Ad _ Hoc Insights

Consumer Goods

Created By

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Objectives

- **Atliq Hardware** (fictitious corporation) is one of the major computer hardware manufacturers in India, with a strong presence in other nations.

- Nevertheless, the management did note that they **do not have sufficient   insights** to make prompt, wise, and data-informed judgments.

- The company seeks insights for **10 ad hoc** requests.

10 REQUESTS

Requests:

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

2. What is the percentage of unique product increase in 2021 vs. 2020? The final output contains these fields,
   - unique_products_2020
   - unique_products_2021
   - percentage_chg

3. Provide a report with all the unique product counts for each segment and sort them in descending order of product counts. The final output contains 2 fields,
   - segment
   - product_count

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

5. Get the products that have the highest and lowest manufacturing costs. The final output should contain these fields,
   - product_code
   - product
   - manufacturing_cost

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. The final output contains these fields,
   - customer_code
   - customer
   - average_discount_percentage

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.
   The final report contains these columns:
   - Month
   - Year
   - Gross sales Amount

8. In which quarter of 2020, got the maximum total_sold_quantity? The final output contains these fields sorted by the total_sold_quantity,
   - Quarter
   - total_sold_quantity

9. Which channel helped to bring more gross sales in the fiscal year 2021 and the percentage of contribution? The final output contains these fields,
   - channel
   - gross_sales_mln
   - percentage

10. Get the Top 3 products in each division that have a high total_sold_quantity in the fiscal_year 2021? The final output contains these fields,
    - division
    - product_code

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

market
Australia
Bangladesh
India
Indonesia
Japan
Newzealand
Philiphines
South Korea

Insights:

In the APAC region, our Exclusive store has

established its presence in 8 major markets.

2. What is the percentage of unique product increase in 2021 vs. 2020? The final output contains these fields,

unique_products_2020
unique_products_2021
percentage change

unique_products_2020	unique_products_2021	percentage_change
245	334	36.33

Insights:

It's a good sign that we are continuously innovating and introducing new products to the market. In FY 2020, we had a total of 245 products, but in FY 2021, our count increased by 36% to 334 products.

3. Provide a report with all the unique product counts for each segment and sort them in descending order of product counts. The final output contains 2 fields,

segment
product_count

segment	product_count
Notebook	129
Accessories	116
Peripherals	84
Desktop	32
Storage	27
Networking	9

Insights:

Segments: notebooks, accessories, and peripherals are showing significant manufacturing growth as compared to desktops, storage, and networking.

Notebooks, accessories, and peripherals constitute **83%** of the total manufactured product.

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.

segment	product_count_2020	product_count_2021	difference
Accessories	69	103	34
Desktop	7	22	15
Networking	6	9	3
Notebook	92	108	16
Peripherals	59	75	16
Storage	12	17	5

Insights:

Accessories had the largest increase in production.

Storage and **networking** are experiencing slower production growth than other segments

5. Get the products that have the highest and lowest manufacturing costs. The final output should contain these fields,

product_code
product
manufacturing_cost

product_code	product	manufacturing_cost
A6120110206	AQ HOME Allin1 Gen 2	240.5364
A2118150101	AQ Master wired x1 Ms	0.8920

Insights:

AQ Master wired x1 Ms has the lowest manufacturing cost.
AQ Home Allin1 Gen2 has the highest manufacturing cost

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. The final output contains these fields,

customer_code
customer
average_discount_percentage

customer_code	customer	average_discount_percentage
90002009	Flipkart	0.3083
90002006	Viveks	0.3038
90002003	Ezone	0.3028
90002002	Croma	0.3025
90002016	Amazon	0.2933

Insights:

The largest average pre-invoice discount was given to Flipkart.
The least average pre-invoice discount was given to Amazon.

7. Get the complete report of the Gross sales amount for the customer "AtliqExclusive" for each month. This analysis helps to get an idea of low and high-performing months and take strategic decisions. The final report contains these columns:

<div align="center">
Month
Year
Gross sales Amount
</div>

month_name	year	gross_sales_amount
September	2019	9092670.34
October	2019	10378637.60
November	2019	15231894.97
January	2020	9584951.94
February	2020	8083995.55
March	2020	766976.45
May	2020	1586964.48
June	2020	3429736.57
July	2020	5151815.40
September	2020	19530271.30
October	2020	21016218.21
November	2020	32247289.79
January	2021	19570701.71
February	2021	15986603.89
March	2021	19149624.92
May	2021	19204309.41
June	2021	15457579.66
July	2021	19044968.82
December	2019	9755795.06
April	2020	800071.95
August	2020	5638281.83
December	2020	20409063.18
April	2021	11483530.30
August	2021	11324548.34

INSIGHTS:

- For AtliqExclusive, **November 2020** marked the highest sales, and **March 2020** marked the lowest gross sales.
- It's very evident that the lower sales between March and August are because of **COVID-19.**
- However, it's a very **good sign** that the sales **increased** quickly after Insights August

8. In which quarter of 2020, got the maximum total_sold_quantity? The final output contains these fields sorted by the total_sold_quantity,

Quarter
total_sold_quantity

Quarters	total_sold_quantity
1	7005619
2	6649642
4	5042541
3	2075087

INSIGHTS:

Quarter 1 of FY2020 saw the most units sold overall, while Quarter3 had the fewest.

9. Which channel helped to bring more gross sales in the fiscal year 2021 and the percentage of contribution? The final output contains these fields,

channel
gross_sales_mln
percentage

channel	Gross_sales_mln	percentage
Retailer	1924.17 M	73.22 %
Direct	406.69 M	15.48 %
Distributor	297.18 M	11.31 %

INSIGHTS:
- Channel: "Retailer " helped bring maximum sales to the company with **73.22%** as the contribution percentage.
- Channel: "Distributor " makes the least contribution at a percentage of **11.31%**

10. Get the Top 3 products in each division that have a high total_sold_quantity in the fiscal_year 2021? The final output contains these fields,   division
product_code
product
total_sold_quantity
Rank_order

division	product_code	product	Total_sold_quantity	Rank_Order
N & S	A6720160103	AQ Pen Drive 2 IN 1 [Premium]	701373	1
N & S	A6818160202	AQ Pen Drive DRC [Plus]	688003	2
N & S	A6819160203	AQ Pen Drive DRC [Premium]	676245	3
P & A	A2319150302	AQ Gamers Ms [Standard 2]	428498	1
P & A	A2520150501	AQ Maxima Ms [Standard 1]	419865	2
P & A	A2520150504	AQ Maxima Ms [Plus 2]	419471	3
PC	A4218110202	AQ Digit [Standard Blue]	17434	1
PC	A4319110306	AQ Velocity [Plus Red]	17280	2
PC	A4218110208	AQ Digit [Premium Misty Green]	17275	3

INSIGHTS:

Every division has a product with different variants that appears twice in the top three products by division list

THANK YOU