Business Intelligence & Big Data Analytics

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DATASET

Coffee Shops Transactions

- 149.116 rows
- 11 columns

- 116.789 transactions
- 1/1/2023 – 30/6/2023
- 3 coffee shops

COLUMNS

transaction_id

product_id

store_id

transaction_date

product_category

store_location

transaction_time
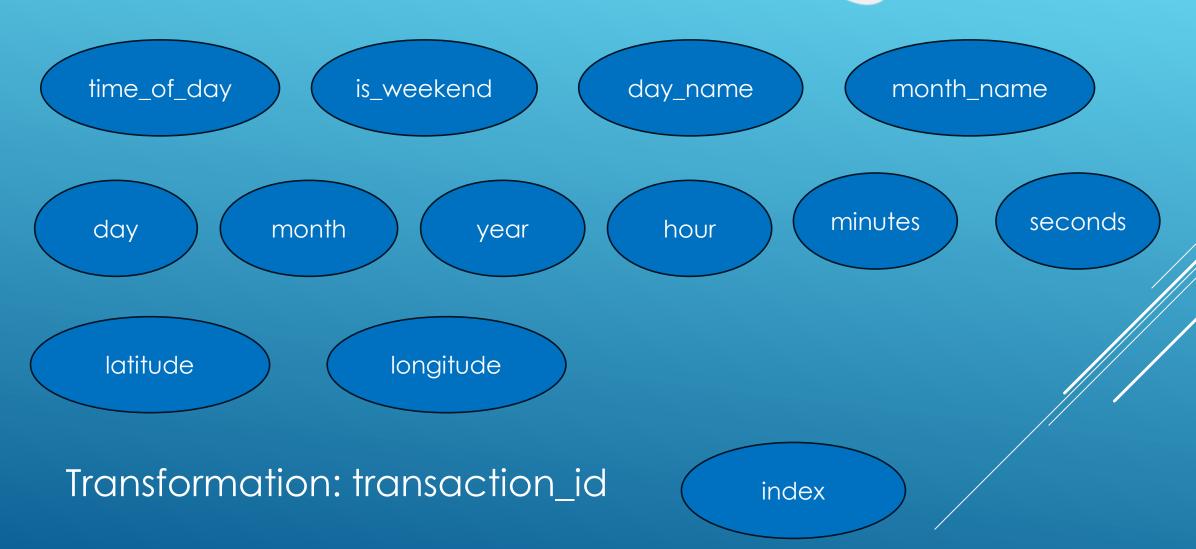
product_type

