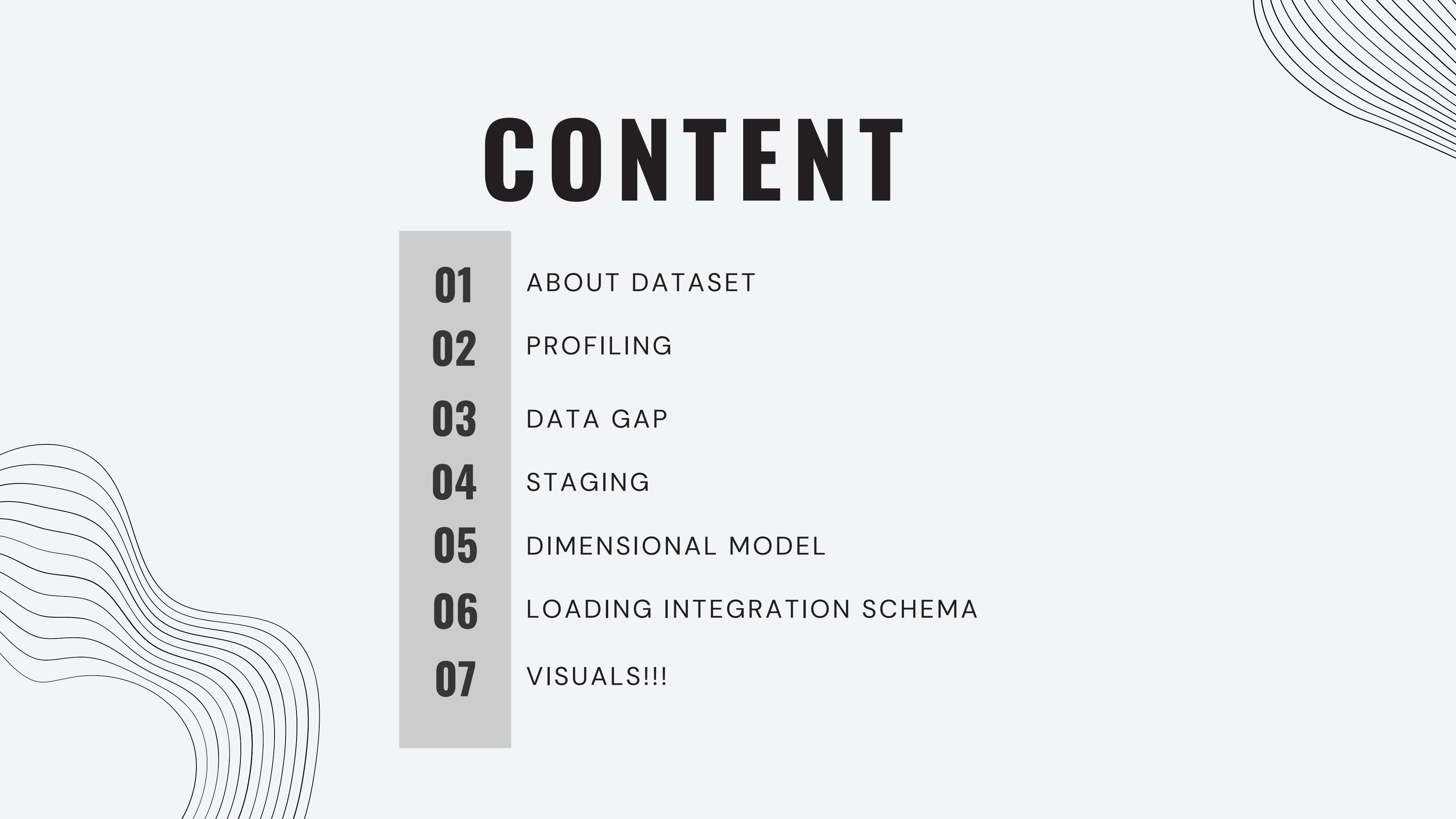


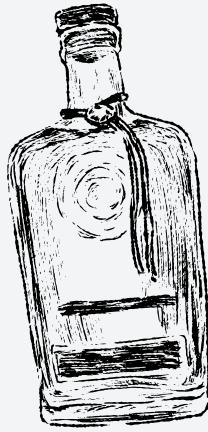


# **IOWA LIQUOR SALES DADA BI**

**TEAM NUMBER - 1**

# CONTENT

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  - 02** PROFILING
  - 03** DATA GAP
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# ABOUT DATASET

Iowa is a Midwestern state where Liquor sales are closely regulated, with the state controlling the distribution and sale of spirits, making it a significant area of study for market trends and consumer behavior. The dataset is extracted from the site --> [https://data.iowa.gov/Sales-Distribution/Iowa-Liquor-Sales/m3tr-qhgy/about\\_data](https://data.iowa.gov/Sales-Distribution/Iowa-Liquor-Sales/m3tr-qhgy/about_data)

