

EDUNET – SHELL SKILLS4FUTURE AICTE INTERNSHIP

DATA ANALYSIS PROJECT 2 :

SUSTAINABLE SUPPLY CHAIN PERFORMANCE DASHBOARD USING POWER BI

Step 1) Opened the Power Query Editor , By clicking transform Data

The screenshot shows the Power Query Editor interface. The main area displays a table with 24 columns and 100 rows. The columns are: Product type, SKU, Price, Availability, Number of products sold, Revenue generated, and Customer demographics. The table is filtered to show the top 1000 rows. The status bar at the bottom indicates '24 COLUMNS. 100 ROWS' and 'Column profiling based on top 1000 rows'.

Product type	SKU	Price	Availability	Number of products sold	Revenue generated	Customer demographics
Valid	Valid	Valid	Valid	Valid	Valid	Valid
Error	Error	Error	Error	Error	Error	Error
Empty	Empty	Empty	Empty	Empty	Empty	Empty
100%	100%	100%	100%	100%	100%	100%
0%	0%	0%	0%	0%	0%	0%
0%	0%	0%	0%	0%	0%	0%
1	haircare	SKU0	69.80800554	55	802	8661.996792 Non-binary
2	skincare	SKU1	14.84352328	95	736	7460.900065 Female
3	haircare	SKU2	11.31968329	34	8	9577.749626 Unknown
4	skincare	SKU3	61.16334302	68	83	7766.836426 Non-binary
5	skincare	SKU4	4.805496036	26	871	2686.505152 Non-binary
6	haircare	SKU5	1.699976014	87	147	2828.348746 Non-binary
7	skincare	SKU6	4.078332863	48	65	7823.47656 Male
8	cosmetics	SKU7	42.95838438	59	426	8496.103813 Female
9	cosmetics	SKU8	68.71759675	78	150	7517.363211 Female
10	skincare	SKU9	64.01573294	35	980	4971.145988 Unknown
11	skincare	SKU10	15.70779568	11	996	2330.965802 Non-binary
12	skincare	SKU11	90.63545998	95	960	6099.944116 Female
13	haircare	SKU12	71.21338908	41	336	2873.741446 Unknown
14	skincare	SKU13	16.16039332	5	249	4052.738416 Male
15	skincare	SKU14	99.17132864	26	562	8653.570926 Non-binary
16	skincare	SKU15	36.98924493	94	469	5442.086785 Non-binary
17	skincare	SKU16	7.54717211	74	280	6453.797968 Female
18	cosmetics	SKU17	81.46253437	82	126	2629.396435 Female
19	haircare	SKU18	36.44362777	23	620	9384.673505 Unknown
20	skincare	SKU19	51.12387009	100	187	2533.495585 Unknown
21	skincare	SKU20	96.34107244	22	320	8128.027697 Unknown
22	cosmetics	SKU21	84.89386898	60	601	7087.052696 Unknown
23	haircare	SKU22	27.67978089	55	884	2390.807867 Unknown

Step 2) Made a Duplicate of existing table Sustainable Supply Chain Performance , and remove the columns which are not needed in the Inventory Table (Duplicate Table).

The screenshot shows the Power Query Editor interface after modifying the table. The main area displays a table with 10 columns and 100 rows. The columns are: Product type, SKU, Availability, Number of products sold, Customer demographics, Stock levels, and Lead time. The table is filtered to show the top 1000 rows. The status bar at the bottom indicates '10 COLUMNS. 100 ROWS' and 'Column profiling based on top 1000 rows'.

Product type	SKU	Availability	Number of products sold	Customer demographics	Stock levels	Lead time
Valid	Valid	Valid	Valid	Valid	Valid	Valid
Error	Error	Error	Error	Error	Error	Error
Empty	Empty	Empty	Empty	Empty	Empty	Empty
100%	100%	100%	100%	100%	100%	100%
0%	0%	0%	0%	0%	0%	0%
0%	0%	0%	0%	0%	0%	0%
1	haircare	SKU0	55	802 Non-binary	58	58
2	skincare	SKU1	95	736 Female	53	53
3	haircare	SKU2	34	8 Unknown	1	1
4	skincare	SKU3	68	83 Non-binary	23	23
5	skincare	SKU4	26	871 Non-binary	5	5
6	haircare	SKU5	87	147 Non-binary	90	90
7	skincare	SKU6	48	65 Male	11	11
8	cosmetics	SKU7	59	426 Female	93	93
9	cosmetics	SKU8	78	150 Female	5	5
10	skincare	SKU9	35	980 Unknown	14	14
11	skincare	SKU10	11	996 Non-binary	51	51
12	skincare	SKU11	95	960 Female	46	46
13	haircare	SKU12	41	336 Unknown	100	100
14	skincare	SKU13	5	249 Male	80	80
15	skincare	SKU14	26	562 Non-binary	54	54
16	skincare	SKU15	94	469 Non-binary	9	9
17	skincare	SKU16	74	280 Female	2	2
18	cosmetics	SKU17	82	126 Female	45	45
19	haircare	SKU18	23	620 Unknown	10	10
20	skincare	SKU19	100	187 Unknown	48	48

