Consumer Goods Ad hoc Insights

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Agenda

1. Overview of Company
2. Objective
3. About data
4. Ad hoc request with Insights

Company

AtliQ Hardware is one of the leading computer hardware producers in India as well as 26 other countries across the globe

Objective

Assist the management team to gain more insights about the business Take data-driven business

About Data

We have 4 fact tables i.e., sales monthly, manufacturing cost, pre invoice deductions, gross price which have measurable metrics and 2 dimension table i.e., customer details and product details

REQUESTS
QUERY RESULTS AND INSIGHTS

REQUEST 1

```sql
select distinct market, region, customer from dim_customer
where customer = "Atliq Exclusive " and region = "APAC";
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

market	region	customer
India	APAC	Atliq Exclusive
Indonesia	APAC	Atliq Exclusive
Japan	APAC	Atliq Exclusive
Philiphines	APAC	Atliq Exclusive
South Korea	APAC	Atliq Exclusive
Australia	APAC	Atliq Exclusive
Newzealand	APAC	Atliq Exclusive
Bangladesh	APAC	Atliq Exclusive

Provide the list of markets in which customer “Atliq Exclusive” operates its business in the APAC region

REQUEST 2

What is the percentage of unique product increase in 2021 vs 2020 ? the final output contains

1. unique_products_2020
2. unique_products_2021
3..Percentage_Chg

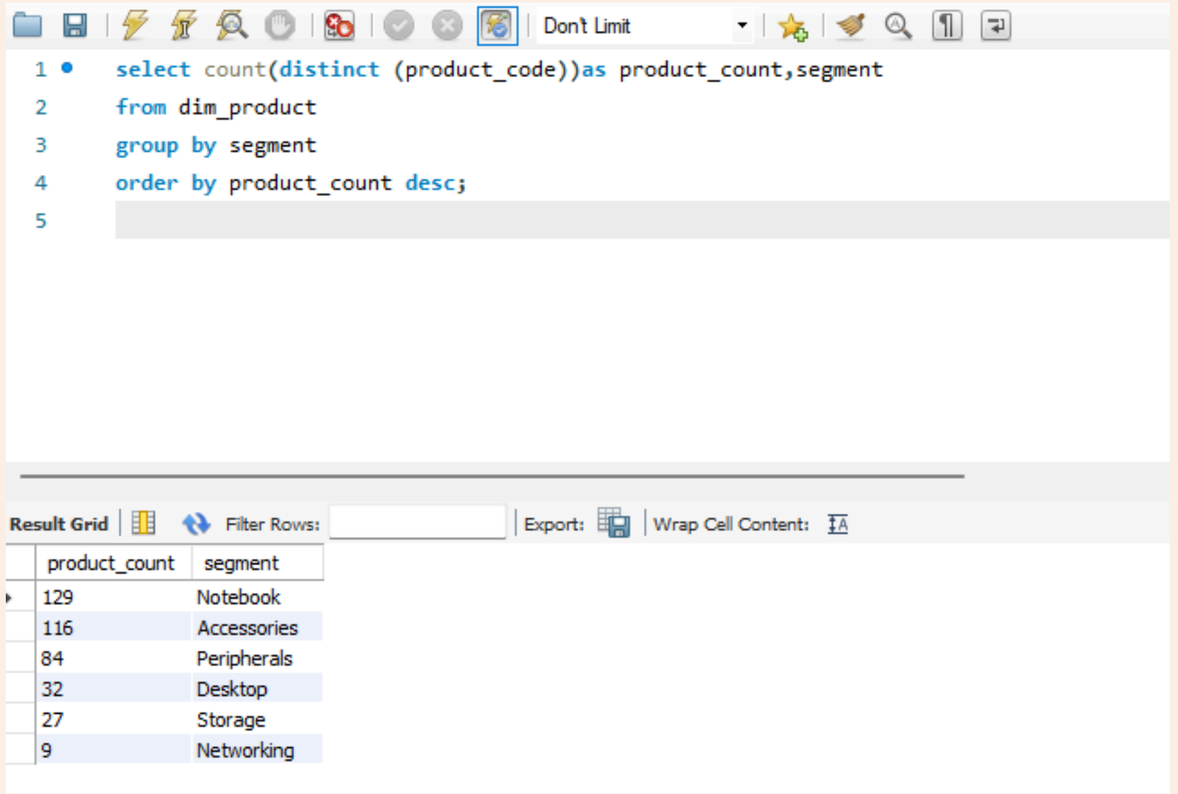
```sql
with year_data as (
select fiscal_year, count(distinct fact_sales_monthly.product_code) as unique_products
from fact_sales_monthly
join fact_gross_price
on fact_sales_monthly.product_code = fact_gross_price.product_code
group by fiscal_year
)
select
y2020.unique_products as unique_products_2020,
y2021.unique_products as unique_products_2021,
round((y2021.unique_products - y2020.unique_products)/
      y2020.unique_products * 100 ,2) as percentage_chg
from year_data y2020
cross join year_data y2021
where y2020.fiscal_year = 2020 and y2021.fiscal_year = 2021;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

unique_products_2020	unique_products_2021	percentage_chg
245	334	36.33

REQUEST 3

Provide a report with all the unique product counts for each segment and sort them in descending order of product counts
final output contains 2 fields: SEGMENT & PRODUCT_COUNT