unit_price
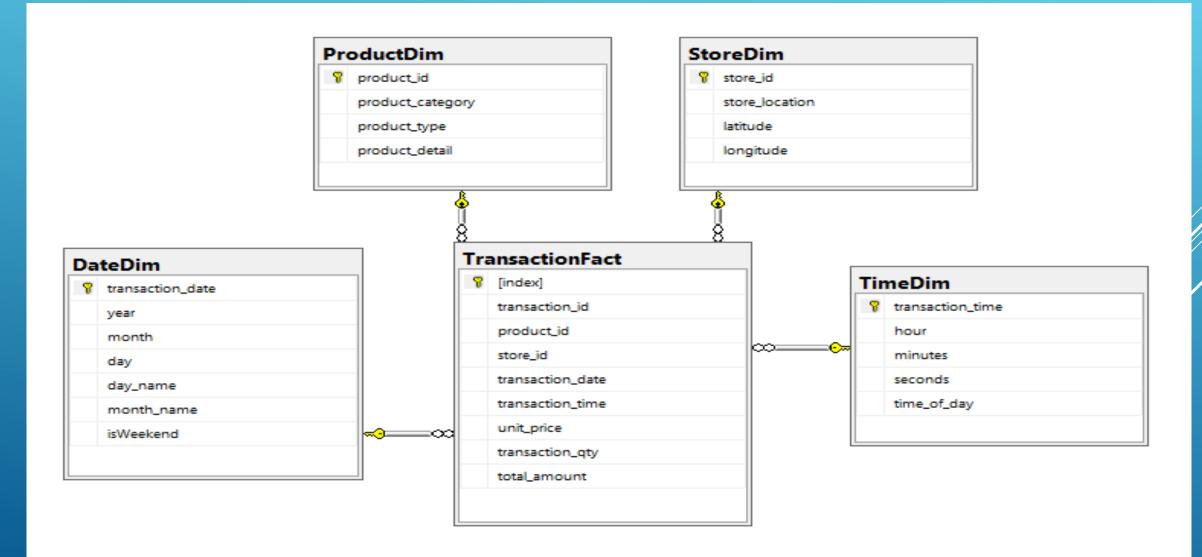
transaction_qty

product_detail

NEW COLUMNS

time_of_day

is_weekend

day_name

month_name

day

month

year

hour

minutes

seconds

latitude

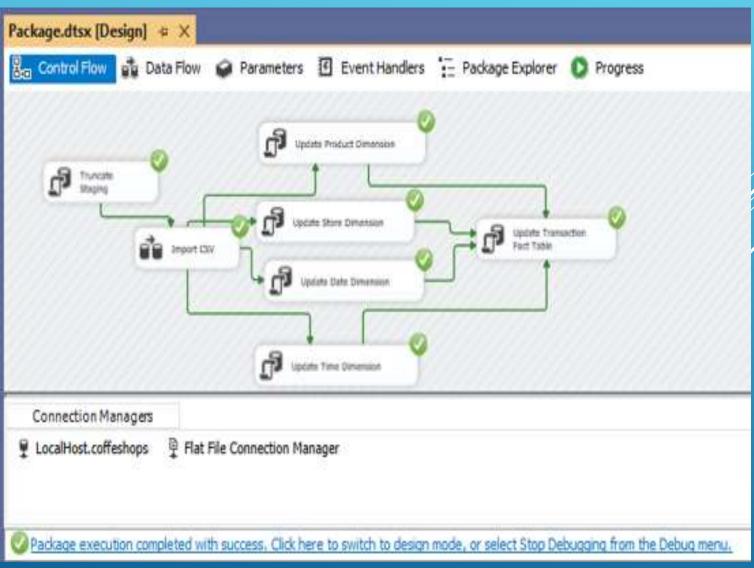longitude

Transformation: transaction_id

index

STAR SCHEMA ⭐

ETL

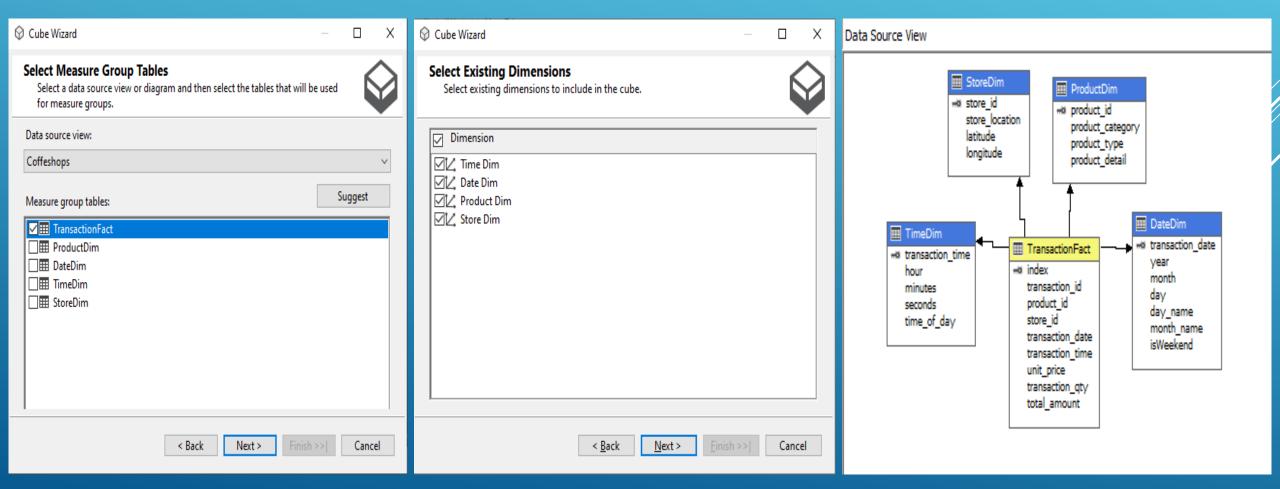## SQL SERVER Integration Services (SSIS)

