

project 3 - Power Query Editor

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 Remove Keep Remove Split Group Data Type: Text Use First Row as Headers Append Queries Text Analytics Merge Queries Append Queries Combine Files Azure Machine Learning Vision

Queries [7] This preview may be up to 3 days old. Refresh

Table.RenameColumns(#Merged Columns,{"Product ID Product Name Current Price Number in Stock Customer Rating (stars) .3", "Current

Product ID	Product Name	Current Price	Number in Stock	Customer Rating (stars)	Return Rate
C5w2104	Cotton Sweater	100	95	4.1	0.0023
W5c6070	Wool Scarf	50	362	3.1	0.017031456
OC08824	Oversized Coat	650	173	3.2	0.016146829
LBa2237	Leather Bag	2000	246	3.3	0.012281759
LWw7799	Leather Wallet	175	105	3.2	0.02
CWw1982	Chronograph Watch	350	65	4.9	0.00014
WG6543	Winter Gloves	75	171	3.1	0.023441955
LSw9754	Light Sweatshirt	45	230	3.5	0.012335504
ST-3720	Spring T-Shirt	25	145	3.7	0.00452009
PSH9297	Polo Shirt	35	25	4.2	0.007590577
PSK2742	Pleated Skirt	50	100	4	0.0125
LDY4317	Long Dress	125	373	4.5	0.0015
SD6674	Sweater Dress	215	314	3.8	0.018899556
B5H1337	Button Shirt	60	199	3.5	0.02047351
CB7926	Cotton Blouse	75	243	3.75	0.016219379
LSn4457	Leather Sneakers	175	95	4.7	0.00225
FF5119	Flip Flops	25	250	3.9	0.007859143

6 COLUMNS, 17 ROWS Column profiling based on top 1000 rows

Query Settings

PROPERTIES

Name

Product Inventory

All Properties

APPLIED STEPS

Source

Navigation

Changed Type

Promoted Headers

Changed Type1

Split Column by Delimiter

Changed Type2

Renamed Columns

Reordered Columns

Merged Columns

Renamed Columns1

PREVIEW DOWNLOADED ON TUESDAY

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Queries [7] This preview may be up to 3 days old. Refresh

Table.RenameColumns(#"Changed Type2",{"Value", "Amount"})

Customer ID	Date	Amount
JLH30836	01/09/2020	0.00
JLH30836	02/09/2020	0.00
JLH30836	03/09/2020	500.00
JLH30836	04/09/2020	0.00
JLH30836	05/09/2020	2,000.00
JLH30836	06/09/2020	0.00
JLH30836	07/09/2020	0.00
JLH30836	08/09/2020	0.00
JLH30836	09/09/2020	0.00
JLH30836	10/09/2020	0.00
JLH30836	11/09/2020	0.00
JLH30836	12/09/2020	750.00
JLH30836	13/09/2020	0.00
JLH30836	14/09/2020	500.00
JLH30836	15/09/2020	0.00
JLH30836	16/09/2020	0.00
JLH30836	17/09/2020	0.00
JLH30836	18/09/2020	0.00
JLH30836	19/09/2020	0.00
JLH30836	20/09/2020	0.00
JLH30836	21/09/2020	0.00
JLH30836	22/09/2020	0.00
JLH30836	23/09/2020	0.00
JLH30836	24/09/2020	0.00
JLH30836	25/09/2020	0.00
JLH30836	26/09/2020	0.00
JLH30836	27/09/2020	0.00
JLH30836	28/09/2020	0.00
JLH30836	29/09/2020	0.00

