

Chapter 2. Transforming Data

Imported DimCustomer.csv

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Daily XP 50 Guides

2_1_transform_load - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply Recent Sources Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor Choose Columns Remove Columns Keep Rows Remove Rows Split Column Group By Data Type: Text Use First Row as Headers Replace Values Merge Queries Append Queries Combine Files Combine Text Analytics Vision Azure Machine Learning AI Insights

Queries [4]

FactSale DimDate DimEmployee DimCustomer

Column1 Column2 Column3 Column4 Column5 Column6

1 Customer Data

2 Customer Key WWI Customer ID Customer Bill To Customer Category Buying Group

3 0 0 Unknown N/A N/A N/A

4 1 1 Tailspin Toys (Head Office) Tailspin Toys (Head Office) Novelty Shop Tailspin Toys

5 2 2 Tailspin Toys (Sylvanite, MT) Tailspin Toys (Head Office) Novelty Shop Tailspin Toys

6 3 3 Tailspin Toys (Peebles Valley, AZ) Tailspin Toys (Head Office) Novelty Shop Tailspin Toys

7 4 4 Tailspin Toys (Medicine Lodge, KS) Tailspin Toys (Head Office) Novelty Shop Tailspin Toys

8 5 5 Tailspin Toys (Gasport, NY) Tailspin Toys (Head Office) Novelty Shop Tailspin Toys

9 6 6 Tailspin Toys (Jessie, ND) Tailspin Toys (Head Office) Novelty Shop Tailspin Toys

10 7 7 Tailspin Toys (Frankewing, TN) Tailspin Toys (Head Office) Novelty Shop Tailspin Toys

11 8 8 Tailspin Toys (Bow Mar, CO) Tailspin Toys (Head Office) Novelty Shop Tailspin Toys

12 9 9 Tailspin Toys (Netcong, NJ) Tailspin Toys (Head Office) Novelty Shop Tailspin Toys

13 10 10 Tailspin Toys (Wimbleton, ND) Tailspin Toys (Head Office) Novelty Shop Tailspin Toys

14 11 11 Tailspin Toys (Devault, PA) Tailspin Toys (Head Office) Novelty Shop Tailspin Toys

15 12 12 Tailspin Toys (Biscay, MN) Tailspin Toys (Head Office) Novelty Shop Tailspin Toys

16 13 13 Tailspin Toys (Stonfort, IL) Tailspin Toys (Head Office) Novelty Shop Tailspin Toys

17 14 14 Tailspin Toys (Long Meadow, MD) Tailspin Toys (Head Office) Novelty Shop Tailspin Toys

18 15 15 Tailspin Toys (Batson, TX) Tailspin Toys (Head Office) Novelty Shop Tailspin Toys

19 16 16 Tailspin Toys (Coney Island, MO) Tailspin Toys (Head Office) Novelty Shop Tailspin Toys

20 17 17 Tailspin Toys (East Fultonham, OH) Tailspin Toys (Head Office) Novelty Shop Tailspin Toys

12 COLUMNS, 404 ROWS Column profiling based on top 1000 rows

Query Settings

PROPERTIES

Name DimCustomer

APPLIED STEPS

Source Changed Type

Context Instructions

1 2 3 4 5

• Open the csv file DimCustomer.csv from Datasets/WWI folder on the desktop.

• Select the Transform Data button to navigate to Power Query as shown in navigation cheat sheet.

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File Home Transform Add Column View Tools Help

Close & Apply Recent Sources Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor Choose Columns Remove Columns Keep Rows Remove Rows Split Column Group By Data Type: Whole Number Use First Row as Headers Replace Values Merge Queries Append Queries Combine Files Combine Text Analytics Vision Azure Machine Learning AI Insights

Queries [4]

FactSale DimDate DimEmployee DimCustomer

Customer Key WWI Customer ID Customer Bill To Customer Category Buying Group

1 0 0 Unknown N/A N/A

2 1 1 Tailspin Toys (Head Office) Tailspin Toys (Head Office) Novelty Shop Tailspin Toys

3 2 2 Tailspin Toys (Sylvanite, MT) Tailspin Toys (Head Office) Novelty Shop Tailspin Toys

4 3 3 Tailspin Toys (Peebles Valley, AZ) Tailspin Toys (Head Office) Novelty Shop Tailspin Toys

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18 17 17 Tailspin Toys (East Fultonham, OH) Tailspin Toys (Head Office) Novelty Shop Tailspin Toys

19 18 18 Tailspin Toys (Goffstown, NH) Tailspin Toys (Head Office) Novelty Shop Tailspin Toys

20 19 19 Tailspin Toys (Head Office) Novelty Shop Tailspin Toys

12 COLUMNS, 402 ROWS Column profiling based on top 1000 rows

Query Settings

PROPERTIES

Name DimCustomer

APPLIED STEPS

Source Changed Type Removed Top Rows Promoted Headers Changed Type1

Context Instructions

1 2 3 4 5

• Remove the first row. It contains mostly blanks and does not provide any information.

