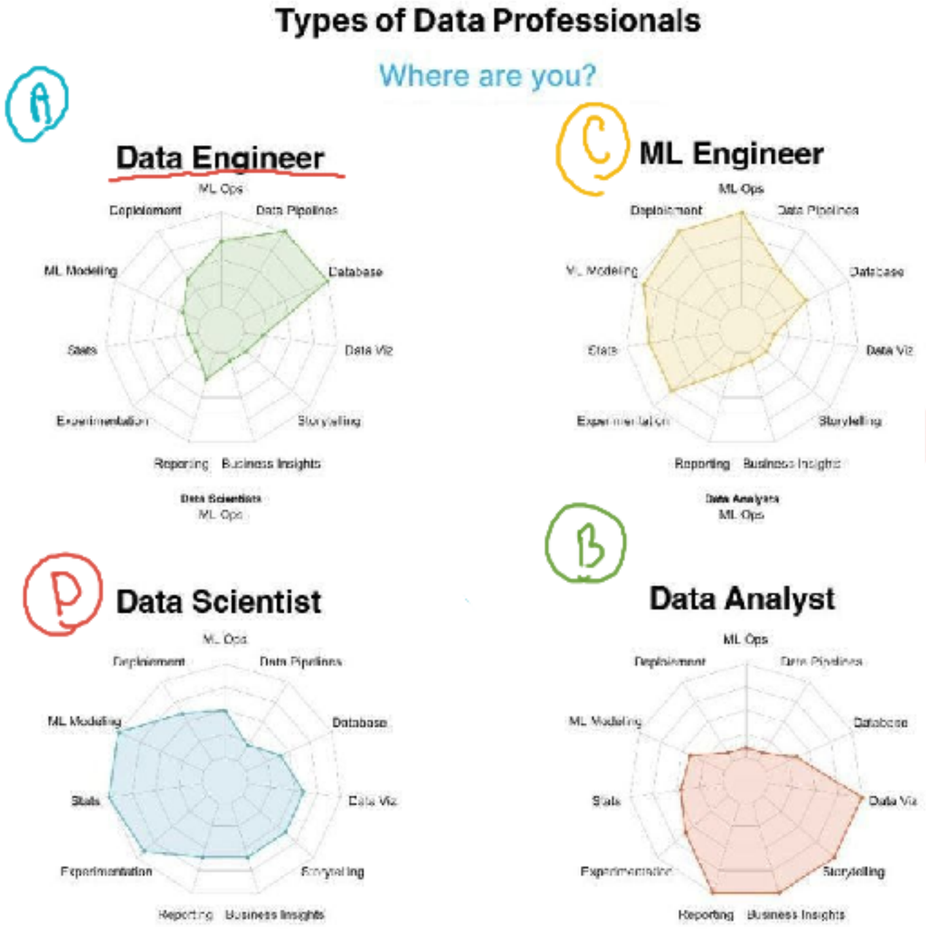
Data Engineer

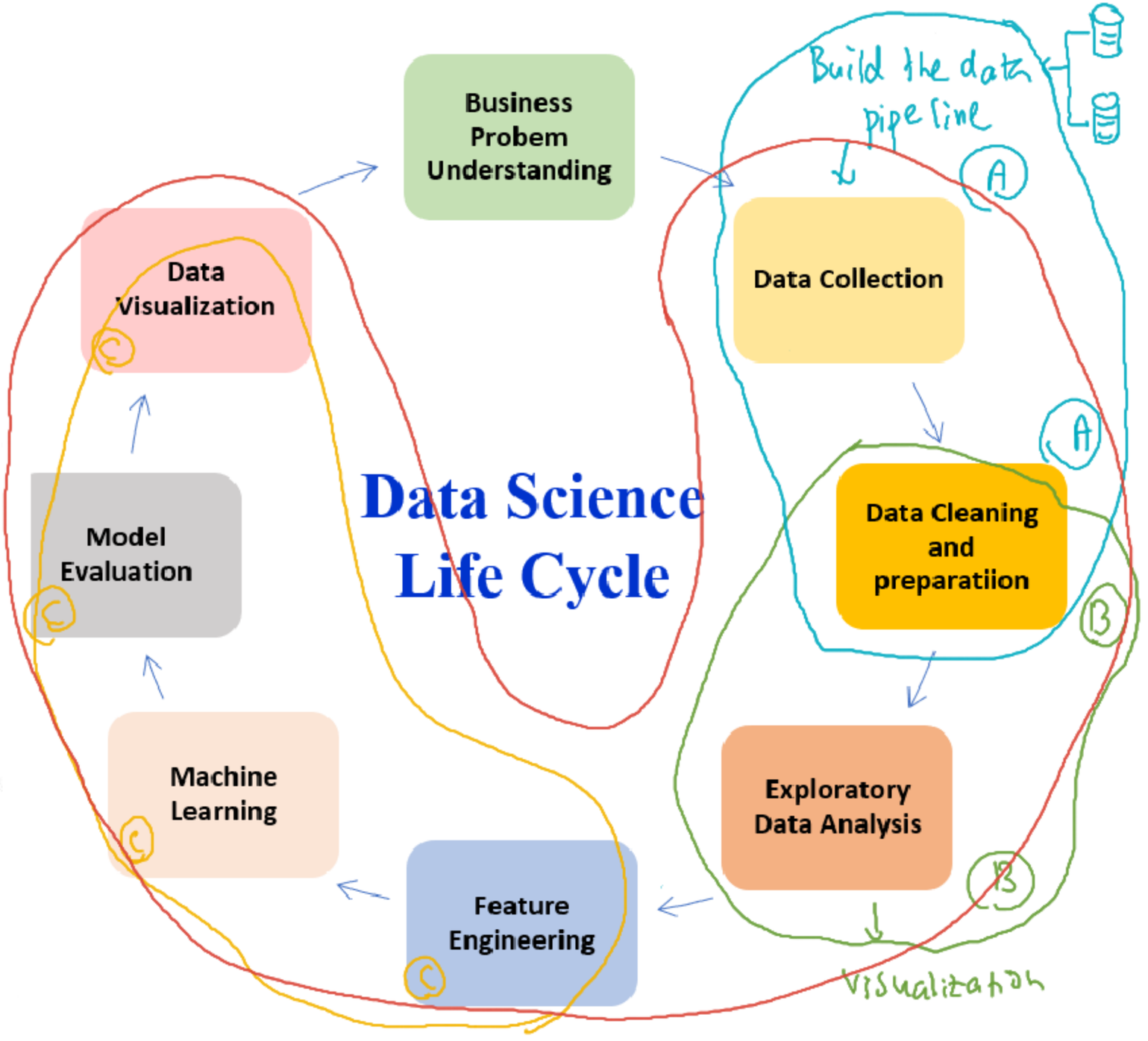
ML Engineer

Data Scientist

Data Analyst

Simple Lifecycle





Introduction to Python

(Numpy, Pandas?)

Before Data preprocessing..

Data Acquisition, data quality ?

Standard Data Sc / ML dataset

1) IRIS
2) Californic House prediction
3) Wine bottle prediction

4) Car (AMG...)

'Toy' dataset
=
Kaggle

How to look at data / tables

ML

Variables, Features, attributes, (input Dimension), parameters

output, target variables..

