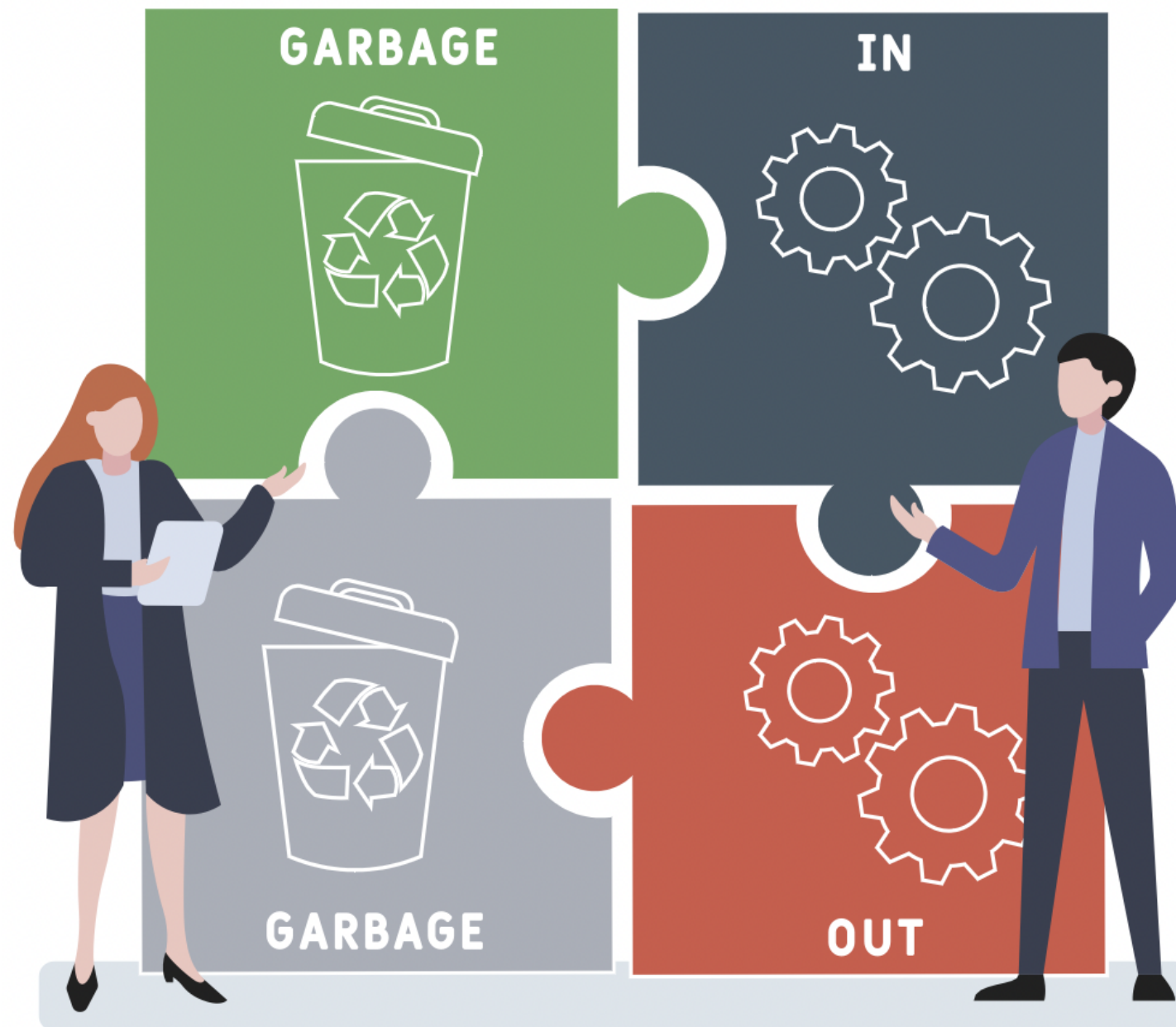# Introduction to Power Query

DATA PREPARATION IN POWER BI

Khaled Choucri
Strategic Analyst - Trilogy

datacamp

Why prepare data?

What is clean data?