▶ Truncate Staging Table

▶ Load CSV to Staging Table

▶ Update Dimension Tables

▶ Update Fact Table

CUBE
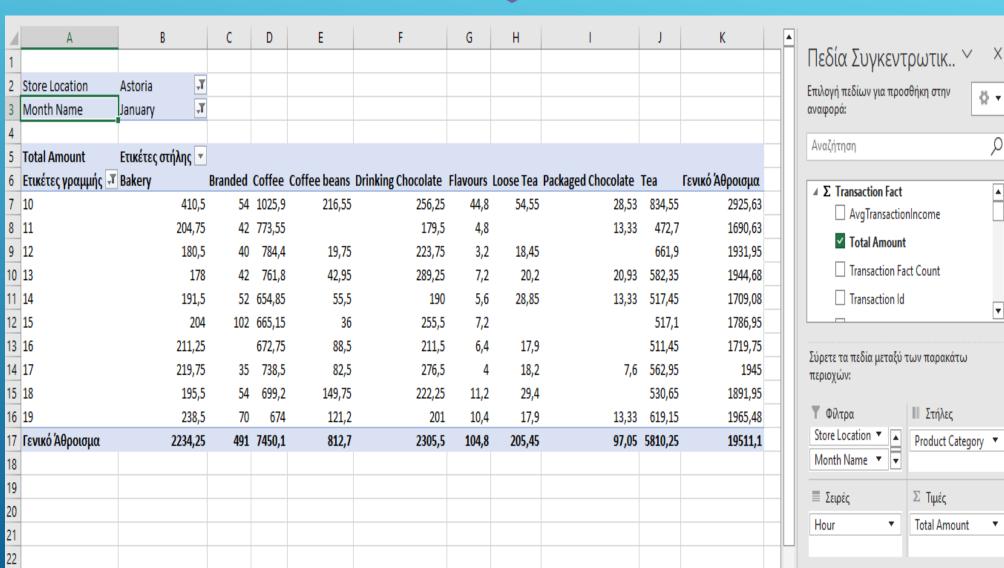
SQL SERVER Analysis Services (SSAS)

CUBE

Cube Browser (SSAS)

- January Income
- Astoria Store
- 10.00 – 19.59
- Per product category

Store Location	Astoria									
Month Name	January									
Total Amount	Ετικέτες στήλης									
Ετικέτες γραμμής	Bakery	Branded	Coffee	Coffee beans	Drinking Chocolate	Flavours	Loose Tea	Packaged Chocolate	Tea	Γενικό Άθροισμα
10	410,5	54	1025,9	216,55	256,25	44,8	54,55	28,53	834,55	2925,63
11	204,75	42	773,55		179,5	4,8		13,33	472,7	1690,63
12	180,5	40	784,4	19,75	223,75	3,2	18,45		661,9	1931,95
13	178	42	761,8	42,95	289,25	7,2	20,2	20,93	582,35	1944,68
14	191,5	52	654,85	55,5	190	5,6	28,85	13,33	517,45	1709,08
15	204	102	665,15	36	255,5	7,2			517,1	1786,95
16	211,25		672,75	88,5	211,5	6,4	17,9		511,45	1719,75
17	219,75	35	738,5	82,5	276,5	4	18,2	7,6	562,95	1945
18	195,5	54	699,2	149,75	222,25	11,2	29,4		530,65	1891,95
19	238,5	70	674	121,2	201	10,4	17,9	13,33	619,15	1965,48
Γενικό Άθροισμα	2234,25	491	7450,1	812,7	2305,5	104,8	205,45	97,05	5810,25	19511,1

Πεδία Συγκεντρωτικ..

Επιλογή πεδίων για προσθήκη στην αναφορά:

Αναζήτηση

Σ Transaction Fact
- ☐ AvgTransactionIncome
- ☑ Total Amount
- ☐ Transaction Fact Count
- ☐ Transaction Id

Σύρετε τα πεδία μεταξύ των παρακάτω περιοχών:

▼ Φίλτρα	||| Στήλες
Store Location ▼	Product Category ▼
Month Name ▼	

≡ Σειρές	Σ Τιμές
Hour ▼	Total Amount ▼

VISUALIZATIONS

VISUALIZATIONS

Filters

- ▶ Two stores
- ▶ Weekends only
- ▶ Coffee types units sold

VISUALIZATIONS

Filters
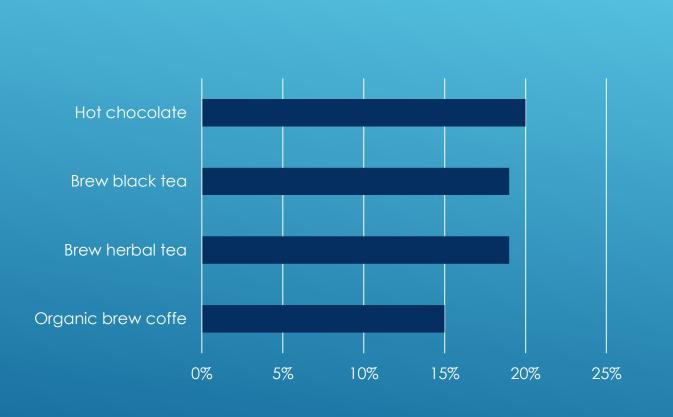
- ▶ Drill-down June
- ▶ Morning
- ▶ Product Types