Step 3) Created another table : MANUFACTURING TABLE by duplicating the original table : Sustainable Supply chain Performance.

EdunetInternship_SupplyChainManagement

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 Merge Queries Append Queries Text Analytics Vision Azure Machine Learning

Queries [3] Sustainable Supply... Inventory Manufacturing

Table.RemoveColumns("#Changed Type",{"Price", "Availability", "Number of products sold", "Revenue generated", "Customer demographics", "Stock

	SKU	Production volumes	Manufacturing lead time	Manufacturing costs	Inspection results	Defect rates
1	haircare	SKU0	215	29	46.27987924	Pending
2	skincare	SKU1	517	30	33.61676895	Pending
3	haircare	SKU2	971	27	30.68801935	Pending
4	skincare	SKU3	937	18	35.6247414	Fail
5	skincare	SKU4	414	3	92.0651606	Fail
6	haircare	SKU5	104	17	56.76647556	Fail
7	skincare	SKU6	314	24	1.08506857	Pending
8	cosmetics	SKU7	564	1	99.4661086	Fail
9	cosmetics	SKU8	769	8	11.42302714	Pending
10	skincare	SKU9	963	23	47.95760163	Pending
11	skincare	SKU10	830	5	96.52735279	Pass
12	skincare	SKU11	362	11	27.59236309	Pending
13	haircare	SKU12	563	3	32.32128621	Fail
14	skincare	SKU13	173	10	97.82905011	Pending
15	skincare	SKU14	558	14	5.79143663	Pending
16	skincare	SKU15	580	7	97.12128175	Pass
17	skincare	SKU16	399	21	77.1063425	Pass
18	cosmetics	SKU17	453	16	47.67968037	Fail
19	haircare	SKU18	374	17	27.10798085	Pending
20	skincare	SKU19	694	16	82.37332059	Fail
21	SKU1					

7 COLUMNS, 100 ROWS Column profiling based on top 1000 rows

Query Settings

PROPERTIES Name Manufacturing

APPLIED STEPS Source Promoted Headers Changed Type Removed Columns

PREVIEW DOWNLOADED AT 23:05

Step 4) Removed columns which are not needed in the Manufacturing Table.

EdunetInternship_SupplyChainManagement

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 Merge Queries Append Queries Text Analytics Vision Azure Machine Learning

Queries [3] Sustainable Supply... Inventory Manufacturing

Table.RemoveColumns("#Changed Type",{"Price", "Availability", "Number of products sold", "Revenue generated", "Customer demographics", "Stock

	SKU	Production volumes	Manufacturing lead time	Manufacturing costs	Inspection results	Defect rates
1	SKU0	215	29	46.27987924	Pending	0.226410361
2	SKU1	517	30	33.61676895	Pending	4.854068026
3	SKU2	971	27	30.68801935	Pending	4.580592619
4	SKU3	937	18	35.6247414	Fail	4.746648621
5	SKU4	414	3	92.0651606	Fail	3.145579523
6	SKU5	104	17	56.76647556	Fail	2.779193512
7	SKU6	314	24	1.08506857	Pending	1.000910619
8	SKU7	564	1	99.4661086	Fail	0.398177187
9	SKU8	769	8	11.42302714	Pending	2.709862691
10	SKU9	963	23	47.95760163	Pending	3.844614479
11	SKU10	830	5	96.52735279	Pass	1.727313928
12	SKU11	362	11	27.59236309	Pending	0.021169821
13	SKU12	563	3	32.32128621	Fail	2.161253748
14	SKU13	173	10	97.82905011	Pending	1.63107423
15	SKU14	558	14	5.79143663	Pending	0.100682852
16	SKU15	580	7	97.12128175	Pass	2.264405761
17	SKU16	399	21	77.1063425	Pass	1.012563089
18	SKU17	453	16	47.67968037	Fail	0.102020755
19	SKU18	374	17	27.10798085	Pending	2.231939111
20	SKU19	694	16	82.37332059	Fail	3.646450865
21	SKU1					

7 COLUMNS, 100 ROWS Column profiling based on top 1000 rows

Query Settings

PROPERTIES Name Manufacturing

APPLIED STEPS Source Promoted Headers Changed Type Removed Columns

PREVIEW DOWNLOADED AT 23:05

Step 5) Created Supply Table and Removed the unnecessary columns from this table.

