**Adhoc-Consumer Insights**

# 1. The list of markets in which customer "Atliq Exclusive" operates its business in the APAC region

SELECT DISTINCT(market) FROM dim\_customer

WHERE region = 'APAC' AND customer = 'Atliq Exclusive';

# ----------------------------------------------------------------------------------------------------------------------- #

# 2. What is the percentage of unique product increase in 2021 vs. 2020?

WITH fy20 AS (

SELECT COUNT(DISTINCT(product\_code)) AS up\_20 FROM fact\_sales\_monthly

WHERE fiscal\_year = 2020),

fy21 AS (

SELECT COUNT(DISTINCT(product\_code)) AS up\_21 FROM fact\_sales\_monthly

WHERE fiscal\_year = 2021)

SELECT fy20.up\_20 AS unique\_products\_2020,

fy21.up\_21 AS unique\_products\_2021,

CONCAT(ROUND((fy21.up\_21-fy20.up\_20) \* 100/fy20.up\_20, 2), ' %') as percentage\_chg

FROM fy20, fy21;

# ----------------------------------------------------------------------------------------------------------------------- #

# 3. Provide a report with all the unique product counts for each segment and sort them in descending order of product counts.

SELECT segment, count(product) AS product\_count FROM dim\_product

GROUP BY segment

ORDER BY product\_count DESC;

# ----------------------------------------------------------------------------------------------------------------------- #

# 4. Follow-up: Which segment had the most increase in unique products in 2021 vs 2020?

WITH fy20 AS(

SELECT segment, COUNT(DISTINCT(fm.product\_code)) AS seg20 FROM fact\_sales\_monthly fm

JOIN dim\_product dp

ON fm.product\_code = dp.product\_code

WHERE fiscal\_year = 2020

GROUP BY dp.segment),

fy21 AS(

SELECT segment, COUNT(DISTINCT(fm.product\_code)) AS seg21 FROM fact\_sales\_monthly fm

JOIN dim\_product dp

ON fm.product\_code = dp.product\_code

WHERE fiscal\_year = 2021

GROUP BY dp.segment)

SELECT fy20.segment, seg20 AS product\_count\_2020, seg21 AS product\_count\_2021, seg21-seg20 AS difference FROM fy20

JOIN fy21

ON fy20.segment = fy21.segment

ORDER BY difference DESC;

# ----------------------------------------------------------------------------------------------------------------------- #

# 5. Get the products that have the highest and lowest manufacturing costs.

SELECT fc.product\_code, product, CONCAT(manufacturing\_cost, '/unit') AS manufacturing\_cost FROM fact\_manufacturing\_cost as fc

JOIN dim\_product as dp

ON fc.product\_code = dp.product\_code

WHERE fc.manufacturing\_cost = (SELECT max(manufacturing\_cost) FROM fact\_manufacturing\_cost) OR

fc.manufacturing\_cost = (SELECT min(manufacturing\_cost) FROM fact\_manufacturing\_cost)

ORDER BY manufacturing\_cost DESC;

# ----------------------------------------------------------------------------------------------------------------------- #

# 6. Generate a report which contains the top 5 customers who received an average high pre\_invoice\_discount\_pct for the

# fiscal year 2021 and in the Indian market.

SELECT fd.customer\_code,

customer,

ROUND(AVG(pre\_invoice\_discount\_pct) \* 100, 2) AS average\_discount\_percentage

FROM fact\_pre\_invoice\_deductions fd

JOIN dim\_customer dc

ON fd.customer\_code = dc.customer\_code

WHERE market = 'India' AND fd.fiscal\_year = 2021

GROUP BY customer, fd.customer\_code

ORDER BY average\_discount\_percentage DESC

LIMIT 5;

# ----------------------------------------------------------------------------------------------------------------------- #

# 7. Get the complete report of the Gross sales amount for the customer “Atliq Exclusive” for each month.

# This analysis helps to get an idea of low and high-performing months and take strategic decisions.

WITH gross\_sales\_table AS (

SELECT date, fm.customer\_code, fp.fiscal\_year, gross\_price \* sold\_quantity AS gross\_sales FROM fact\_gross\_price fp

JOIN fact\_sales\_monthly fm

ON fm.product\_code = fp.product\_code

AND fm.fiscal\_year = fp.fiscal\_year),

customer\_sort AS (

SELECT date, dc.customer\_code, gross\_sales FROM gross\_sales\_table gt

JOIN dim\_customer dc

ON gt.customer\_code = dc.customer\_code

WHERE customer = "Atliq Exclusive")

SELECT MONTH(date) AS Month, YEAR(date) AS Year, ROUND(SUM(gross\_sales) / 1000000, 2) AS Gross\_sales\_Amount\_mln FROM customer\_sort

GROUP BY Month, Year;

# ----------------------------------------------------------------------------------------------------------------------- #

# 8. In which quarter of 2020, got the maximum total\_sold\_quantity?

WITH quarter AS (

SELECT sold\_quantity,

CASE

WHEN MONTH(date) BETWEEN 09 AND 11 THEN "Q1"

WHEN MONTH(date) IN (12, 01, 02) THEN "Q2"

WHEN MONTH(date) BETWEEN 03 AND 05 THEN "Q3"

WHEN MONTH(date) BETWEEN 06 AND 08 THEN "Q4"

END as Quarter

FROM fact\_sales\_monthly

WHERE fiscal\_year = 2020)

SELECT Quarter, SUM(sold\_quantity) AS total\_sold\_quantity FROM quarter

GROUP BY Quarter

ORDER BY total\_sold\_quantity DESC;

# ----------------------------------------------------------------------------------------------------------------------- #

# 9. Which channel helped to bring more gross sales in the fiscal year 2021 and the percentage of contribution?

WITH gross\_sale\_table as (

SELECT customer\_code, gross\_price \* sold\_quantity AS gross\_sales\_mln FROM fact\_gross\_price fp

JOIN fact\_sales\_monthly fm

ON fp.product\_code = fm.product\_code AND fp.fiscal\_year = fm.fiscal\_year

WHERE fp.fiscal\_year = 2021),

channel\_table AS (

SELECT channel, ROUND(SUM(gross\_sales\_mln / 1000000), 3) AS gross\_sales\_mln FROM gross\_sale\_table gt

JOIN dim\_customer dc

ON gt.customer\_code = dc.customer\_code

GROUP BY channel),

total\_sum AS (

SELECT SUM(gross\_sales\_mln) as SUM\_ FROM channel\_table)

SELECT ct.\*,

CONCAT(ROUND(ct.gross\_sales\_mln \* 100 / ts.SUM\_, 2), ' %') AS percentage

FROM channel\_table ct, total\_sum ts

ORDER BY percentage DESC;

# ----------------------------------------------------------------------------------------------------------------------- #

# 10. Get the Top 3 products in each division that have a high total\_sold\_quantity in the fiscal\_year 2021?

WITH product\_table AS (

SELECT dp.division, fm.product\_code, dp.product, SUM(fm.sold\_quantity) AS total\_sold\_quantity FROM fact\_sales\_monthly fm

JOIN dim\_product dp

ON fm.product\_code = dp.product\_code

WHERE fm.fiscal\_year = 2021

GROUP BY fm.product\_code, dp.division, dp.product),

rank\_table AS (

SELECT \*, RANK () OVER (PARTITION BY division ORDER BY total\_sold\_quantity DESC) AS rank\_order FROM product\_table)

SELECT \* from rank\_table

WHERE rank\_order < 4;