Data Visualization: Through the Eyes of Our Working Example

Our Story

“The first task in data science is always data visualization”

You recall these words from the many courses and bootcamps you’ve attended, and here you are working for AAVAIL about to do just that!

Your team lead has asked you to start looking at the market churn in Singapore. How comfortable are you with creating common data science plots in Python?

If you are comfortable with creating plots, then this next section can serve as a review for you, before you move on to the challenging task of looking at AAVAIL’s Singapore data.

For everyone else, this module is meant to reinforce why important concepts like reproducibility and communication are so important when carrying out data visualization in an enterprise context.

Before you take a deep dive into your client’s data, let’s level-set with some practice data. You always want to test your tools with non-critical data before you start working with actual client data.

AAVAIL wants the deliverables for this project to be prepared in Jupyter notebooks. Jupyter has become an industry standard in the Python ecosystem and in data science. But here is a pro-tip: Jupyter notebooks don’t do well when used in a version control system.

The task of performing EDA on the AAVAIL data comes after this unit. There is a video to help ensure you are aware of the commonly used tools and best practices in EDA. There is also a Jupyter notebook that follows up on those materials and provides more details. Once you have seen the video and gone through the notebook, you will be ready to work on the AAVAIL data in the case study.

THE DESIGN THINKING PROCESS

Your other team members are working with AAVAIL team members on the *Empathize* phase of their design thinking process. They are gathering data and facts related to AAVAIL's business challenges and will be presenting that to everyone in a playback after it is summarized.

Your data visualization deliverables will become an important part of a playback! It is part of one of the key principles of design thinking: *Observation* and *Reflection*.

IMPORTANT: For some business opportunities, a sound solution can be easily identified through thoughtful data visualization. Models are not always a part of the AI workflow.