• Make the resulting first row the header row.

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Queries [4] FactSale DimDate DimEmployee DimCustomer

Category	Buying Group	Primary Contact	Postal Code	Credit Limit	Lineage Key
1	N/A	N/A	N/A	?	0
2	Shop	Tailspin Toys	Waldemar Fisar	90410	?
3	Shop	Tailspin Toys	Lorena Cindric	90216	?
4	Shop	Tailspin Toys	Bhaargav Rambhatia	90205	?
5	Shop	Tailspin Toys	Daniel Roman	90152	?
6	Shop	Tailspin Toys	Johanna Hulting	90261	?
7	Shop	Tailspin Toys	Biswajeet Thakur	90298	?
8	Shop	Tailspin Toys	Kalidas Nadar	90761	?
9	Shop	Tailspin Toys	Kanti Kotadia	90484	?
10	Shop	Tailspin Toys	Sointu Aalto	90129	?
11	Shop	Tailspin Toys	Siddhartha Parkar	90061	?
12	Shop	Tailspin Toys	Elnaz Javan	90185	?
13	Shop	Tailspin Toys	Heloise Fernandes	90054	?
14	Shop	Tailspin Toys	Razeena Hosseini	90685	?
15	Shop	Tailspin Toys	Tereza Valentova	90633	?
16	Shop	Tailspin Toys	Filips Jaunzemis	90631	?
17	Shop	Tailspin Toys	Nitin Matondkar	90467	?
18	Shop	Tailspin Toys	Adam Kubat	90416	?
19	Shop	Tailspin Toys	Isabelle Vodlan	90321	?
20	Shop	Tailspin Toys	Makus Buresch	90329	?

10 COLUMNS, 402 ROWS Column profiling based on top 1000 rows

Query Settings

PROPERTIES Name DimCustomer All Properties

APPLIED STEPS Source Changed Type Removed Top Rows Promoted Headers Changed Type1 Removed Columns

Context Instructions Minimize

1 2 3 4 5

- Delete the columns Valid From and Valid To.
- Close and apply.

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Queries [4] FactSale DimDate DimEmployee DimCustomer

Customer Key	WWI Customer ID	Customer	Bill To Customer	Category	Buying Group
0	0	Unknown	N/A	N/A	N/A
1	1	Tailspin Toys (Head Office)	Tailspin Toys (Head Office)	Novelty Shop	
2	2	Tailspin Toys (Sylvanite, MT)	Tailspin Toys (Head Office)	Novelty Shop	
3	3	Tailspin Toys (Peebles Valley, AZ)	Tailspin Toys (Head Office)	Novelty Shop	
4	4	Tailspin Toys (Medicine Lodge, KS)	Tailspin Toys (Head Office)	Novelty Shop	
5	5	Tailspin Toys (Gasport, NY)	Tailspin Toys (Head Office)	Novelty Shop	
6	6	Tailspin Toys (Jessie, ND)	Tailspin Toys (Head Office)	Novelty Shop	
7	7	Tailspin Toys (Frankewing, TN)	Tailspin Toys (Head Office)	Novelty Shop	
8	8	Tailspin Toys (Bow Mar, CO)	Tailspin Toys (Head Office)	Novelty Shop	
9	9	Tailspin Toys (Netcong, NJ)	Tailspin Toys (Head Office)	Novelty Shop	
10	10	Tailspin Toys (Wimbledon, ND)	Tailspin Toys (Head Office)	Novelty Shop	
11	11	Tailspin Toys (Devault, PA)	Tailspin Toys (Head Office)	Novelty Shop	
12	12	Tailspin Toys (Biscay, MN)	Tailspin Toys (Head Office)	Novelty Shop	
13	13	Tailspin Toys (Stonewort, IL)	Tailspin Toys (Head Office)	Novelty Shop	
14	14	Tailspin Toys (Long Meadow, MD)	Tailspin Toys (Head Office)	Novelty Shop	
15	15	Tailspin Toys (Batson, TX)	Tailspin Toys (Head Office)	Novelty Shop	
16	16	Tailspin Toys (Coney Island, MO)	Tailspin Toys (Head Office)	Novelty Shop	
17	17	Tailspin Toys (East Fultonham, OH)	Tailspin Toys (Head Office)	Novelty Shop	
18	18	Tailspin Toys (Goffstown, NH)	Tailspin Toys (Head Office)	Novelty Shop	
19	19	Tailspin Toys (Head Office)	Tailspin Toys (Head Office)	Novelty Shop	

12 COLUMNS, 402 ROWS Column profiling based on top 1000 rows

Query Settings

PROPERTIES

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Nice Job! Note that the total steps is 6 because Power BI has automatically applied two data transformation steps when the data was loaded. The "Applied Steps" section is handy because it shows us all the modifications we've done to the data. We can delete our actions here or even see what the data looked like before applying certain changes.