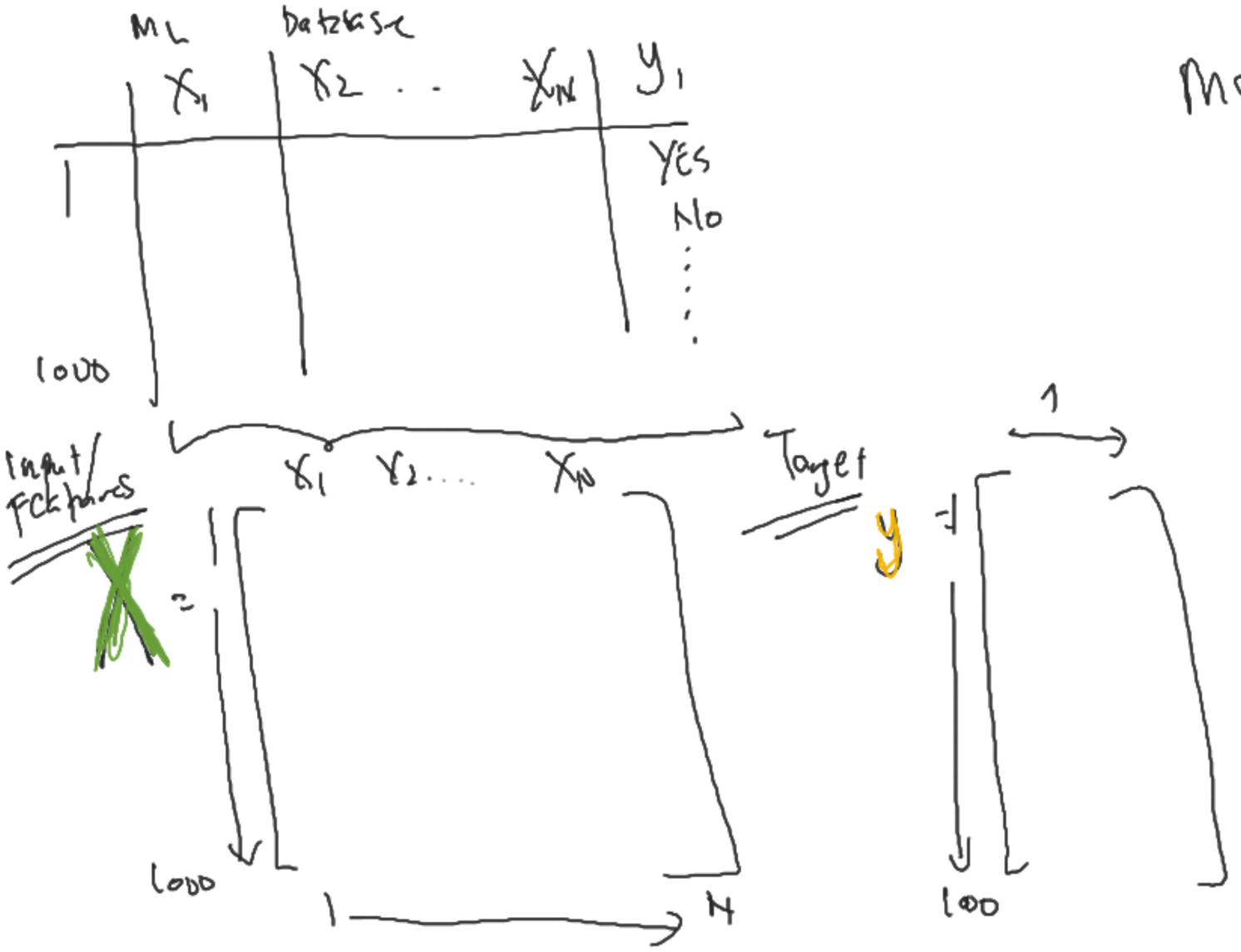
	Student	Data Analytics	ML	. . .	Database	Working with Microsoft?
1	Adam					YES
2	Ali					No
3	Mei Lin	98	95	. . .	71	Yes
4	Raju					No
	Daria					
⋮						
4	mary					

observation/sample

4th obs/sample

X

y



Matrix : $A = \begin{bmatrix} 1 & 2 \\ 3 & 4 \end{bmatrix}$

$B = \begin{bmatrix} 1 & 2 & 3 \end{bmatrix}$