REQUEST 4

Follow-up : which segment had the most increase in unique products in 2021 vs 2020 ? the final output contains these fields :
SEGMENT, PRODUCT_COUNT_2020,PRODUCT_COUNT_2021,Difference

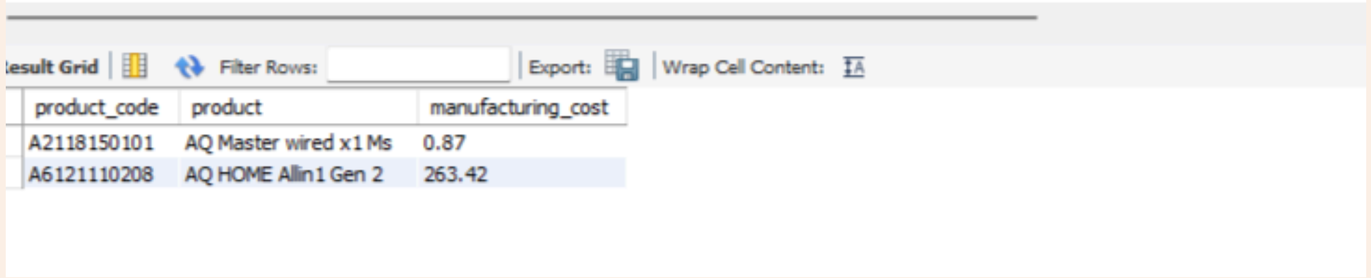
```sql
with year_data as (
select segment, fiscal_year, count(distinct dim_product.product_code) as unique_product_count
from fact_sales_monthly
join dim_product
on fact_sales_monthly.product_code = dim_product.product_code
group by segment, fiscal_year
)
select
yd.segment,
yd.unique_product_count as product_count_2020,
yy.unique_product_count as product_count_2021,
abs(yd.unique_product_count - yy.unique_product_count) as difference
from year_data yd
join year_data yy on yd.segment = yy.segment
where yd.fiscal_year = 2020 and yy.fiscal_year = 2021
order by difference desc
limit 7;

```

REQUEST 5

Get the products that have the highest and lowest manufacturing costs

```sql
select dim_product.product_code,product,round(manufacturing_cost,2) as manu
from dim_product
Join fact_manufacturing_cost
on dim_product.product_code =fact_manufacturing_cost.product_code
where manufacturing_cost  in (
(select max(manufacturing_cost)
from fact_manufacturing_cost ),
(select min(manufacturing_cost)
from fact_manufacturing_cost ))
order by manufacturing_cost;
```



product_code	product	manufacturing_cost
A2118150101	AQ Master wired x1 Ms	0.87
A6121110208	AQ HOME Allin1 Gen 2	263.42

REQUEST 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

```sql
select dim_customer.customer_code, customer, round(avg(pre_invoice_discount_pct),2) as average_discount_percentage
 from dim_customer
 join fact_pre_invoice_deductions
 on dim_customer.customer_code =  fact_pre_invoice_deductions.customer_code
 where fiscal_year = 2021 and market = "India"
 group by customer_code, customer
 order by average_discount_percentage desc limit 5;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

customer_code	customer	average_discount_percentage
90002009	Flipkart	0.31
90002006	Viveks	0.30
90002002	Croma	0.30
90002003	Ezone	0.30
90002016	Amazon	0.29

REQUEST 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.

```sql
with table_1 as (
    select customer,
    monthname(date) as months,
    month(date) as month_number,
    year(date) as year,
    (sold_quantity * gross_price) as gross_sales
    from fact_sales_monthly s join
    fact_gross_price g on s.product_code = g.product_code
    join dim_customer c on s.customer_code = c.customer_code
    where customer = "Atliq exclusive"
    order by month_number
    )
    select months,year,concat(round(sum(gross_sales)/1000000,2),"M") as gross_sales from table_1
    group by year,months;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

months	year	gross_sales
September	2017	2.35M
October	2017	2.46M
November	2017	3.77M
December	2017	2.39M
January	2018	2.29M
February	2018	1.99M
March	2018	2.22M

REQUEST 8

In which quarter of 2020, got the maximum total_sold_quantity?

```sql
with table_1 as (
    select date,month(date_add(date,interval 4 month)) as period, fiscal_year, sold_quantity
    from fact_sales_monthly
    JOIN fact_gross_price
    on fact_sales_monthly.product_code = fact_gross_price.product_code
    )
    select case
    when period/3 <= 1 then "Q1"
    when period/3 <= 2 and period/3>1 then "Q2"
    when period/3 <= 3 and period/3>2 then "Q3"
    when period/3 <= 4 and period/3>2 then "Q4" end quarter,
    round(sum(sold_quantity)/1000000,2) as total_sold_quantity_in_mln from table_1
    where fiscal_year = 2020
    group by quarter
    order by total_sold_quantity_in_mln desc;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

quarter	total_sold_quantity_in_mln
Q1	36.75
Q2	26.87
Q4	15.21
Q3	12.31

26.87

Thank you!