- Free from missing values

- Typos/data entry errors are corrected

- No duplicated data

- Irrelevant data is excluded

- Outliers are dealt with

- Correct data types for all columns

- Column & table names are short and descriptive

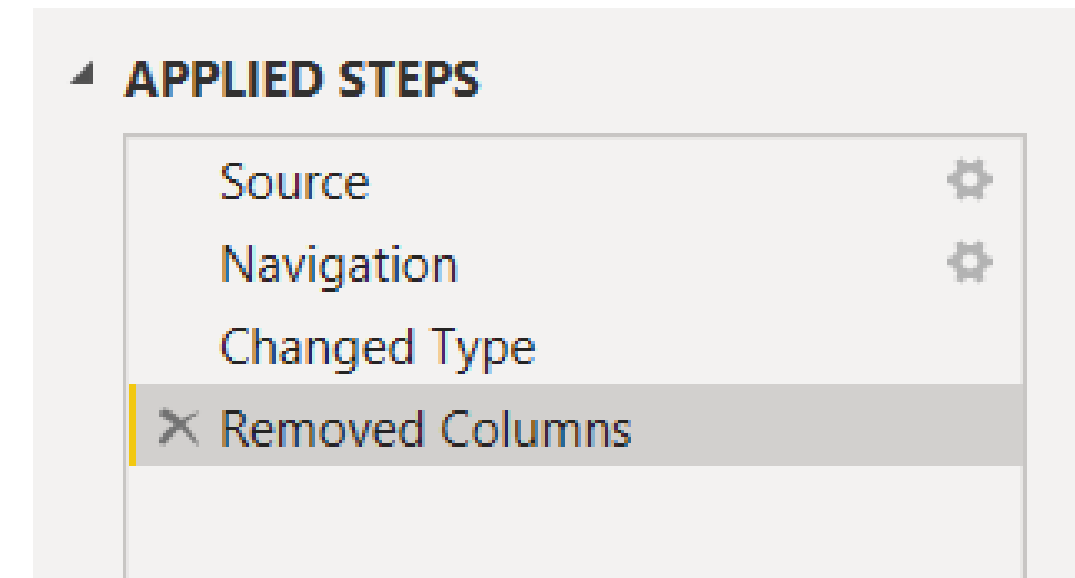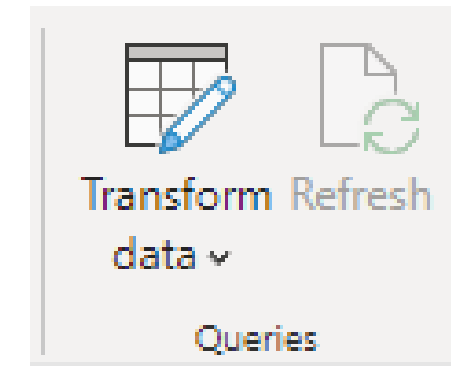| Student ID	Student Name	Age	GPA	Classification
100122014	Joseph	21	3.5	Junior
100232015	Patrick	200	3.2	Sophomore
100122012	Seller	24	3.0	Senior
100342013	Roger	23	234	Senior
100942012	Davis	2.8	3.7	Sophomore
	Travis	23	3.4	Sr
100982015	Alex	27		Sophomore
100982013	Trevor	-22	4.0	Senior
AUC2016XC	Aman	30	3.5	Jr

Missing Data   Inconsistent Data   Noisy Data

How does data preparation work in Power Query?

- To load & transform data, we use the *Power Query* interface in Power BI

- Transformation steps are added sequentially

- Steps are saved in a "recipe" called "Applied Steps" that executes every time your data is loaded/refreshed

- To apply the transformations, we choose "Close & Apply" in the *Power Query* editor

Data types in Power Query

- Numerical Data (Whole Number / Decimal / Percentage)
  - `123` , `45.23` , `23%`

- Date / Time Data
  - `01/01/2022` , `09:30 AM`

- Text Data
  - `ABC`

- Logical Data
  - `TRUE`

- Binary Data
  - `RGF0YWNhbXA=`

Power Query will auto detect data types by default

Basic structural transformation of data

- Promote headers

- Reorder columns

- Sort columns

- Remove columns/rows

- Rename columns

Let's practice!

DATA PREPARATION IN POWER BI

Introduction to Power Query demo

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