3 COLUMNS, 999+ ROWS Column profiling based on top 1000 rows

Query Settings

PROPERTIES

Name

Purchase List

All Properties

APPLIED STEPS

Source

Navigation

Promoted Headers

Changed Type

Unpivoted Columns

Renamed Columns

Changed Type1

Replaced Value

Replaced Value1

Replaced Value2

Replaced Value3

Changed Type2

Renamed Columns1

PREVIEW DOWNLOADED ON TUESDAY

```
1 Income Range =
2 IF('Customer List'[Predicted Income]<= 100000,100000,
3 IF('Customer List'[Predicted Income]<= 120000,120000,
4 IF('Customer List'[Predicted Income]<= 140000,140000,
5 IF('Customer List'[Predicted Income]<= 160000,160000,
6 IF('Customer List'[Predicted Income]<= 180000,180000,
7 IF('Customer List'[Predicted Income]<= 200000,200000,
8 IF('Customer List'[Predicted Income]<= 250000,250000,
9 IF('Customer List'[Predicted Income]<= 250000,250000,
10 IF('Customer List'[Predicted Income]<= 600000,600000,0
11 )))))))
```

```
1 Recommended Products =
2 IF([Predicted Income] >= 60000 && [Predicted Income] < 120000 , "Polo Shirt, Flip Flops",
3 IF([Predicted Income] >= 120000 && [Predicted Income] < 180000 , "Button Shirt, Wool Scarf",
4 IF([Predicted Income] >= 180000 && [Predicted Income] < 250000 , "Cotton Sweater, Cotton Blouse",
5 IF([Predicted Income] >= 250000 && [Predicted Income] < 600000 , "Chronograph Watch, Oversized Coat",
6 IF([Predicted Income] >= 600000, "Leather Bag",
7 "No Recommendation"
8 ))))
```

State	Y	Y^2	X	X^2	XY
Kansas	241.45	58300.30	87569.111	7,668,349,201.33	\$21,143,959.8924
Arkansas	132.50	17556.25	73734.11	5,436,718,977.49	\$9,769,769.575
New Mexico	160.90	25888.81	77644.128	6,028,610,612.88	\$12,492,940.1952
California	428.86	183918.44	106269.184	11,293,139,468.03	\$45,574,297.6119
Oregon	219.91	48360.01	93274.124	8,700,062,207.97	\$20,511,827.8142
Vermont	272.13	74053.25	89099.112	7,938,651,759.19	\$24,246,298.351
North Dakota	271.09	73490.28	90179.118	8,132,273,323.26	\$24,446,739.0796
Mississippi	118.00	13924.00	70814.125	5,014,640,299.52	\$8,356,066.75
Washington	472.09	222869.83	104499.158	10,920,074,022.71	\$49,333,102.4995
Colorado	417.64	174420.13	103364.149	10,684,147,298.49	\$43,168,627.3187
New York	241.15	58155.18	99524.188	9,905,063,997.06	\$24,000,640.7215
Rhode Island	275.18	75725.03	95079.131	9,040,041,151.72	\$26,164,048.1397
North Carolina	108.95	11869.11	83904.123	7,039,901,856.40	\$9,140,972.8185
Pennsylvania	244.74	59896.12	90344.131	8,162,062,006.15	\$22,110,537.3237
Illinois	443.80	196862.30	95769.149	9,171,729,900.18	\$42,502,764.7138
Idaho	177.35	31454.63	85834.093	7,367,491,521.13	\$15,223,066.5485
Arizona	266.83	71196.79	88974.124	7,916,394,741.57	\$23,740,722.8502
Hawaii	306.58	93992.41	107304.159	11,514,182,538.70	\$32,897,504.1647
Louisiana	152.50	23256.25	77829.151	6,057,376,745.38	\$11,868,945.5275
Florida	178.15	31735.77	86034.127	7,401,871,008.65	\$15,326,581.4189
Nebraska	284.00	80656.00	88634.102	7,856,004,037.35	\$25,172,084.968
Wisconsin	118.64	14074.59	88984.097	7,918,169,518.91	\$10,556,749.6895
South Dakota	86.23	7435.14	84719.093	7,177,324,718.74	\$7,305,096.3373
Wyoming	247.93	61467.93	89699.099	8,045,928,361.41	\$22,238,852.9812
New Jersey	428.42	183543.23	110794.199	12,275,354,532.05	\$47,466,390.8468

