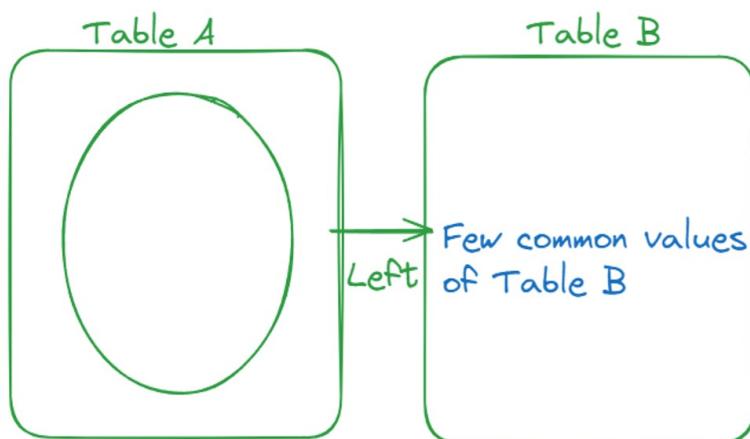


Data Transformation -3

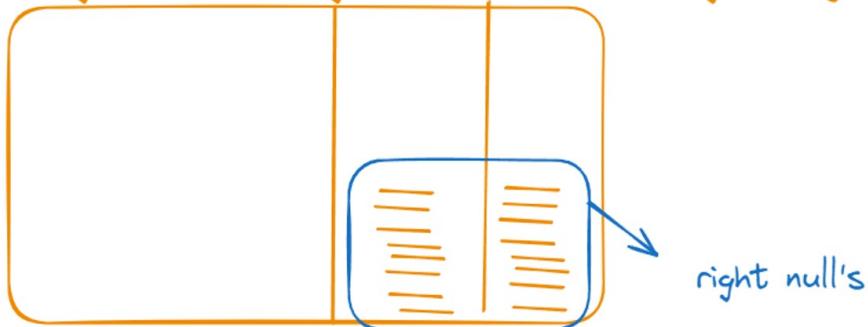
30 August 2024 21:06

Data Transformation - 3

Merging the Table



Original Table Merge with New Table using Left join



[Before Merging]





Merge

Select a table and matching columns to create a merged table.

Sales Record 2015-17

OrderDate	StockDate	OrderNumber	ProductKey	CustomerKey	TerritoryKey	OrderLineItem	Order
01-01-2015	21-09-2001	SO45080	332	14657	1	1	
06-02-2015	12-10-2001	SO45383	332	14734	1	1	
01-01-2015	05-12-2001	SO45079	312	29255	4	1	
02-01-2015	15-12-2001	SO45083	312	14947	10	1	

d-customer

CustomerKey	Prefix	FirstName	LastName	BirthDate	MaritalStatus	Gender	EmailAddress
15118	MR.	NELSON	ORTEGA	09-07-1949	M	M	nelson21@adventure
11434	MR.	ANDRE	LOPEZ	06-05-1951	M	M	andre16@adventure-v
11467	MR.	ARTURO	ZHENG	07-10-1969	M	M	arturo21@adventure-v
11080	MR.	DAMIEN	CHANDER	17-07-1959	M	M	damien32@adventure

Join Kind

Inner (only matching rows)

Use fuzzy matching to perform the merge

Fuzzy matching options

The selection matches 28801 of 56046 rows from the first table, and 7902...

OK Cancel

\$ d-product.ProductPrice Δ d-customer.Gender

Sort Ascending Sort Descending Clear Sort Clear Filter Remove Empty Text Filters Search

- (Select All)
- F
- M

OK Cancel

A Δ B d-customer.Gender Δ A B d-customer.Occupation

Sort Ascending Sort Descending Clear Sort Clear Filter Remove Empty Text Filters Search

- (Select All)
- Clerical
- Management
- Manual
- Professional
- Skilled Manual

OK Cancel

Group By

Specify the columns to group by and one or more outputs.