If you like to learn more about how you can shape raw data, go to this [Microsoft Learn page](#).

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2_1_transform_load - Power BI Desktop

File Home Help

Clipboard: Paste, Copy, Cut

Data: Get data, Excel, Power BI, SQL, Enter data, Datasource, Recent sources, Transform Refresh data, Manage relationships, Manage roles, View as, Q&A setup, Language, Linguistic schema, Sensitivity, Publish

FactSale, DimDate, DimCustomer, DimEmployee

Properties: Cards, Show the database in the header when applicable, Show related fields when card is collapsed, Pin related fields to top of card

Fields: DimCustomer, DimDate, DimEmployee, FactSale

Context: 1 2 3 4

Instructions: Click "Close & Apply" to close Power Query In case It is still open. Check that Power BI recognized a relationship between FactSale and DimCustomer. Add a new page tab in the Report view.

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File Home Insert Modeling View Help

Clipboard: Paste, Copy, Cut, Format painter

Data: Get data, Excel, Power BI, SQL, Enter data, Datasource, Recent sources, Transform Refresh data, New visual, Text box, More visuals, New Quick measure measure, Sensitivity, Publish

Build visuals with your data. Select or drag fields from the Fields pane onto the report canvas.

Visualizations: Build visual, Filters

Fields: DimCustomer, DimDate, DimEmployee, FactSale

Context: 1 2 3 4

Instructions: Click "Close & Apply" to close Power Query In case It is still open. Check that Power BI recognized a relationship between FactSale and DimCustomer. Add a new page tab in the Report view.

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File Home Insert Modeling View Help

Clipboard: Paste, Cut, Copy, Format painter

Get data: workbook, datasets, Server, Data

Enter data: Datastore, Recent sources

Transform Refresh data: Queries


New visual: Text box, More visuals

Quick measure measure: Calculations

Sensitivity: Sensitivity

Publish: Share

Total Including Tax by Buying Group



Visualizations: Build visual, Filters

Fields: Invoice Date Key, Lineage Key, Package, Profit, Quantity, Sale Key, Salesperson Key, Stock Item Key

Context: Instructions

1 2 3 4

Make a Clustered Column Chart using Buying Group from DimCustomer and Total Including Tax from FactSale.

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Full-Screen 100%

3

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File Home Insert Modeling View Help Format Data / Drill

Clipboard: Paste, Cut, Copy, Format painter

Get data: workbook, datasets, Server, Data

Enter data: Datastore, Recent sources

Transform Refresh data: Queries

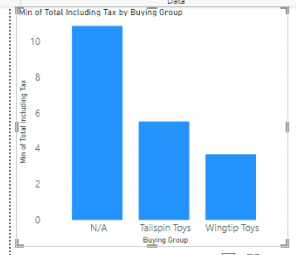
New visual: Text box, More visuals

Quick measure measure: Calculations

Sensitivity: Sensitivity

Publish: Share

Min of Total Including Tax by Buying Group



Visualizations: Build visual, Filters

Fields: DimDate, DimEmployee, FactSale, Bill To Customer..., City Key, Customer Key, Delivery Date K..., Description, Invoice Date Key, Lineage Key, Package, Profit, Quantity, Sale Key, Salesperson Key, Stock Item Key

X-axis: Buying Group

Y-axis: Min of Total Including...

Legend: Add data fields here

Context: Instructions

1 2 3 4

Change it so that the value is the minimum of Total Including Tax.

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File Home Insert Modeling View Help Format Data / Drill

Clipboard: Paste, Cut, Copy, Format painter

Data: Get data, Excel, Power BI, SQL, Enter data, Datasource, Recent sources

Queries: Transform, Refresh, New visual, Text box, More visuals, New Quick measure, Sensitivity, Publish

Visualizations: Build visual, Filters, Fields

Fields: Search, DimDate, DimEmployee, FactSale, Bill To Customer, City Key, Customer Key, Delivery Date Key, Invoice Date Key, Lineage Key, Package, Profit, Quantity, Sale Key, Salesperson Key, Check Item Key

Visualizations: Min of Total Including Tax by Buying Group

Min of Total Including Tax

Buying Group: N/A, Tailspin Toys, Wingtip Toys

Awesome aggregating! In all the transaction records for Tailspin Toys, the cheapest transaction was \$5.52. Minimum is one of several options. We could do the average total for each buying group, the count of sales for each buying group, and even the standard deviation. It's important that you are always aware which aggregation is being used on your visualization. Luckily, Power BI dynamically changes the axis labels, so make sure to review those.