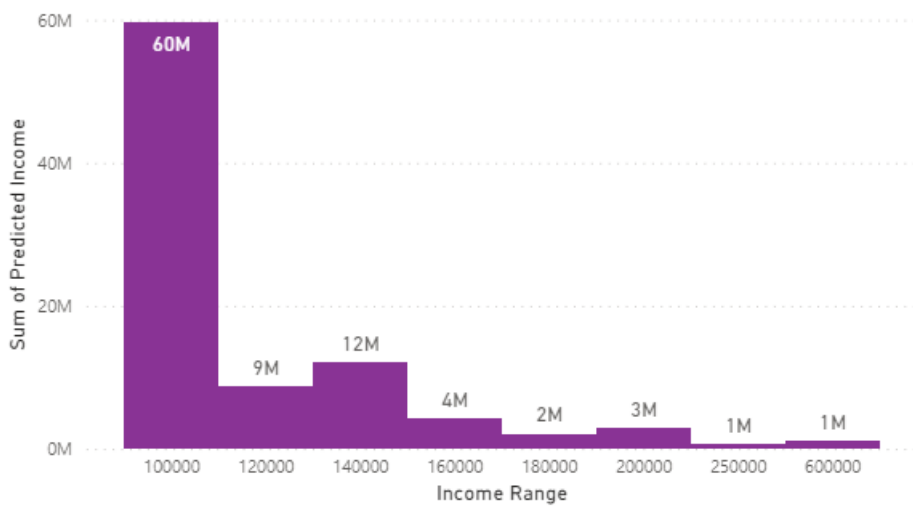
```
1 Prediction Formula = "X = (" & ROUND([b],3) & " - Y) / - " & ROUND([m],3)
```

```
1 m = DIVIDE([n]*[Sum of XY]-[Sum of X]*[Sum of Y],[n]*[Sum of X2]-[Sum of X]^2)
```

```
1 b = DIVIDE([Sum of Y]*[Sum of X2]-[Sum of X]*[Sum of XY],[n]*[Sum of X2]-[Sum of X]^2)
```

```
1 Predicted Income = DIVIDE(-722.14 - 'Customer List'[Last 6 Months Purchases],-0.011)
```

