Reshaping and aggregating data

DATA TRANSFORMATION IN POWER BI

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Understanding dataset shapes

- Long Data Structure
  - Repeating values in first column
  - Usually only one numerical column
  - Easier for computer to interpret

- Wide Data Structure
  - Unique values in first column
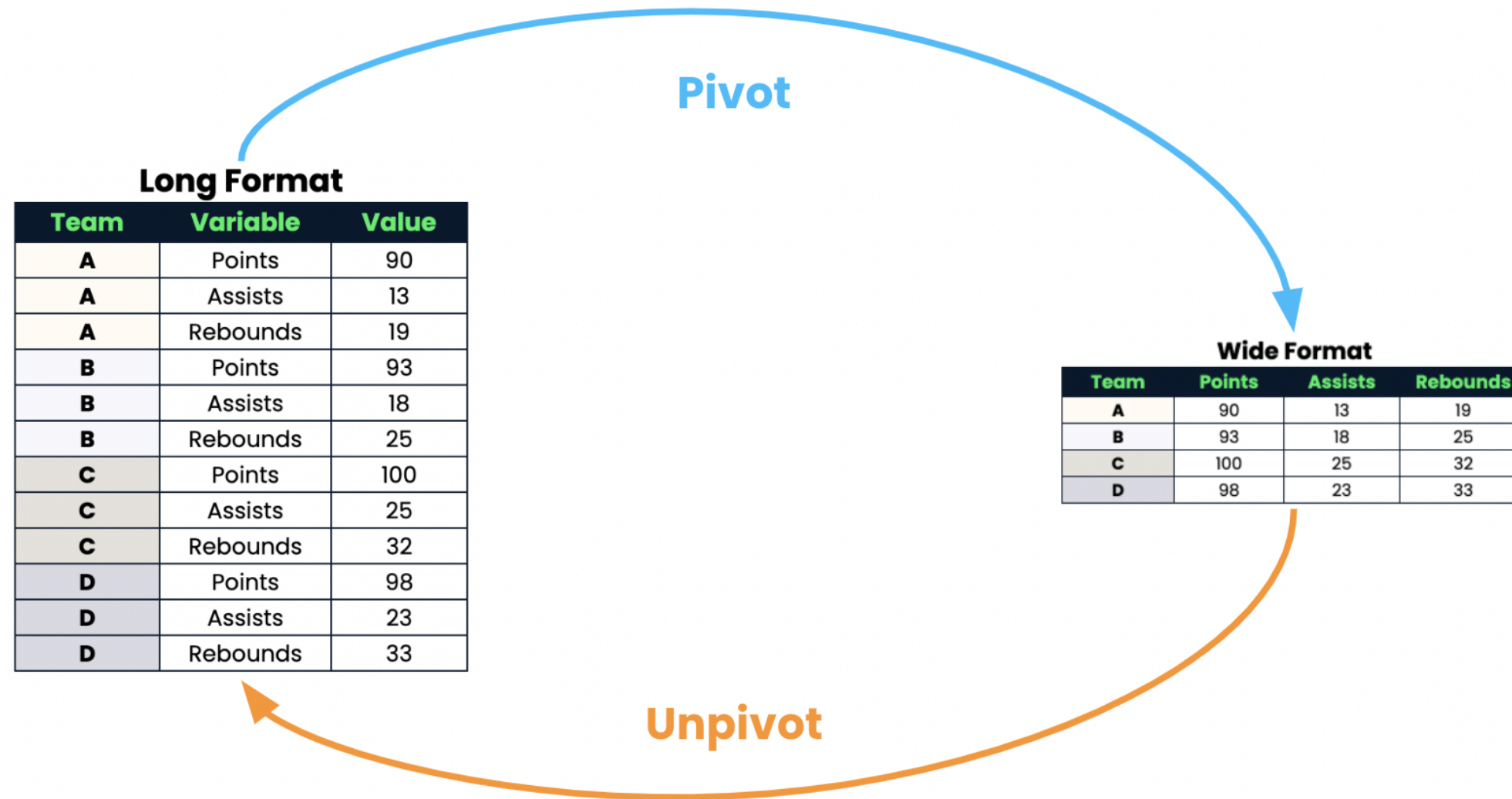 - Multiple numerical columns
  - More human-readable

Long Format

Team	Variable	Value
A	Points	90
A	Assists	13
A	Rebounds	19
B	Points	93
B	Assists	18
B	Rebounds	25
C	Points	100
C	Assists	25
C	Rebounds	32
D	Points	98
D	Assists	23

Wide Format

Team	Points	Assists	Rebounds
A	90	13	19
B	93	18	25
C	100	25	32
D	98	23	33

[1] Data can be represented in different ways through different dataset shapes

Transforming data shape

- To transform from long to wide, we pivot our data

- To transform from wide to long, we unpivot our data

Transforming data shape

- Transposing changes your rows into columns and your columns into rows

Aggregating with group by transformation

- Grouping changes the granularity of your dataset

- After choosing a granularity (groups) you apply an aggregation such as:
  - Sum

  - Average

  - Median

  - Min / Max

  - Count

  - Custom aggregation

Day	Week	Sales
1	1	700
2	1	515
3	1	994
4	1	646
5	1	638
6	1	731
7	1	826
8	2	578
9	2	821
10	2	652
11	2	757
12	2	665
13	2	924
14	2	603
15	3	859
16	3	862
17	3	755
18	3	674
19	3	772
20	3	623
21	3	886
22	4	753
23	4	704
24	4	859
25	4	827
26	4	814
27	4	944
28	4	574
29	5	762

Week	Total Sales	Average Sales
1	5,050	721
2	5,000	714
3	5,431	776
4	5,475	782
5	1,322	661

Let's practice!

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Reshaping and aggregating tables in Power Query

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Let's practice!

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