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2.3_transforming_columns - Power BI Desktop

File Home Insert Modeling View Help Format Data / Drill

Clipboard: Paste, Cut, Copy, Format painter

Data: Get data, Excel, Power BI, SQL, Enter data, Datasource, Recent sources

Queries: Transform, Refresh, New visual, Text box, More visuals, New Quick measure, Sensitivity, Publish

Visualizations: Build visual, Filters, Fields

Fields: Search, DimCustomer, DimDate, DimEmployee, FactSale

Visualizations: Min of Total Including Tax by Buying Group

Min of Total Including Tax

Buying Group: N/A, Tailspin Toys, Wingtip Toys

Transforming columns

Earlier you practiced cleaning data at row-level, like deleting erroneous rows or changing the header row. Now, we'll take a look at issues at the column-level.

If you lost progress, close any open reports and load 2_3_transforming_columns.pbix from the Exercises folder on the desktop.

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2.3_transforming_columns - Power BI Desktop

File Home Insert Modeling View Help Format Data / Drill

Clipboard Cut Copy Paste Format painter

Get data Excel Power BI SQL Enter data Dataverse Recent sources

Transform Refresh Queries

New visual Text box More visuals

New Quick measure Sensitivity Publish

Visualizations

Build visual

Filters

Search

Filters on this visual

First Credit Limit is (All)

Add data fields here

Filters on this page

Add data fields here

Filters on all pages

Add data fields here

Fields

Search

DimCustomer

Bill To Customer

Buying Group

Category

Credit Limit

Customer

Customer Key

Lineage Key

Context Instructions

1 2 3 4 5 6

The card should show ? -, which is unexpected! Edit the query of DimCustomer to open up the Power Query Editor and fix the Credit Limit column.

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Min of Total Including Tax by Buying Group

Min of Total Including Tax

Buying Group

N/A Tailspin Toys Wingtip Toys

Sales Data Page 1

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2.3_transforming_columns - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Source Recent Sources Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor

Choose Columns Remove Columns Keep Rows Remove Rows Split Column Group By Data Type: Text Use First Row as Headers Replace Values Merge Queries Append Queries Combine Files Combine Text Analytics Vision Azure Machine Learning All Insights

Queries [4]

FactSale

DimDate

DimEmployee

DimCustomer

Category Buying Group Primary Contact Postal Code Credit Limit Lineage Key

1		N/A	N/A	N/A	-	
2	lty Shop	Tailspin Toys	Waldemar Fisz	90410	100,000.000000	
3	lty Shop	Tailspin Toys	Lorena Cindric	90216	100,000.000000	
4	lty Shop	Tailspin Toys	Bhaargav Rambhatla	90205	100,000.000000	
5	lty Shop	Tailspin Toys	Daniel Roman	90152	100,000.000000	
6	lty Shop	Tailspin Toys	Johanna Hulting	90261	100,000.000000	
7	lty Shop	Tailspin Toys	Biswajeet Thakur	90298	5,000.000000	
8	lty Shop	Tailspin Toys	Kalidas Nadar	90761	100,000.000000	
9	lty Shop	Tailspin Toys	Kanti Kotadia	90484	100,000.000000	
10	lty Shop	Tailspin Toys	Sointu Aalto	90129	100,000.000000	
11	lty Shop	Tailspin Toys	Siddhartha Parkar	90061	100,000.000000	
12	lty Shop	Tailspin Toys	Elnaz Javan	90185	100,000.000000	
13	lty Shop	Tailspin Toys	Heloisa Fernandes	90054	100,000.000000	
14	lty Shop	Tailspin Toys	Razeena Hosseini	90685	100,000.000000	
15	lty Shop	Tailspin Toys	Tereza Valentova	90633	100,000.000000	
16	lty Shop	Tailspin Toys	Filips Jaunzems	90631	100,000.000000	
17	lty Shop	Tailspin Toys	Nitin Matondkar	90467	100,000.000000	
18	lty Shop	Tailspin Toys	Adam Kubat	90416	3,320.000000	
19	lty Shop	Tailspin Toys	Isabelle Vodlan	90321	100,000.000000	
20	lty Shop	Tailspin Toys	Mithun Bhattacharya	90303	100,000.000000	
21	lty Shop	Tailspin Toys	Nghi Hua	90050	100,000.000000	
22						

10 COLUMNS, 402 ROWS Column profiling based on top 1000 rows

Query Settings

PROPERTIES

Name

DimCustomer

APPLIED STEPS

Source

Changed Type

Removed Top Rows

Promoted Headers

Changed Type1

Removed Columns

Context Instructions

1 2 3 4 5 6

The card should show ? -, which is unexpected! Edit the query of DimCustomer to open up the Power Query Editor and fix the Credit Limit column.