Basic Advanced

d-customer.Gender

d-customer.Occupation

Add grouping

New column name Operation Column

Total Order Quantity	Sum	OrderQuantity
----------------------	-----	---------------

Add aggregation

OK Cancel

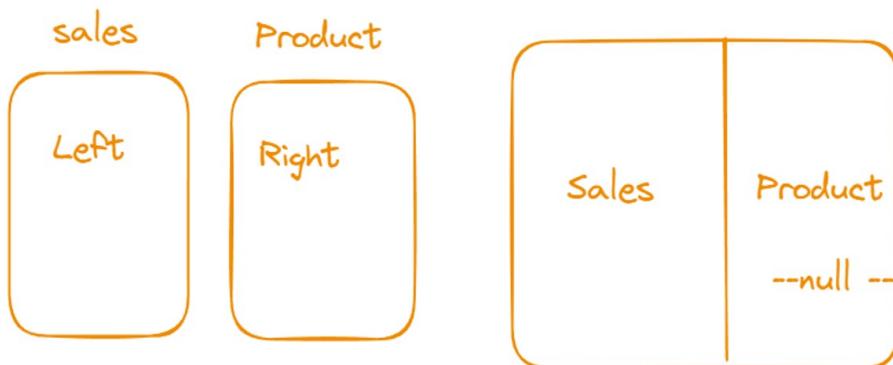
d-customer.Gender	d-customer.Occupation	1.2 Total Order Quantity	d-customer.Gender	d-customer.Occupation	1.2 Total Order Quantity	
Valid	100%	Valid	Valid	91%	Valid	100%
Error	0%	Error	Error	0%	Error	0%
Empty	0%	Empty	Empty	0%	Empty	0%

$A \setminus C$ d-customer.Gender	$A \setminus C$ d-customer.Occupation	1.2 Total Order Quantity
Valid Error Empty	Valid Error Empty	Valid Error Empty
100% 0% 0%	100% 0% 0%	100% 0% 0%
2 distinct, 0 unique	5 distinct, 0 unique	10 distinct, 10 unique
M	Skilled Manual	4793
M	Professional	6841
M	Manual	2462
F	Professional	6769
F	Skilled Manual	5223
F	Manual	2402
F	Clerical	3076
M	Management	4448
F	Management	4118
M	Clerical	3083

Inner Join

$A \setminus C$ d-customer.Gender	$A \setminus C$ d-customer.Occupation	1.2 Total Order Quantity
Valid Error Empty	Valid Error Empty	Valid Error Empty
91% 0% 9%	91% 0% 9%	100% 0% 0%
3 distinct, 1 unique	6 distinct, 1 unique	11 distinct, 11 unique
F	Manual	2402
F	Management	4118
F	Professional	6769
M	Management	4448
M	Clerical	3083
M	Professional	6841
M	Manual	2462
F	Skilled Manual	5223
M	Skilled Manual	4793
F	Clerical	3076
null	null	40959

Left Outer Join

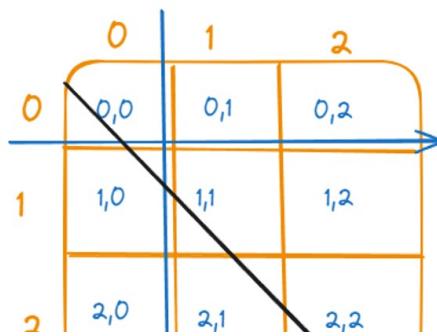
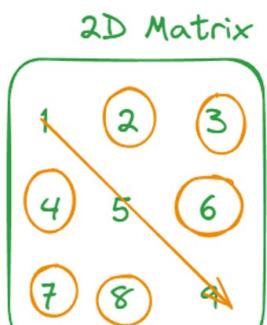


LEFT JOIN - " Right side mein null show hoga"

Right Join - " Left Side mein null show hoga"

