

AEROFIT
CASE STUDY
REVIEW

Class Starts
@ 9:10PM

Agenda

1) Problem Statement

2) Exploring the data (EDA)

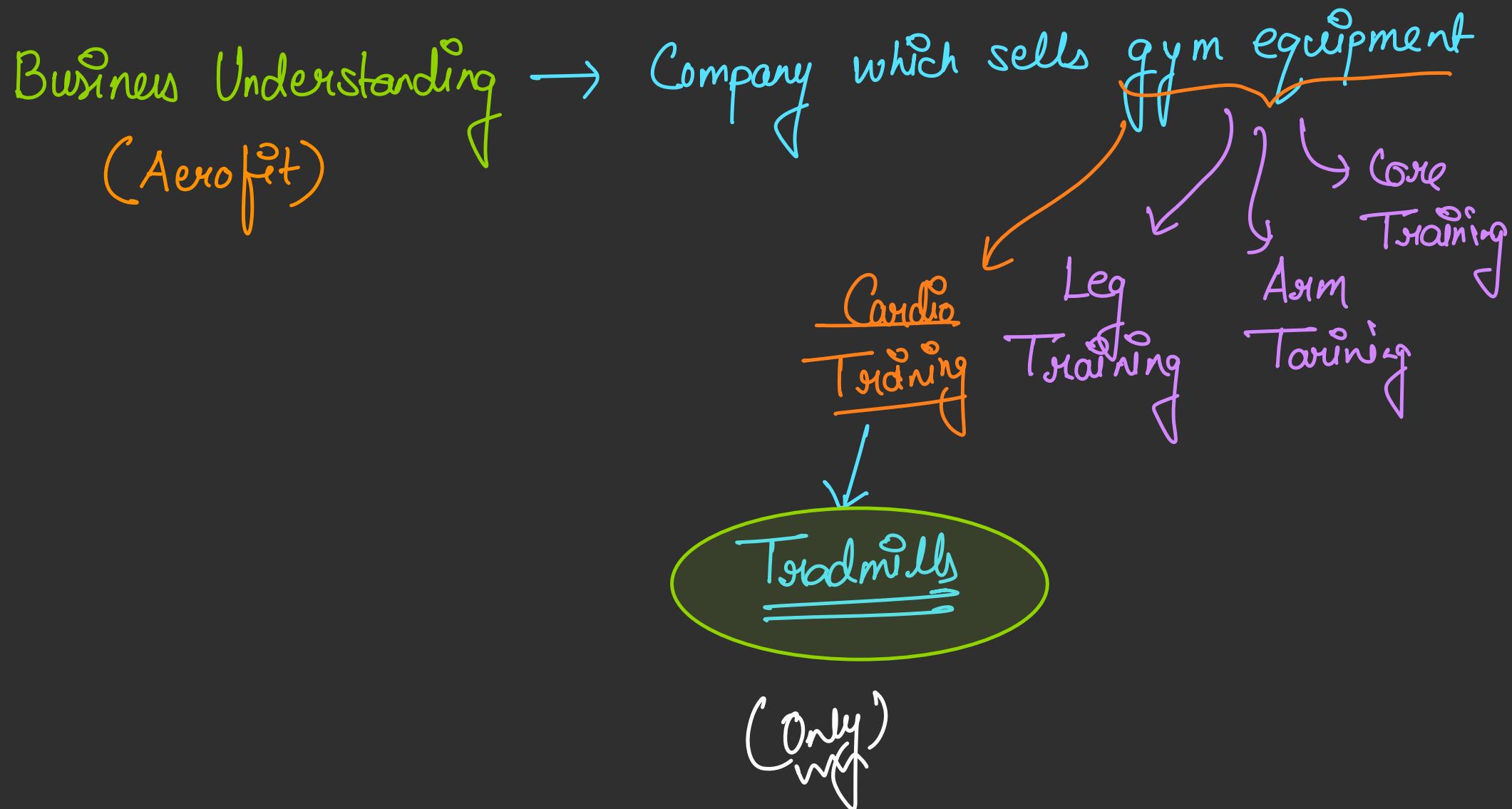
3) Conclusion

4) O/A

1.5 h

10:30pm

problem statement



Product

problem statement ?