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File Home Transform Add Column View Tools Help

Close & Apply Recent Sources Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor Choose Columns Remove Columns Keep Rows Remove Rows Sort Split Column Group By Data Type: Text Merge Queries Append Queries Text Analytics Vision Azure Machine Learning

Queries [4] FactSale DimDate DimEmployee DimCustomer

Category	Buying Group	Primary Contact	Postal Code	Credit Limit	Lineage Key
1	N/A	N/A	N/A		
2	ety Shop	Tailspin Toys	Waldemar Fisar	90410	100,000.000000
3	ety Shop	Tailspin Toys	Lorena Cindric	90216	100,000.000000
4	ety Shop	Tailspin Toys	Bhaargav Rambhatia	90205	100,000.000000
5	ety Shop	Tailspin Toys	Daniel Roman	90152	100,000.000000
6	ety Shop	Tailspin Toys	Johanna Hulting	90261	100,000.000000
7	ety Shop	Tailspin Toys	Biswajeet Thakur	90298	5,000.000000
8	ety Shop	Tailspin Toys	Kalidas Nadar	90761	100,000.000000
9	ety Shop	Tailspin Toys	Kanti Kotadia	90484	100,000.000000
10	ety Shop	Tailspin Toys	Sointu Aalto	90129	100,000.000000
11	ety Shop	Tailspin Toys	Siddhartha Parkar	90061	100,000.000000
12	ety Shop	Tailspin Toys	Elnaz Javan	90185	100,000.000000
13	ety Shop	Tailspin Toys	Heloisa Fernandes	90054	100,000.000000
14	ety Shop	Tailspin Toys	Razeena Hosseini	90685	100,000.000000
15	ety Shop	Tailspin Toys	Tereza Valentova	90633	100,000.000000
16					

100,000.000000

10 COLUMNS, 402 ROWS Column profiling based on top 1000 rows

Context Instructions

1 2 3 4 5 6

- Replace values so that ? s are replaced with blanks in Credit Limit.
- Repeat so that - s are replaced with blanks for the Credit Limit column.

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Queries [4] FactSale DimDate DimEmployee DimCustomer

Category	Buying Group	Primary Contact	Postal Code	Credit Limit	Lineage Key
1	N/A	N/A	N/A		
2	ety Shop	Tailspin Toys	Waldemar Fisar	90410	100000
3	ety Shop	Tailspin Toys	Lorena Cindric	90216	100000
4	ety Shop	Tailspin Toys	Bhaargav Rambhatia	90205	100000
5	ety Shop	Tailspin Toys	Daniel Roman	90152	100000
6	ety Shop	Tailspin Toys	Johanna Hulting	90261	100000
7	ety Shop	Tailspin Toys	Biswajeet Thakur	90298	5000
8	ety Shop	Tailspin Toys	Kalidas Nadar	90761	100000
9	ety Shop	Tailspin Toys	Kanti Kotadia	90484	100000
10	ety Shop	Tailspin Toys	Sointu Aalto	90129	100000
11	ety Shop	Tailspin Toys	Siddhartha Parkar	90061	100000
12	ety Shop	Tailspin Toys	Elnaz Javan	90185	100000
13	ety Shop	Tailspin Toys	Heloisa Fernandes	90054	100000
14	ety Shop	Tailspin Toys	Razeena Hosseini	90685	100000
15	ety Shop	Tailspin Toys	Tereza Valentova	90633	100000
16	ety Shop	Tailspin Toys	Filips Jaunzems	90631	100000
17	ety Shop	Tailspin Toys	Nitin Matondkar	90467	100000
18	ety Shop	Tailspin Toys	Adam Kubat	90416	3320
19	ety Shop	Tailspin Toys	Isabelle Vodlan	90321	100000
20	ety Shop	Tailspin Toys	Mithun Bhattacharya	90303	100000
21	ety Shop	Tailspin Toys	Nghi Hua	90050	100000
22					

10 COLUMNS, 402 ROWS Column profiling based on top 1000 rows

Context Instructions

1 2 3 4 5 6

Change the data type of Credit Limit from Text to Decimal Number.