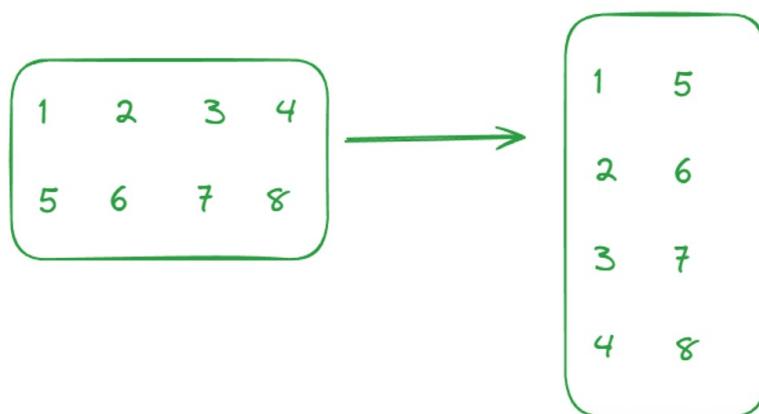
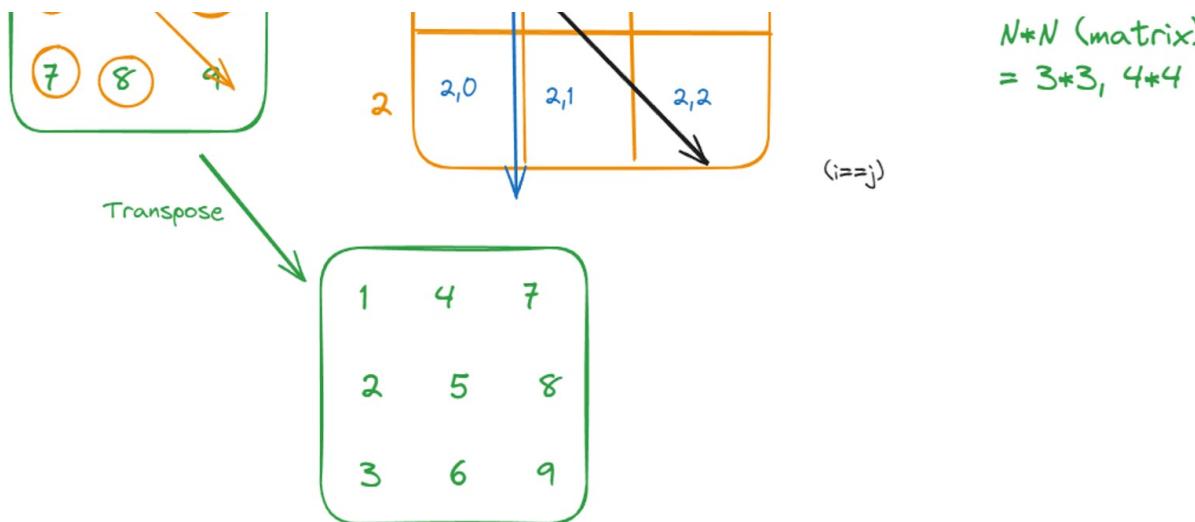
Category Table:

- Transpose the category table to convert rows into columns and columns into rows



cell - indexing [row,column]

$N \times N$ (matrix)
 $= 3 \times 3, 4 \times 4$



Power BI Transposed Table:

ABC Column1	ABC Column2	ABC Column3	ABC Column4
Valid: 100%	Valid: 100%	Valid: 100%	Valid: 100%
Error: 0%	Error: 0%	Error: 0%	Error: 0%
Empty: 0%	Empty: 0%	Empty: 0%	Empty: 0%
2 distinct, 2 unique			
1	2	3	4
Bikes	Components	Clothing	Accessories

Properties:

- Name: d-categories
- Applied Steps:
 - Source
 - Transposed Table
 - Renamed Columns
 - Changed Type

Category Key:

ABC Categories

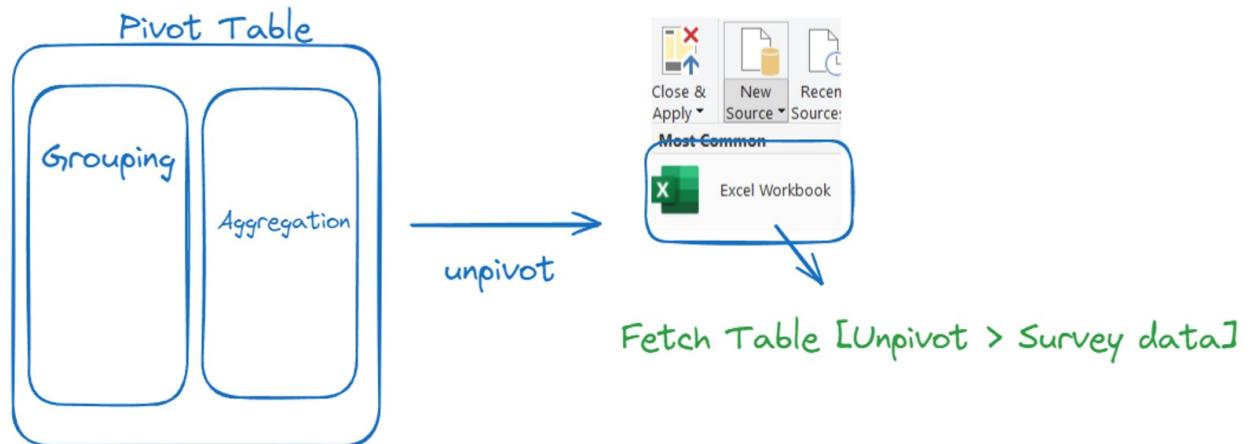
Annotations:

- 2×4 [row,col]
- 4×2 [row,col]

Category Key	Categories
Valid	100%
Error	0%
Empty	0%
4 distinct, 4 unique	
	1 Bikes
	2 Components
	3 Clothing
	4 Accessories

Unpivot Table:

- Unpivot the survey sheet to convert multiple columns of data into a single column and multiple rows of data into a single column.



Survey Data - Unpivot	Company	I am paid fairly for the work I do	My colleagues openly value the contributions of others	I feel I can share my opinions openly with management without fear of retribution
1	Strongly Disagree	Neutral	Neutral	Neutral
2	Agree	Agree	Neutral	Neutral
3	Strongly Disagree	Agree	Strongly Agree	Agree
4	Strongly Disagree	Agree	Disagree	Agree
5	Agree	Agree	Agree	Agree
6	Agree	Agree	Strongly Agree	Agree
7	Strongly Disagree	Agree	Agree	Agree
8	Neutral	Agree	Neutral	Neutral
9	Agree	Agree	Agree	Agree
10	Disagree	Neutral	Neutral	Neutral
11	Neutral	Agree	Agree	Agree
12	Neutral	Strongly Agree	Strongly Agree	Agree
13	Agree	Agree	Agree	Agree
14	Agree	Agree	Agree	Agree
15	Neutral	Agree	Neutral	Neutral
16	Agree	Agree	Agree	Agree
17	Disagree	Neutral	Neutral	Neutral
18	Neutral	Agree	Neutral	Neutral
19	Neutral	Agree	Agree	Agree

	16	Agree	Agree	Agree
	17	Disagree	Neutral	Neutral
	18	Neutral	Agree	Neutral
	19	Neutral	Agree	Agree
	20	Neutral	Agree	Agree

= Table.TransformColumnTypes(#"Renamed Columns", {"Name", type text}, {"REGION", type text}, {"Position", type text}, {"Domain", type text})