File Name	Description
County_Population_in_Iowa_by_Year.tsv	This file contains 3,366 records with year-wise and county-wise population data for Iowa.
Iowa_Liquor_Products.tsv	This dataset contains 8,776 records detailing various items, including their category, vendor, and more.
Iowa_Liquor_Products_notCleaned.tsv	This is the uncleaned version of the Iowa Liquor Products dataset, containing 6,350 records.
Iowa_Liquor_sales.tsv	This dataset contains invoice-level data about liquor sales in Iowa from 2012 to 2024.
Iowa_Liquor_sales_by_Year.tsv	This dataset contains sales data aggregated by year.
Iowa_Liquor_sales_by_Year_and_County.tsv	This dataset contains Iowa liquor sales data, broken down by year and county.
Iowa_Liquor_stores.tsv	Contains detailed store information, including location details.
Iowa_Liquor_stores_notCleaned.tsv	This is the uncleaned version of the Iowa Liquor Stores dataset.
Iowa_Liquor_sales_notCleaned.tsv	This dataset contains uncleaned invoice-level data about liquor sales in Iowa from 2012 to 2022.



# PROFILING

ALTERYX

SNOWFLAKE

TALEND LOADS

File Name	Talend job timing	Alteryx job timing	Number of rows in Source	Number of rows in Snowflake
County_Population_in_Iowa_by_Year.tsv	6s	0.8s	3366	3366
Iowa_Liquor_Products.tsv	6s	0.6s	8776	8776
Iowa_Liquor_Products_notCleaned.tsv	5s	0.7s	6350	6350
Iowa_Liquor_sales.tsv	5.19 mins	3.39mins	29445098	29445098
Iowa_Liquor_sales_by_Year.tsv	3.67s	0.2s	13	13
Iowa_Liquor_sales_by_Year_and_County.tsv	5s	0.6s	1301	1301
Iowa_Liquor_stores.tsv	4.36mins	3.19mins	24847472	24847472
Iowa_Liquor_stores_notCleaned.tsv	5s	0.4s	2626	2626
Iowa_Liquor_sales_notCleaned.tsv	5s	0.6s	2248	2248
Total_City_Population_by_Year.tsv	6s	0.9s	32152	32152



# DATA GAPS

## LIQUOR\_SALES - FILES

**Volume in Cleaned Table:** 29445098

**Volume in Not Cleaned Table:** 24847472

- Data Present in the Not Cleaned table only till 2022-09-30
- There are 0 records which are part of not cleaned but not part of cleaned
- TRIMMING and CASING needs to be done

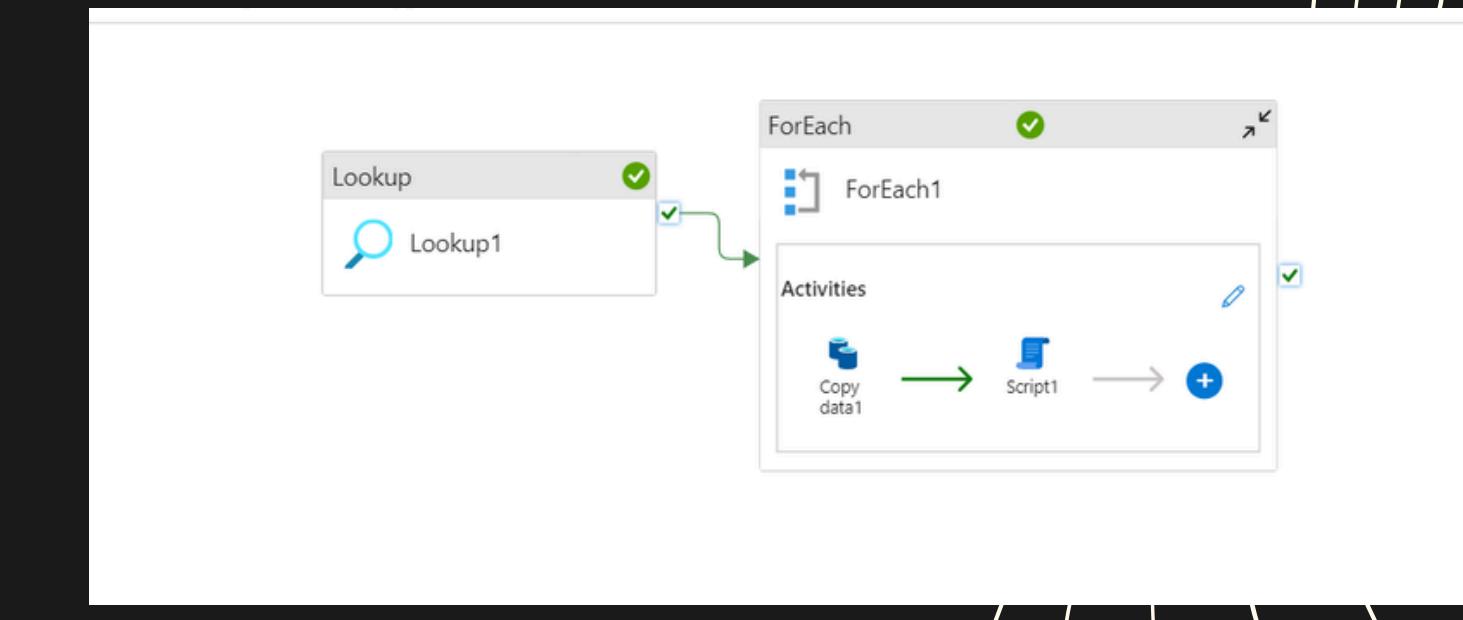
STORE_NAME	STORE_NAME
KIMMES MANSON COUNTRY STORE #10	Kimmes Manson Country Store #10
FAREWAY STORES #019 / SIOUX CITY	Fareway Stores #019 / Sioux City
TWIN TOWN LIQUOR	Twin Town Liquor
HY-VEE WINE AND SPIRITS / DENISON	Hy-Vee Wine and Spirits / Denison
BROTHERS MARKET / GRUNDY CENTER	Brothers Market / Grundy Center