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Course Outline

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Sign in

2.3_transforming_columns - Power BI Desktop

File Home Insert Modeling View Help Format Data / Drill

Clipboard: Paste, Cut, Copy, Format painter

Data: Get data, Excel, Power BI, SQL, Enter data, Dataverse, Recent sources

Queries: Transform data, Refresh data

Visuals: New visual, Text box, More visuals

Calculations: New measure, Quick measure

Sensitivity: Sensitivity

Share: Publish

Visualizations: Build visual

Fields: DimCustomer

Filters: Filters on this visual, Filters on this page, Filters on all pages

Context: Instructions

1 2 3 4 5 6

Close and apply and return to the *Report* view. In the card, change the value to be the **average** Credit Limit.

Hint Rewatch Video Next

Page 2 of 2

Sales Data Page 1

99.53K
Average of Credit Limit

Min of Total Including Tax by Buying Group

10
5
0

Subk Subgroup Type Business Group Wingtip Type

Transforming columns | Power BI | DataCamp Learn

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Sign in

2.3_transforming_columns - Power BI Desktop

File Home Insert Modeling View Help Format Data / Drill

Clipboard: Paste, Cut, Copy, Format painter

Data: Get data, Excel, Power BI, SQL, Enter data, Dataverse, Recent sources

Queries: Transform data, Refresh data

Visuals: New visual, Text box, More visuals

Calculations: New measure, Quick measure

Sensitivity: Sensitivity

Share: Publish

Visualizations: Build visual

Fields: DimCustomer

Filters: Filters on this visual, Filters on this page, Filters on all pages

Context: Instructions

1 2 3 4 5 6

Close and apply and return to the *Report* view. In the card, change the value to be the **average** Credit Limit.

Hint Rewatch Video Next

Page 2 of 2

Sales Data Page 1

99.53K
Average of Credit Limit

Min of Total Including Tax by Buying Group

10
5
0

Subk Subgroup Type Business Group Wingtip Type

Terrific transforming! If you're making a visualization and you get a weird output, like we did when we first made the card, check out the data view. By looking closer at the credit limit column, you found that there were unwanted ? and - in the column. This made Power BI recognize the field as "text", which is why we could change it to "decimal number" once we replaced values.

Check out the [Microsoft Learn page](#) to see further information when and how to change data types.

PRESS ENTER TO

Continue

Full-Screen 100%

Formatting Currency

1

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Course Outline

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2.4.format_currency - Power BI Desktop

File Home Help Table tools Column tools

Name: Total Including Tax Format: Currency Summarization: Sum

Data type: Decimal number

Choose how the values in this column are displayed (this doesn't impact how they're stored). If you see an asterisk (*), that format will reflect the date and time settings of your operating system.

Sort by column Data groups Manage relationships New column

Table: FactSale (26,397 rows) Column: Total Including Tax (486 distinct values)

Fields

Context Instructions

1 2 3 4 5

In the Data view of FactSale, select the Total Including Tax column.

Using Column tools, change the format to Currency.

Hint Rewatch Video Next

2

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Course Outline

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File Home Help Table tools Column tools

Name: Total Including Tax Format: Currency Summarization: Sum

Data type: Decimal number

Change the number of decimal places shown for this value.

Sort by column Data groups Manage relationships New column

Table: FactSale (26,397 rows) Column: Total Including Tax (486 distinct values)

Fields

Context Instructions

1 2 3 4 5

Change the number of decimal places shown to 2 instead of Auto.

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3

Formatting currency | Power BI | DataCamp

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File Home Help Table tools Column tools

Name Profit Format Currency Summarization Average

Data type Decimal number

Set the default way to summarize values in this column (for example, a sum or an average) when it's used in a visual. To change the summarization in a specific visual, go to the Fields tab in the Visualizations pane. Setting it to Don't summarize will show the distinct values for the column.