	A ^b _c Position	A ^b _c Domain	A ^b _c Tenure	A ^b _c Survey Questions	A ^b _c Responses
s	• Valid • Error • Empty	100% 0% 0%	• Valid • Error • Empty	100% 0% 0%	• Valid • Error • Empty
b					100% 0% 0%
s					• Valid • Error • Empty
1	Analyst L1	Industrials	0 - 2 years	I feel encouraged to come up with new and better ways of doing things.	Neutral
2	Analyst L1	Industrials	0 - 2 years	My work gives me a feeling of personal accomplishment.	Strongly Agree
3	Analyst L1	Industrials	0 - 2 years	I have the tools and resources to do my job well.	Agree
4	Analyst L1	Industrials	0 - 2 years	On my job, I have clearly defined quality goals.	Neutral
5	Analyst L1	Industrials	0 - 2 years	The Company does an excellent job of keeping employees informed ab...	Agree
6	Analyst L1	Industrials	0 - 2 years	When a customer is dissatisfied, I can usually correct the problem to t...	Agree
7	Analyst L1	Industrials	0 - 2 years	I understand why it is so important for (Company name) to value diver...	Strongly Agree
8	Analyst L1	Industrials	0 - 2 years	My job makes good use of my skills and abilities.	Agree
9	Analyst L1	Industrials	0 - 2 years	My supervisor's manager visibly demonstrates a commitment to quality.	Agree
10	Analyst L1	Industrials	0 - 2 years	Senior managers visibly demonstrate a commitment to quality.	Neutral
11	Analyst L1	Industrials	0 - 2 years	How satisfied are you with the information you receive from manage...	Neutral
12	Analyst L1	Industrials	0 - 2 years	How satisfied are you with your involvement in decisions that affect y...	Neutral
13	Analyst L1	Industrials	0 - 2 years	Considering everything, how satisfied are you with your job?	Agree
14	Analyst L1	Industrials	0 - 2 years	How satisfied are you with the information you receive from manage...	Agree
15	Analyst L1	Industrials	0 - 2 years	How satisfied are you with your opportunity to get a better job in this...	Neutral
16	Analyst L1	Industrials	0 - 2 years	Do you feel that employees are recognized as individuals?	Agree
17	Analyst L1	Industrials	0 - 2 years	How motivated are you to see the company succeed?	Strongly Agree
18	Analyst L1	Industrials	0 - 2 years	The company clearly communicates its goals and strategies to me.	Strongly Agree
19	Analyst L1	Industrials	0 - 2 years	I receive adequate opportunity to interact with other employees on a f...	Strongly Agree
20	Analyst L1	Industrials	0 - 2 years	I have a clear path for career advancement.	Strongly Agree
21	Analyst L1	Industrials	0 - 2 years	Moving requirements are clear	Agree

Name
Survey Data - Unpivot

All Properties

APPLIED STEPS

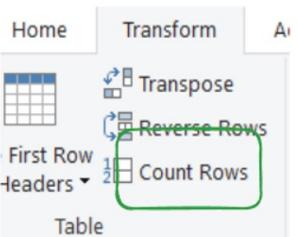
- Source
- Navigation
- Promoted Headers
- Unpivoted Columns
- Renamed Columns
- Changed Type

Class Room Data Transformations - 2

Customer Table:

- Count Total Number of Customers.

8169



Queries [8]

d-customer

i² CustomerKey

Queries [8]

d-customer
Sales 2015
sales 2016
sales 2017
Sales Record 2015-17
d-product
d-categories
Survey Data - Unpivot

i23 CustomerKey

	Valid	100%	•
	Error	0%	•
	Empty	0%	•
1000 distinct, 1000 unique			
1	15118	MI	
2	11434	MI	
3	11467	MI	
4	11080	MI	
		3	

Product Table:

- Determine the unique number of products in the product table.
- Round off the values in the "Product Price" and "Product Cost" columns.

Queries [8]

d-customer
Sales 2015
sales 2016
sales 2017
Sales Record 2015-17
i23 d-product
d-categories
Survey Data - Unpivot

→ < .5 - .0
≥ .5 - +.1 carry

19.8 = 20
19.3 = 19

293

293

Krishna Madan

PROPERTIES

Name: d-product

All Properties

APPLIED STEPS

Source
Promoted Headers
Changed Type
Removed Duplicates
Counted Rows

Queries [8]

\$ ProductCost	\$ ProductPrice
• Valid 100%	• Valid 100%
• Error 0%	• Error 0%
• Empty 0%	• Empty 0%

i23 d-product

	104 distinct, 43 unique	103 distinct, 43 unique
13.10		35.00
12.00		33.60
3.40		9.50
3.40		9.50
12.00		33.60
5.70		8.60
31.70		48.10
31.70		48.10

Krishna Madan

PROPERTIES

Name: d-product

All Properties

APPLIED STEPS

Source
Promoted Headers
Changed Type
Rounded Off
Rounded Off1