CLUSTERING
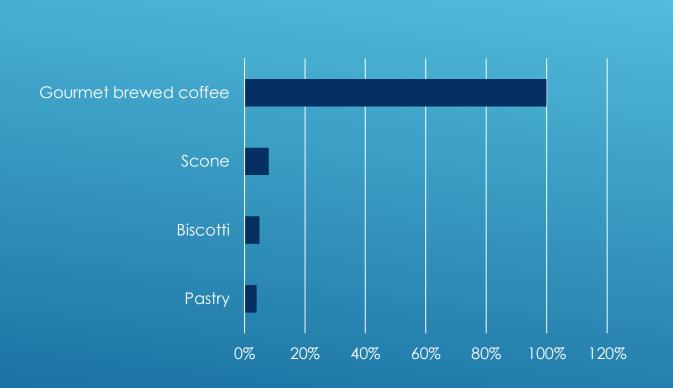
GOURMET COFFEE LOVERS

Gourmet brewed coffee

Scone

Biscotti

Pastry

0% 20% 40% 60% 80% 100% 120%

14%

5.3$

1.74

ESPRESSO FANS

Espresso

Regural syrup

Scone

Sugar free syrup

0% 20% 40% 60% 80% 100% 120%

15%

7.7$

2.45

CLASIC COFFEE LOVERS

Drip Coffee

Scone

Pastry

Biscotti

0%   20%   40%   60%   80%   100%   120%

7%

4.9$

1.73
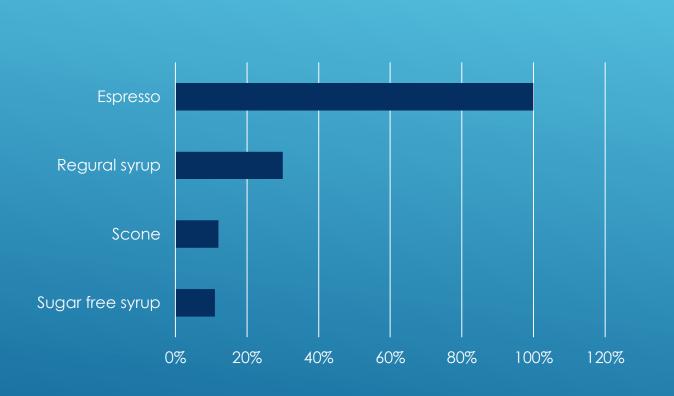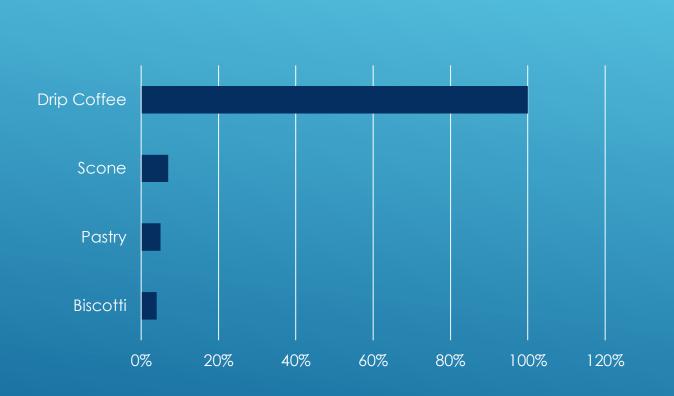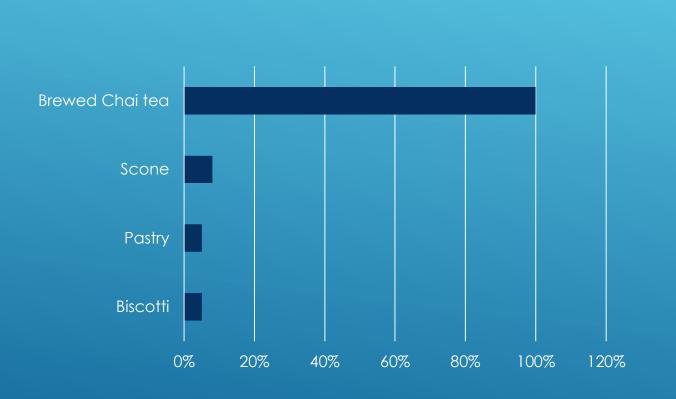
ASSOCIATION RULES

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Regular Syrup → Espresso 99.6%

Sugar free Syrup → Espresso 99.3%

Espresso → Regular Syrup 54.7%

ASSOCIATION RULES

Gourmet Brewed Coffee → Scone   38.5%

Brew Chai Tea → Scone   37.4%

Thank you! Any questions?