$\left\{ \begin{array}{l} K_p 781 \\ K_p 481 \\ K_p 281 \end{array} \right.$

→ Understand the problem

1 Scoping → What is the problem statement?
→ Do we have all the required data?
→ Are those data useful?

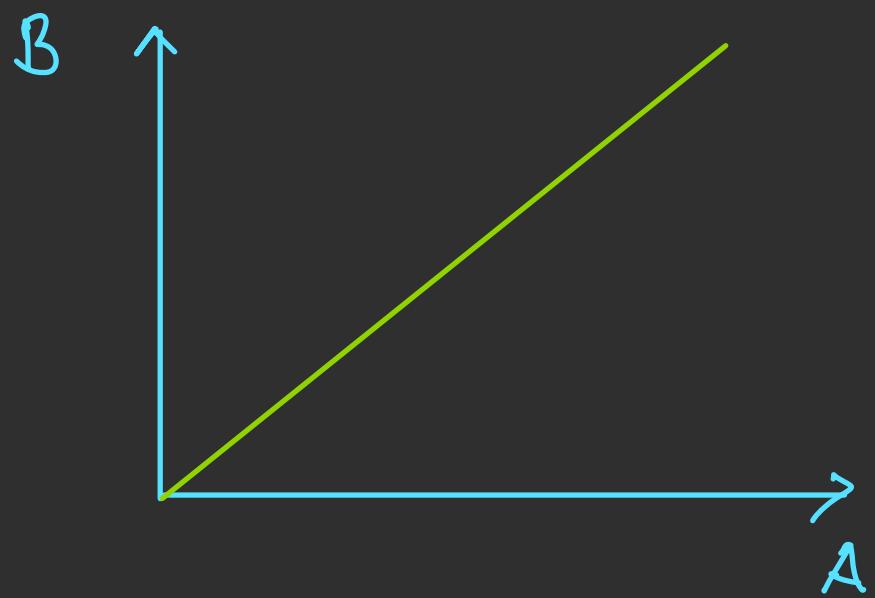
2 Data Analysis → EDA (column profiling, Null value identification, treatment, Outlier treatment, Column creation, Viz)

3 Observation/Insights & Recommendation
Your analysis result
Your suggestion Action Items
for the leadership

$A \propto B$

$A \uparrow$

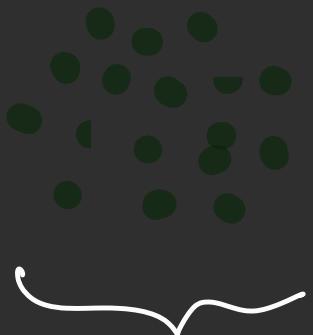
$B \uparrow$



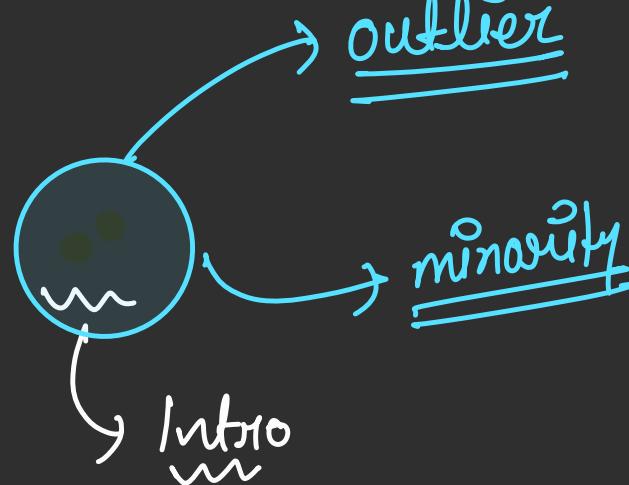
Outlier

Are lonely data points

~~majority~~



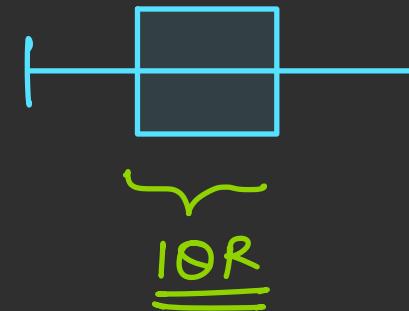
Extro



1) IQR Method

$Q_1 \rightarrow 25^{\text{th}} \text{ per}$
 $Q_2 \rightarrow 50^{\text{th}} \text{ per}$
 $Q_3 \rightarrow 75^{\text{th}} \text{ per}$

$$\text{IQR} = Q_3 - Q_1$$

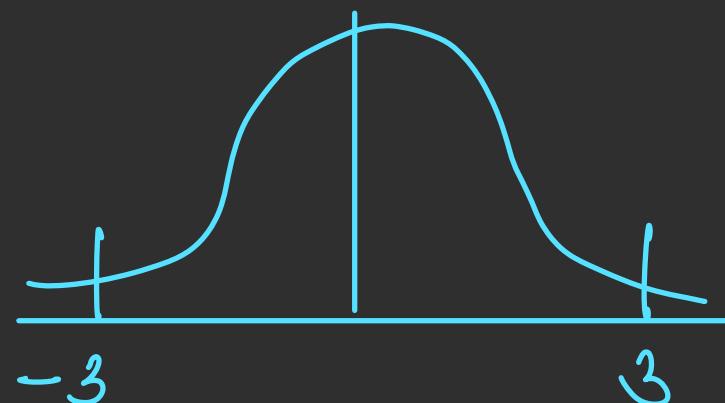


$$\begin{cases} \underline{\underline{x_1}} = Q_1 - 1.5 \times \text{IQR} \\ \underline{\underline{x_2}} = Q_3 + 1.5 \times \text{IQR} \end{cases}$$

2) Z score

col \rightarrow z score \rightarrow

$$z = \frac{x - \mu}{\sigma}$$



~~df~~
↳ Income

0 - 89000

Mean

OR

~~df~~ - copy
↳ Income

0 - 6000

Mean =

- 1) If you have a large dataset, where you can sacrifice some data pb.
- 2) Outlier are anomalies, rare event. If the data pb are actually more then remove it