

Applied Data Science Project

L17 - Slides

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Pillars

Develop Design Communicate Manage



Project communication

- Keep a scientific mindset when communicate: a project of Applied Data Science is about science
- Start from an objective, pose a research question, propose a methodology that is tested in a controlled experiment with an analysis of the results
- The same story, but different narratives according to the audience: scientists, innovators, or public consumptions



Formats

- Slides with plots, charts, and tables
- Reports (deliverables and papers) with plots, charts, and tables

Recall, in this course we cover the technical communication



Plots, charts, and tables are complementary tools

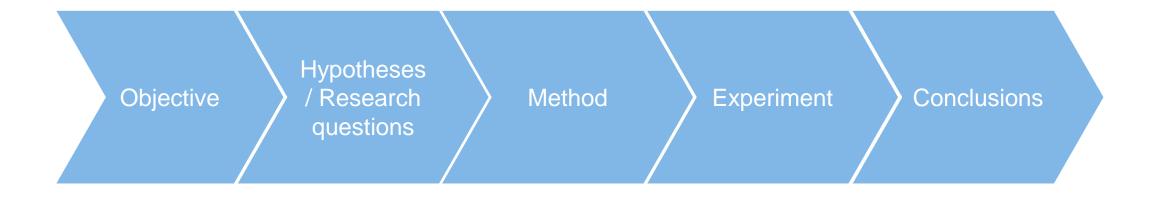
- Slides with plots, charts, and tables
- Reports (deliverables and papers) with plots, charts, and tables

does it mean that plots, charts and tables are complementary and cannot come along?

Yes, better to put them into a context by either providing a concise communication or a longer text format



Outline





Objective

Why is the project conducted?

Who are the stakeholders?

Can the project be linked to one of the United Nations Sustainable Development Goals?

Usually, this is one slide to set the scene and give an idea of what you're proposing for whom



Hypotheses and research questions

A hypothesis is written as a statement

A research question is written as a question

They differ in the writing style, but they are utilized interchangeably to set the challenge being addressed in the project

For instance:

RQ: Would language model contribute to have language translator?

H: Language models will improve language translator quality

Usually, this is in 1 slide, and you can put a diagram/picture to summarize the challenge



Method

When we refer to a method in a Data Science project we refer to:

- Algorithm, Model, Architecture
- Tools utilized for the implementation

Short summary of how the method achieves the previous steps

Prefer utilizing diagrams for describing a method

Usually, this is the bulk of the presentation, and you may dedicate 2 slides to the algorithm, model or architecture and 1 to summarize the utilized tools



Experiment

It reports the controlled experiment to validate the method to address the objectives defined in the project

It reports:

- dataset
- experiment configuration
- quality assessment

Usually, we have 1 slide for the dataset, 1 slide for the experiment configuration and 2 slides for the quality assessment

It is important to report tables of the quality assessment and illustrate the overall assessment task



Conclusions

State the objective (1 sentence)

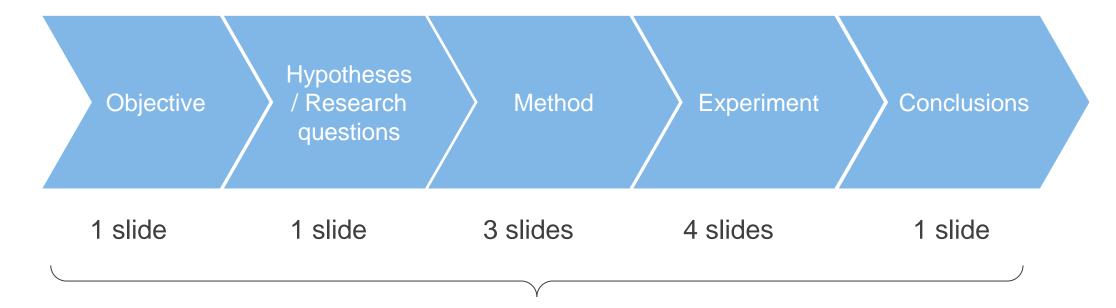
State the method (1 sentence)

State why the method is effective to reach the objective (1 sentence)

Usually this is 1-slide content that you can decide to leave for the QA session to guide the attendees to think deeper on the content and eventually pose questions



Overall



There is an additional slide for landing and another with your/team references at the end



Slide aesthetic

Aesthetic plays a little role in communication, better to exploit it

Start from a slide template that you either took from your employer, university, or that you edited yourself

Once picked, do not touch it anymore, and keep it consistent throughout the entire presentation



If it's science, can I add code?

Depends on the target

If you're sharing your experience with developers, then you might want to utilize some snippets of code in dedicated slides

If your audience is people who attend TED Talk style events, then not at all



Length

It depends on the target audience

General rule of thumb: 1 slide requires around 1 minute for presenting

15 minutes is a reasonable slot to have people awake during presentation (unless you like having people sleeping during your presentation)

15 minutes =~ 15 slides including both landing slide and a slides with references



Quality checkpoints before sealing your presentation

- Does it make sense to me in the first place?
- Would make sense to the reader with a given background? The background of the expected audience?
- Are there any ambiguous terms, acronyms, definitions?
- Are there any statements and arguments not supported by data either collected or computed?
- Are there any lengthy and verbose arguments?
- Are the main concepts illustrated with diagrams and charts?
- Are the results being presented with tables and or charts?



App for editing







Google Slides

Both applications allow to collaborative edit the making of a presentation

Consider to export your presentation when complete to PDF to maximize the portability









Thank you for your attention.

Questions?







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