Date Key	Salesperson Key	WWI Invoice ID	Description	Package	Quantity	Unit Price	Tax Rate	Total Excluding Tax	Tax Amount	Profit
10/24/2013	85	15267	DBA joke mug - two types of DBAs (White)	Each	7	13	15	91	13.65	\$59.50
10/26/2013	84	15380	DBA joke mug - SELECT caffeine FROM mug (White)	Each	7	13	15	91	13.65	\$59.50
10/29/2013	81	15551	DBA joke mug - mind if I join you? (White)	Each	7	13	15	91	13.65	\$59.50
11/2/2013	74	15773	DBA joke mug - it depends (White)	Each	7	13	15	91	13.65	\$59.50
11/9/2013	86	16085	Developer joke mug - that's a hardware problem (White)	Each	7	13	15	91	13.65	\$59.50
11/10/2013	39	16149	Developer joke mug - (hip, hip, array) (Black)	Each	7	13	15	91	13.65	\$59.50
11/16/2013	91	16433	DBA joke mug - it depends (Black)	Each	7	13	15	91	13.65	\$59.50
11/28/2013	74	17096	Developer joke mug - when your hammer is C++ (White)	Each	7	13	15	91	13.65	\$59.50
12/8/2013	86	17651	Developer joke mug - a foo walks into a bar (White)	Each	7	13	15	91	13.65	\$59.50
12/11/2013	90	17755	DBA joke mug - it depends (Black)	Each	7	13	15	91	13.65	\$59.50
12/13/2013	81	17840	DBA joke mug - two types of DBAs (Black)	Each	7	13	15	91	13.65	\$59.50
12/14/2013	39	17862	DBA joke mug - it depends (Black)	Each	7	13	15	91	13.65	\$59.50
12/20/2013	86	18131	IT joke mug - keyboard not found ... press F1 to continue (Black)	Each	7	13	15	91	13.65	\$59.50
12/20/2013	81	18135	IT joke mug - keyboard not found ... press F1 to continue (Black)	Each	7	13	15	91	13.65	\$59.50
12/26/2013	81	18463	Developer joke mug - that's a hardware problem (Black)	Each	7	13	15	91	13.65	\$59.50
1/10/2014	9	497	Developer joke mug - inheritance is the OO way to become a developer (Black)	Each	7	13	15	91	13.65	\$59.50
1/16/2014	19	834	Developer joke mug - old C developers never die (White)	Each	7	13	15	91	13.65	\$59.50
1/18/2014	25	935	DBA joke mug - it depends (White)	Each	7	13	15	91	13.65	\$59.50
1/19/2014	12	1019	Developer joke mug - old C developers never die (White)	Each	7	13	15	91	13.65	\$59.50

Table: FactSale (26,397 rows) Column: Profit (547 distinct values)

Context Instructions Minimize

- 1
- 2
- 3
- 4
- 5

- Change the default aggregation from Sum to Average.
- Repeat the same format and decimal place changes to the Profit column.

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4

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2.4_format_currency - Power BI Desktop

File Home Insert Modeling View Help Format Data / Drill Table tools

Name FactSale

Mark as date table Manage relationships New measure column New table

Sales Data

Quantity of Items Sold

\$9.92M Sum of Profit

Quantity Total Dry Items and Total

Calendar Year

Employee

\$865.82 Total Including Tax

Employee	Description	Quantity	Sum of Total Including Tax	Sum of Profit
Amy Trefl	10 mm Anti static bubble wrap (Blue) 10m	450	\$13,455.00	\$4,050.00
Anthony Grosse	10 mm Anti static bubble wrap (Blue) 10m	1110	\$33,189.00	\$9,990.00
Archer Lambie	10 mm Anti static bubble wrap (Blue) 10m	610	\$18,239.00	\$5,490.00
Hudson Hollinworth	10 mm Anti static bubble wrap (Blue) 10m	310	\$9,269.00	\$2,790.00
Hudson Onslow	10 mm Anti static bubble wrap (Blue) 10m	820	\$24,518.00	\$7,380.00
David Dettmer	10 mm Anti static bubble wrap (Blue) 10m	710	\$21,350.00	\$6,300.00
Total		1028670	\$22,855,077.65	\$9,923,891.70

Filters

Visualizations

Fields

Right on! This is the average "Total Including Tax" made in each sale at Wide World Importers. Remember, we made the default aggregation average instead of sum. It is formatted appropriately with a dollar sign and two decimal places. Now it's immediately clear we are looking at a monetary value. If you check the table, you'll find that the monetary fields are also formatted appropriately!

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Making Maps with geographic data

1

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2.5_making_maps - Power BI Desktop

File Home Help

Clipboard Data Queries Relationships Security Q&A Language Linguistic schema Sensitivity Publish

FactSale DimDate DimCustomer

Properties Fields

Context Instructions

1 2 3 4 5 6

- Load the dimension table DimCity.csv from the Datasets/WWI folder on the Desktop.
- Go to the Model view and make sure a relationship is found between DimCity and FactSale.

Hint Retwatch Video Next

2

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2.5_making_maps - Power BI Desktop

File Home Help Table tools Column tools

Name State or Province Format Text Summarization Don't summarize Data category Uncategorized Sort by column Data groups Manage relationships New column

