

Workshop 2:

How to Analyse a Case Study

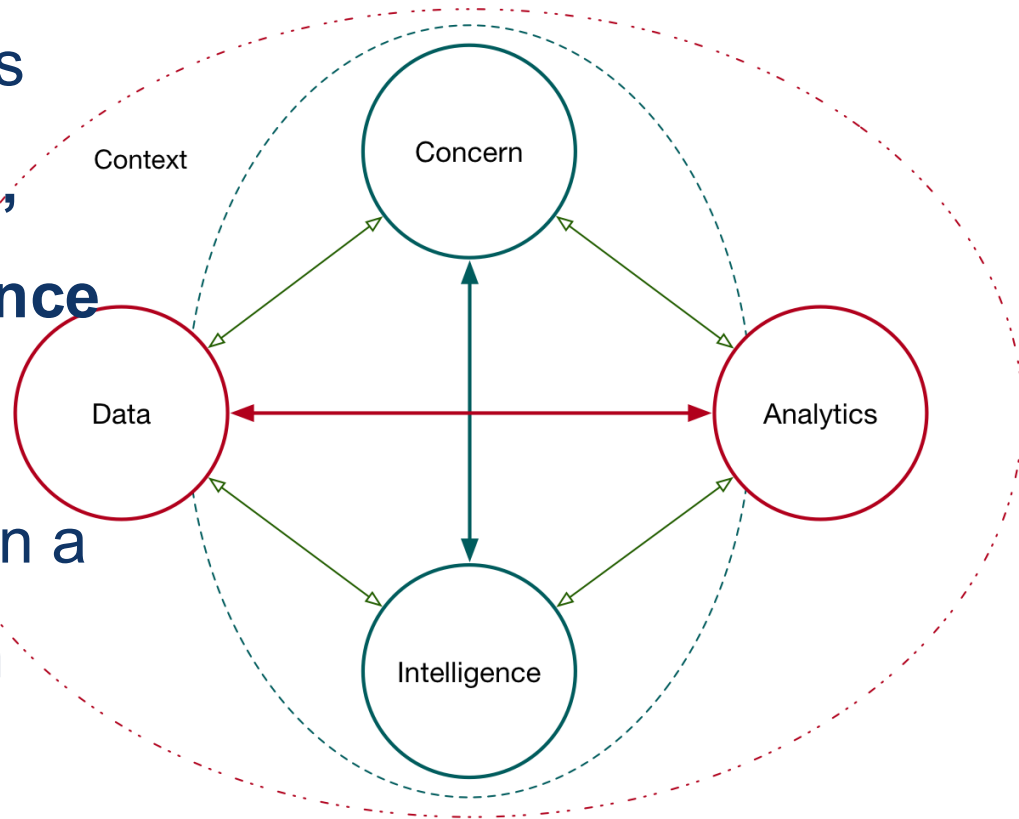
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Data Analytics

- The goal of data analytics is given a **business concern**, **augment human intelligence with data and analytics**.
- It is about converting data in a meaningful way so you can make a decision.



Data Analytics

- Data is a valuable resource that organizations should learn to **extract** and **use** to get **additional information** in order to make better decisions.



- Data is the “new economic currency”. Who has more, has the opportunity to gain **market advantage**

Data Analytics



Data Analytics



- When you have lots of data, what is the **use of that?**
- **How** do you use the information?
- **What** does the information mean?



Data Analytics – The Paradox

- **The more data** you collect, the more difficult it is for a human to get some **understanding about it**



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DATA WRANGLING



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DATA WRANGLING

(making data **more interpretable.**

Topic of next workshop)



How to Analyse a Case Study in Data Science

- A case study helps the students learn by immersing them in a real world business scenario where they act as problem solvers and decision-makers.

How to Analyse a Case Study

- A case study must not merely summarize the case. It should identify **key features** and **key problems**. And also **outline** and **assess** alternative courses of action to deal with the problem you identify.

How to Analyse a Case Study in Data Science

1. Problem Discovery

2. Identify Methods

3. Identify Findings

4. Analyse the Case

How to Analyse a Case Study in Data Science

1. Problem Discovery

How to Analyse a Case Study in Data Science

1. Problem Discovery

- What is the **business question**?
- What is the **context** surrounding the question?
- Why is the answer **relevant for the context**?
- What **opportunities** emerge by addressing this question (**business, social, technological**)?
- Is the answer **answerable** and **feasible**?

How to Analyse a Case Study in Data Science

2. Identify Methods

How to Analyse a Case Study in Data Science

2. Identify Methods

- What methods were applied?
- What variables is the method going to deal with?
- Were the methods **appropriate** to address the question?
- Was the study well conducted?

How to Analyse a Case Study in Data Science

3. Identify Findings

How to Analyse a Case Study in Data Science

3. Identify Findings

- What were the findings?
- Are the findings statistically significant?
- How are the findings linked with methods?
- Are there potential issues with these findings?

How to Analyse a Case Study in Data Science

4. Analyse the Case

How to Analyse a Case Study in Data Science

4. Analyse the Case

- What kind of analysis was made (business, social, technological)?
- Does the analysis answer the business question
- Were there any risks with the approach that was taken?
- Would you follow an alternative analysis to answer the question? Why?