Query: Table.SelectColumns(#"Removed Columns",{"Supplier name", "Location", "Lead time", "Transportation modes", "Routes"})

	Supplier name	Location	Lead time	Transportation modes	Routes
1	Supplier 3	Mumbai	29	Road	Route B
2	Supplier 3	Mumbai	23	Road	Route B
3	Supplier 1	Mumbai	12	Air	Route C
4	Supplier 5	Kolkata	24	Rail	Route A
5	Supplier 1	Delhi	5	Air	Route A
6	Supplier 4	Bangalore	10	Road	Route A
7	Supplier 3	Kolkata	14	Sea	Route A
8	Supplier 4	Bangalore	22	Road	Route C
9	Supplier 4	Mumbai	13	Sea	Route B
10	Supplier 2	Chennai	29	Rail	Route B
11	Supplier 5	Kolkata	18	Road	Route B
12	Supplier 2	Kolkata	28	Air	Route A
13	Supplier 4	Kolkata	3	Road	Route B
14	Supplier 5	Bangalore	23	Road	Route B
15	Supplier 1	Kolkata	25	Air	Route B
16	Supplier 1	Bangalore	14	Sea	Route B
17	Supplier 1	Bangalore	3	Air	Route A
18	Supplier 1	Chennai	7	Air	Route C
19	Supplier 2	Kolkata	18	Sea	Route A
20	Supplier 4	Chennai	20	Road	Route C
21	Supplier 1	Chennai	29	Air	Route B
22	Supplier 5	Chennai	19	Air	Route C
23	Supplier 4	Kolkata	22	Rail	Route C
24	Supplier 5	Kolkata	11	Rail	Route A

5 COLUMNS, 100 ROWS Column profiling based on top 1000 rows

STEP 6) Created Supply chain Table , remove unnecessary columns and kept the needed columns.

Query: Table.SelectColumns(#"Changed Type",{"Product type", "SKU", "Price", "Availability", "Number of products sold", "Revenue generated", "Customer de"})

	Product type	SKU	Price	Availability	Number of products sold	Revenue generated	Customer de
1	haircare	SKU0	69.80800554	55	802	8661.996792	Non-binary
2	skincare	SKU1	14.84352328	95	736	7460.900065	Female
3	haircare	SKU2	11.31968329	34	8	9577.749626	Unknown
4	skincare	SKU3	61.16334302	68	83	7766.836426	Non-binary
5	skincare	SKU4	4.805496036	26	871	2686.505152	Non-binary
6	haircare	SKU5	1.699976014	87	147	2828.348746	Non-binary
7	skincare	SKU6	4.078332863	48	65	7823.47656	Male
8	cosmetics	SKU7	42.95838438	59	426	8496.103813	Female
9	cosmetics	SKU8	68.71759675	78	150	7517.363211	Female
10	skincare	SKU9	64.01573294	35	980	4971.145988	Unknown
11	skincare	SKU10	15.70779568	11	996	2330.965802	Non-binary
12	skincare	SKU11	90.63545998	95	960	6099.944116	Female
13	haircare	SKU12	71.21338908	41	336	2873.741446	Unknown
14	skincare	SKU13	16.16039332	5	249	4052.738416	Male
15	skincare	SKU14	98.17132864	26	562	8653.570926	Non-binary
16	skincare	SKU15	36.98924493	94	469	5442.086785	Non-binary
17	skincare	SKU16	7.54717211	74	280	6453.797968	Female
18	cosmetics	SKU17	81.46253437	82	126	2629.396435	Female
19	haircare	SKU18	36.44362777	23	620	9364.673505	Unknown
20	skincare	SKU19	51.12387009	100	187	2553.495585	Unknown
21	skincare	SKU20	96.34107244	22	320	8128.027697	Unknown
22	cosmetics	SKU21	84.89386898	60	601	7087.052696	Unknown
23	haircare	SKU22	27.67978089	55	884	2390.807867	Unknown
24							

18 COLUMNS, 100 ROWS Column profiling based on top 1000 rows