Structure Formatting Properties Sort Groups Relationships Calculations

City Key	City	State or Province	Country	Sales Territory	Location	Latest Recorded Population
81	El Toro	California	United States	Far West	0xE6100000010C278B005669D04040C7B8FA28A6C5DC0	0
303	Orleans	California	United States	Far West	0xE6100000010CC41E7F0E98A644400C642C89A2E25EC0	0
315	Oro Grande	California	United States	Far West	0xE6100000010CCED77624A84C4140A3B899C063555DC0	0
353	Petrolia	California	United States	Far West	0xE6100000010CE6D7C523A72944408BC35165E125FC0	0
370	Herndon	California	United States	Far West	0xE6100000010CC5B18927166B4240558A784686FA5DC0	0
549	Rimforest	California	United States	Far West	0xE6100000010CD77734C4671D4140B32E2416674E5DC0	0
633	Sauviers Bar	California	United States	Far West	0xE6100000010CD0791D90FA6444050A0F42A2457C85EC0	0
694	South Fontana	California	United States	Far West	0xE6100000010CB44357709084140213020C354A5F5DC0	0
747	Sky Londa	California	United States	Far West	0xE6100000010CB828AA3418B1424060ABA9D1D0905EC0	0
750	Skyforest	California	United States	Far West	0xE6100000010CE5DF10CF1D1E4140162D52178485DC0	0
937	Nipton	California	United States	Far West	0xE6100000010C7149C44AB8B84140A529A7E26B015DC0	0
1137	Red Mountain	California	United States	Far West	0xE6100000010CE26190AADACD4140BC858F7078675DC0	0
1599	Grossmont	California	United States	Far West	0xE6100000010C241CC418A2634040A69D14C413F5DC0	0
1736	Pinedale	California	United States	Far West	0xE6100000010CD07A907906B842405E08D0358DF25DC0	0
1741	Pinehurst	California	United States	Far West	0xE6100000010C73ADAC23FD584240CFB087490EC15DC0	0
1752	Hinkley	California	United States	Far West	0xE6100000010CA67EDE54A4774140A4B05D5E8F4C5DC0	0
2001	Scotland	California	United States	Far West	0xE6100000010C4792205C011F4140F3A81FAE05F5DC0	0
2111	Smiley Park	California	United States	Far West	0xE6100000010C6E77C5426319414091FA89729485DC0	0
2166	Meeks Bay	California	United States	Far West	0xE6100000010CAE4676A565844340C6EDED1CF0075EC0	0
2223	Monolith	California	United States	Far West	0xE6100000010C374F1A0F588F41401884A8B1F3975DC0	0

Table: DimCity (13,028 rows) Column: State or Province (6 distinct values)

Fields

Context Instructions

1 2 3 4 5 6

In the Data view, change the Data category of DimCity's State or Province to 'State or Province'.

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2_5_making_maps - Power BI Desktop

File Home Help Table tools Column tools

Name Profit Format Currency Summarization Average Data type Decimal number Data category Uncategorized Sort by column Data groups Manage relationships New column

Table: FactSale (26,397 rows) Column: Profit (547 distinct values)

Fields

City Key Customer Key Delivery Date Key Description Invoice Date Key Lineage Key Package Profit Quantity

Context Instructions

1 2 3 4 5 6

Make sure the default summarization for Profit from FactSale is "Average".

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File Home Insert Modeling View Help Format Data / Drill

Clipboard Get data workbook datasets Server data Recent sources Transform Refresh data Queries New visual Text box More visuals New measure Quick measure Sensitivity Publish

Visualizations

Filters

Filters on this visual

Profit is (All)

State or Province is (All)

Add data fields here

Filters on this page

Add data fields here

Filters on all pages

Build visual

State Province as Location and Profit as Bubble size.

Context Instructions

1 2 3 4 5 6

In the Report view, navigate to the second tab.

Create a Map visualization using State Province as Location and Profit as Bubble size.

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5

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2_5_making_maps - Power BI Desktop

FileHomeInsertModelingViewHelpFormatData / Drill

PasteCutCopyFormat painterClipboard

Get dataExcelPower BISQLEnter dataDataverseRecent sourcesTransform dataRefresh

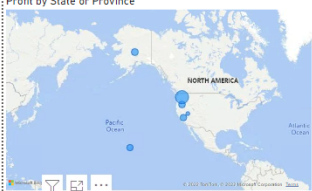
New visualText boxMore visuals

New measureQuick measure

SensitivitySensitivityPublish

TOTAL INCLUDING TAX DATA

Profit by State or Province



Buying Group

☐ N/A

☐ Tallspin Toys

☒ Wingtip Toys

\$905.93

Average of Total Including Tax

Wingtip Toys

Buying Group

Filters

Search

Filters on this visual

Buying Group is (All)

Add data fields here

Filters on this page

Add data fields here

Filters on all pages

Add data fields here

Visualizations

Build visual

Fields

Page 2 of 2

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2:07 PM

✓ +100 XP

Magnificent mapping! Maps are a powerful visualization that let you quickly interpret geographic data. Locations can quickly get crowded, but with the slicer, we can zoom into particular areas of interest.

Congrats on finishing the second chapter! Are you ready to learn more? In the next chapter, you'll dive deeper into the different types of visualizations Power BI offers, as well as how to customize them.

PRESS ENTER TO

Continue