## LEXOGRAPHICAL

- Trailing Os in County Number
- Appended with extra s

# STAGING - ADF

We loaded the staging table into AZURE SQL



The screenshot shows the results of a query run in the Azure Data Explorer (ADE). The query is:

```
select * from stage.final_file_metadata;
```

The results are displayed in a table with the following columns:

table_name	file_delimiter	rows_read	rows_copied	time_duration
STG_IOWA_LIQUOR_SALES		29445098	29445098	2613
STG_IOWA_LIQUOR_PRODUCTS		8776	8776	12
STG_IOWA_LIQUOR_STORES		2626	2626	12
STG_IOWA_CITY_POPULATION_BY_YEAR		32152	32152	17
STG_IOWA COUNTY_POPULATION_BY_YEAR		3366	3366	16
STG_IOWA_LIQUOR_SALES_BY_YEAR_AND_COUNTY		1301	1301	10
STG_IOWA_LIQUOR_SALES_BY_YEAR		13	13	13

# DIMENSIONAL MODEL

- DIM TABLES:

- DIM\_CATEGORY
- DIM\_CITY
- DIM\_COUNTY
- DIM\_ITEM
- DIM\_LOCATION
- DIM\_STORE
- DIM\_VENDOR

- FACT TABLES:

- FACT\_LIQUOR\_SALES
- FACT\_COUNTY\_YEARLY
- FACT\_CITY\_YEARLY



# LOADING EDW

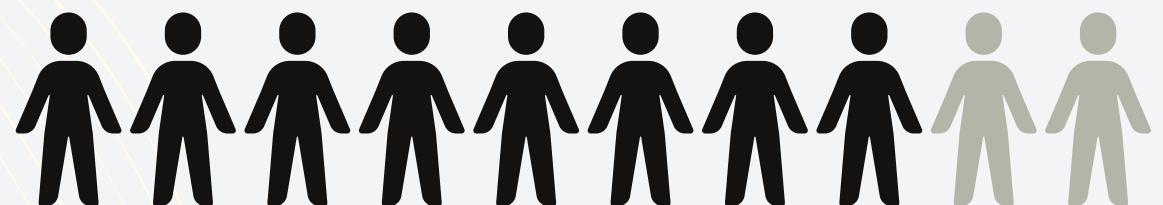


JOB NAME	TIME METRICS	NUMBER OF RECORDS INSERTED
DIM CATEGORY	11mins 28s	194
DIM CITY	9mins 13s	984
DIM COUNTY	9 mins 19s	200
DIM ITEM	9mins 12s	29290
DIM LOCATION	9mins 25s	13618
DIM STORE	9mins 23s	3633
DIM VENDOR	9mins 36s	652
FACT CITY YEARLY	4s	32152
FACT COUNTY YEARLY	3s	1188
FACT LIQUOR SALES	25mins 3s	29445098

# INFERENCES

- **Consistent Growth Period (2013-2021)**: Liquor sales saw steady year-over-year growth, with notable increases in 2014, 2016, 2018, and a significant spike in 2020.
- **Stabilization and Plateau (2022-2023)**: Sales stabilized between 429M and 446M, with a flattening YoY growth rate, indicating market saturation.
- **Sharp Decline and Market Disruption (2024)**: A dramatic sales drop in 2024 suggests major disruptions, warranting further investigation into potential causes.

429M



# VISUALS!!!!



TABLEAU



EDW



Power BI

POWER BI

# **THANK YOU!!**