Sum of Predicted Income by Income Range



0.69

R2 between Cust Rating and Return Rate

-0.83

Negative Correlation between Ratings and Return

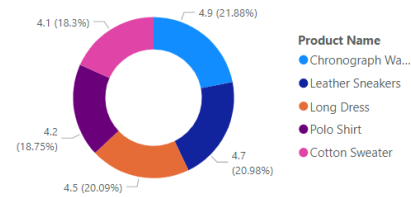
3.79

Avg Customer Rating

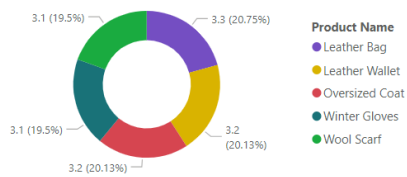
Customer Rating (stars) Vs Return Rate



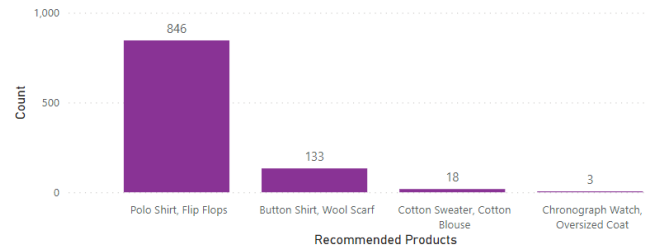
Top 5 Rated Products



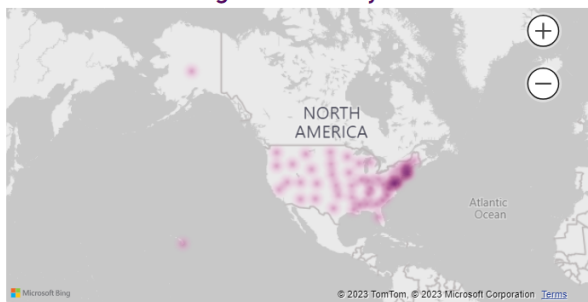
Bottom 5 Rated Products



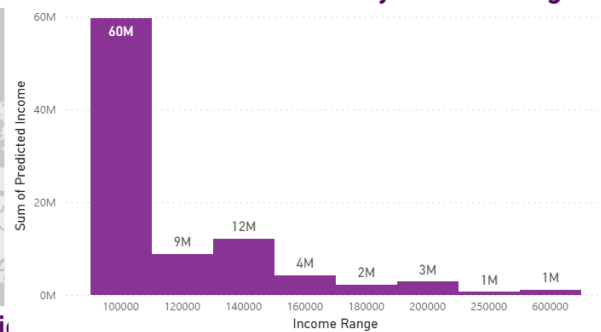
Recommended Products Based On Income



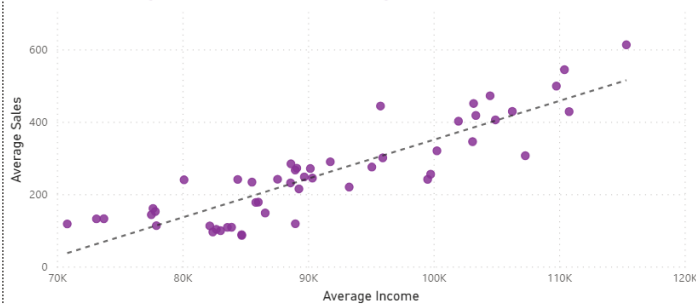
Average Income by State



Sum of Predicted Income by Income Range



Average Income & Average Sales Correlation



0.78

Correlation Coefficient between Avg Sales and Avg Income

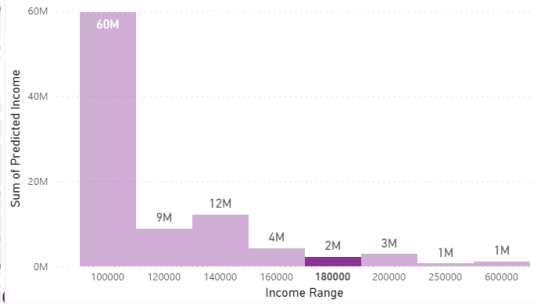
$$X = (-722.142 - Y) / -0.011$$

Prediction Formula

Average Income by State



Sum of Predicted Income by Income Range

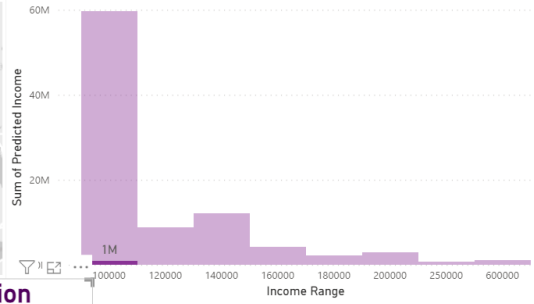


Average Income & Average Sales Correlation

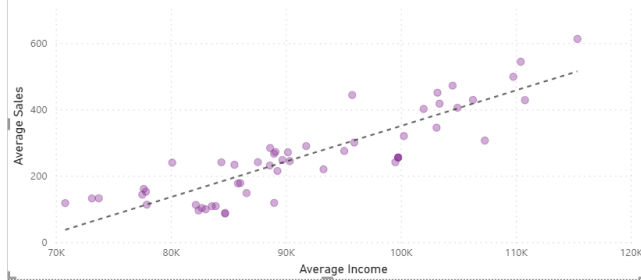
Average Income by State



Sum of Predicted Income by Income Range



Average Income & Average Sales Correlation



(Blank)

Correlation Coefficient between Avg Sales and Avg Income

$$X = (-Y) / -$$

Prediction Formula