**Business Questions**

Liquor Sales: Measures

1. Sales$

Select ROUND(sum(Invoice\_Sale\_Dollars),2) AS Total\_Sales from fct\_iowa\_liquor\_sales\_invoice\_header;

1. Sales volume (gallons)

Select ROUND(sum(Invoice\_Volume\_Sold\_\_Gallons),2) AS Sales\_volume\_gallons from fct\_iowa\_liquor\_sales\_invoice\_header;

1. Sales volume (bottles)

Select ROUND(sum(`Bottle\_Volume\_\_ml`)/3785.41,2) AS Bottle\_volume\_gallons from fct\_iowa\_liquor\_sales\_invoice\_lineitem;

1. Gross profit (retail price – cost)

Select ROUND(sum((`State\_Bottle\_Retail` - `State\_Bottle\_Cost`) \* Bottles\_Sold), 2) AS Bottle\_volume\_gallons

from fct\_iowa\_liquor\_sales\_invoice\_lineitem;

1. Sales $ per Capita

Select YEAR(str\_to\_date(h.Invoice\_Date, '%m/%d/%Y')) as Order\_Date, y.City, ROUND(sum(h.Sale\_\_Dollars)/y.population,2) AS Total\_Sales

from fct\_iowa\_liquor\_sales\_invoice\_header h, FCT\_iowa\_city\_population\_by\_year y, Dim\_Iowa\_Liquor\_Stores st

where h.Store\_SK = st.Store\_SK and st.City\_SK = y.City\_SK

Group BY Order\_Date, y.City

Order By Order\_Date, y.City;

1. Liquor Sales by Time

* Total

Select ROUND(sum(Invoice\_Sale\_Dollars),2) AS Total\_Sales from fct\_iowa\_liquor\_sales\_invoice\_header;

* Year

Select YEAR(str\_to\_date(Invoice\_Date, '%m/%d/%Y')) as Order\_Date, ROUND(sum(Invoice\_Sale\_Dollars),2) AS Total\_Sales

from fct\_iowa\_liquor\_sales\_invoice\_header

Group BY Order\_Date

Order By Order\_Date;

* Year, Month

Select YEAR(str\_to\_date(Invoice\_Date, '%m/%d/%Y')) as Order\_Year, MONTHNAME(str\_to\_date(Invoice\_Date, '%m/%d/%Y')) as Order\_Month, ROUND(sum(Invoice\_Sale\_Dollars),2) AS Total\_Sales

from fct\_iowa\_liquor\_sales\_invoice\_header

Group BY Order\_Year, Order\_Month

Order By Order\_Year, Order\_Month;

* Year over Year (YOY)

/\*Select Sale\_\_Dollars, YEAR(str\_to\_date(Date, '%m/%d/%Y')) as Invoice\_Date

from stg\_iowa\_liquor\_sales

WHERE YEAR(str\_to\_date(Date, '%m/%d/%Y')) IN ('2021','2022');\*/

Select YEAR(str\_to\_date(Invoice\_Date, '%m/%d/%Y')) as Invoice\_Date, ROUND(SUM(Invoice\_Sale\_Dollars),2) as Total\_Sales,

ROUND(ROUND(SUM(Invoice\_Sale\_Dollars),2) - (lag(ROUND(SUM(Invoice\_Sale\_Dollars),2))

OVER (ORDER BY YEAR(str\_to\_date(Invoice\_Date, '%m/%d/%Y')))),2)

AS YOY\_Sales

from fct\_iowa\_liquor\_sales\_invoice\_header

GROUP BY Invoice\_Date

ORDER BY Invoice\_Date;

1. Liquor sales by dimension

* Store

Select st.Store\_Name, ROUND(sum(h.Invoice\_Sale\_Dollars),2) AS Total\_Sales

from fct\_iowa\_liquor\_sales\_invoice\_header h, Dim\_Iowa\_Liquor\_Stores st

WHERE h.Store\_SK = st.Store\_SK

GROUP BY st.Store\_Name

Order BY st.Store\_Name;

-- LIMIT 10000;

* County

select ROUND(sum(h.Invoice\_Sale\_Dollars),2) AS Total\_Sales, cp.County

from fct\_iowa\_liquor\_sales\_invoice\_header h, Dim\_iowa\_county c, Dim\_Iowa\_Liquor\_Stores st

where h.Store\_SK = st.Store\_SK and st.County\_SK = c.County\_SK

group by cp.County

order by cp.County;

* City

select ROUND(sum(s.Sale\_\_Dollars),2) AS Total\_Sales, cp.City

from fct\_iowa\_liquor\_sales\_invoice\_header h, Dim\_iowa\_city c, Dim\_Iowa\_Liquor\_Stores st

where h.Store\_SK = st.Store\_SK and c.City\_SK = st.City\_SK

group by cp.City

order by cp.City;

