

Introduction to Excel and Power BI

BOKSS IMHS Internal Training

30-May-2024 @ K83 & Zoom

Chapter 1

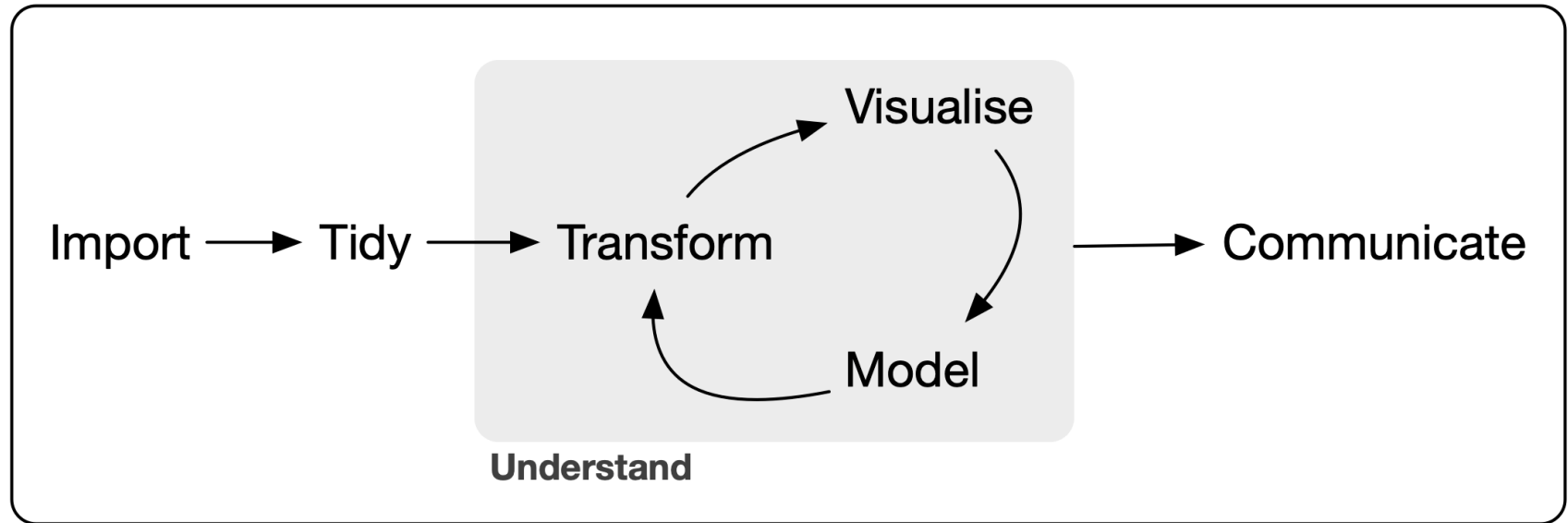
Basic Concept of Data Science

Type of Data Science

- Descriptive (Business Intelligence)
- Predictive (Machine Learning - AI)

Workflow of Data Science

“R for Data Science” (Wickham and Grolemund 2017)



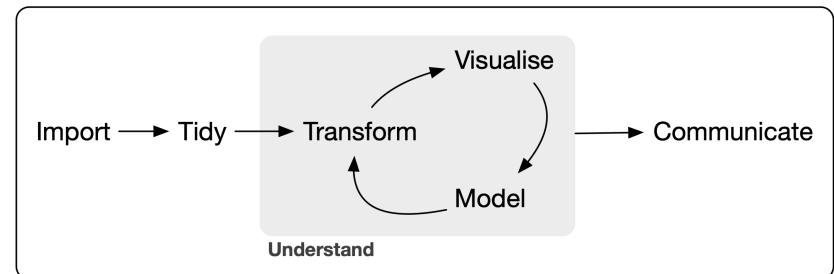
Workflow of Data Science

Import

- Open the file using one software
 - .csv / .tsv / .txt
 - .xlsx / .xls
 - .json

Tidy

- Format in tabular
 - Every column is a variable
 - Every row is an observation
 - Every cell has a single value



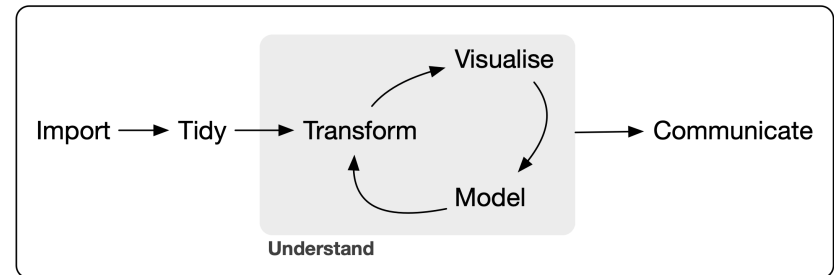
Workflow of Data Science

Transform

- Create new column
- Re-group categories
- Filter your sample
- Combine tables
- Handle missing data

Visualize

- Get the insight of your data
- Check the data quality
 - Missing (Completeness)
 - Validity / Accuracy



Workflow of Data Science

Modeling

- Out-of-scope

Communicate

- Making (interactive) dashboard
 - Excel, Google sheet
 - Power BI, Looker, Tableau
 - R, Python