* Category

Select c.Category\_Name, ROUND(sum(il.Sale\_Dollars \* il.Bottles\_Sold),2) as Total\_Sales

from Dim\_iowa\_liquor\_Product\_Categories c, Dim\_iowa\_liquor\_Products p, fct\_iowa\_liquor\_sales\_invoice\_lineitem il

where c.Category\_SK = p.Category\_SK and p.Item\_SK = il.Item\_SK

GROUP BY c.Category\_Name

ORDER BY c.Category\_Name;

* Item

Select p.Item\_Description, ROUND(sum(il.Sale\_Dollars \* il.Bottles\_Sold),2) as Total\_Sales

from Dim\_iowa\_liquor\_Products p, fct\_iowa\_liquor\_sales\_invoice\_lineitem il

where p.Item\_SK = il.Item\_SK

GROUP BY p.Item\_Description

ORDER BY p.Item\_Description;

* Vendor

Select v.Vendor\_Name, ROUND(sum(il.Sale\_Dollars \* il.Bottles\_Sold),2) as Total\_Sales

from Dim\_iowa\_liquor\_Vendors v, Dim\_iowa\_liquor\_Products p, fct\_iowa\_liquor\_sales\_invoice\_lineitem il

where v.Vendor\_SK = p.Vendor\_SK and p.Item\_SK = il.Item\_SK

GROUP BY v.Vendor\_Name

ORDER BY v.Vendor\_Name;

1. Liquor sales by sales $

* Yearly sales including 2022 YTD

Select ROUND(SUM(invoice\_sale\_dollars),2) as Total\_Sales, YEAR(str\_to\_date(Invoice\_Date, '%m/%d/%Y')) as Invoice\_Date

from fct\_iowa\_liquor\_sales\_invoice\_header

GROUP BY Invoice\_Date

ORDER BY Invoice\_Date;

* Top 20 stores (all-time)

select Store\_Name, Store\_ID, ROUND(sum(h.Invoice\_Sale\_Dollars),2) as Total\_Sales

from fct\_iowa\_liquor\_sales\_invoice\_header h, Dim\_Iowa\_Liquor\_Stores st

where h.Store\_SK = st.Store\_SK

GROUP BY Store\_Name, Store\_ID

order by Total\_Sales

LIMIT 20;

* Top 20 cities (all-time)

select dc.City, ROUND(sum(h.Invoice\_Sale\_Dollars),2) as Total\_Sales

from fct\_iowa\_liquor\_sales\_invoice\_header h, Dim\_Iowa\_Liquor\_Stores st, Dim\_iowa\_city dc

where h.Store\_SK = st.Store\_SK and st.City\_SK = dc.City\_SK

GROUP BY dc.City

order by Total\_Sales desc

LIMIT 20;

-- Top 10 counties (all-time)

select dc.County, ROUND(sum(h.Invoice\_Sale\_Dollars),2) as Total\_Sales

from fct\_iowa\_liquor\_sales\_invoice\_header h, Dim\_Iowa\_Liquor\_Stores st, Dim\_iowa\_county dc

where h.Store\_SK = st.Store\_SK and st.County\_SK = dc.County\_SK

GROUP BY dc.County

order by Total\_Sales desc

LIMIT 20;

-- Top 20 categories (all-time)

Select c.Category\_Name, ROUND(sum(h.Invoice\_Sale\_Dollars),2) as Total\_Sales

from Dim\_iowa\_liquor\_Product\_Categories c, Dim\_iowa\_liquor\_Products p, fct\_iowa\_liquor\_sales\_invoice\_lineitem h

where c.Category\_SK = p.Category\_SK and p.Item\_SK = h.Item\_SK

GROUP BY c.Category\_Name

ORDER BY Total\_Sales desc

LIMIT 20;

-- Top 50 items (all-time)

Select p.Item\_Description, ROUND(sum(il.Sale\_Dollars),2) as Total\_Sales

from Dim\_iowa\_liquor\_Products p, fct\_iowa\_liquor\_sales\_invoice\_lineitem il

where p.Item\_SK = il.Item\_SK

GROUP BY p.Item\_Description

ORDER BY Total\_Sales DESC

LIMIT 50;

-- Top 20 vendor (all-time)

Select v.Vendor\_Name, ROUND(sum(il.Sale\_Dollars),2) as Total\_Sales

from Dim\_iowa\_liquor\_Vendors v, Dim\_iowa\_liquor\_Products p, fct\_iowa\_liquor\_sales\_invoice\_lineitem il

where v.Vendor\_SK = p.Vendor\_SK and p.Item\_SK = il.Item\_SK

GROUP BY v.Vendor\_Name

ORDER BY Total\_Sales desc

LIMIT 20;