Consumer Goods Ad_Hoc Insights Codebasics resume project challenge

Atliq Hardwares | By Rupali Nikam

Project Summary

Company Overview:-

Atliq Hardwares is one of the leading computer hardware producers in India and well expanded in other countries too.

Problem Statement:-

The management noticed that they do not get enough insights to make quick and smart data-informed decisions. They want to expand their data analytics team by adding several junior data analysts. Tony Sharma, their data analytics director wanted to hire someone who is good at both tech and soft skills.

Customer "Atliq Exclusive" operates its business in the APAC region.

• **REQUEST 1**:-

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

• **Insights:** - "Atliq Exclusive" operates its business in the APAC region.



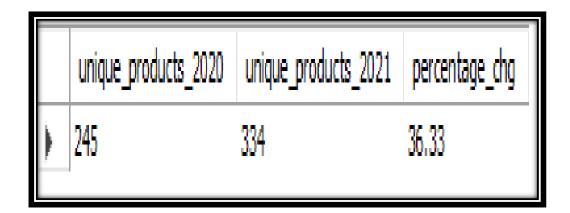


Percentage of unique product increase in 2021 vs. 2020

• **REQUEST 2** :-

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

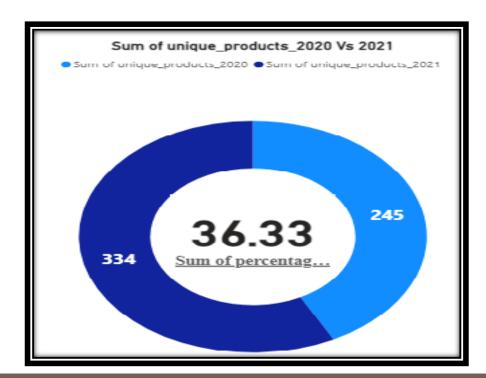
```
unique_products_2020
unique_products_2021
percentage_chg
```



• Insights:-

Atliq Hardware produced 245 unique products in 2020 whereas its increased to 334 unique products in 2021.

Its achieved 36.33% increase in unique products from the previous year.



The unique product counts for each segment

• **REQUEST 3:-**

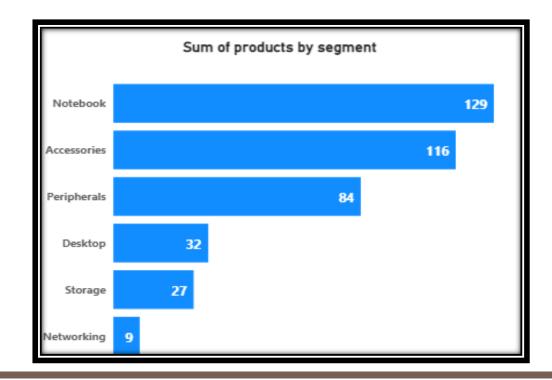
Provide a report with all the unique product counts for each segment and sort them in descending order of product counts. The final output contains 2 fields,

segment product_count

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

• Insights:-

Atliq Hardware has 6 different product segments in which the Notebook segment has the Highest number of unique products whereas Networking has the least number of product.



The unique product counts for each segment

• **REQUEST 4:-**

Follow-up: Which segment had the most increase in unique products in 2021 vs 2020? The final output contains these fields,

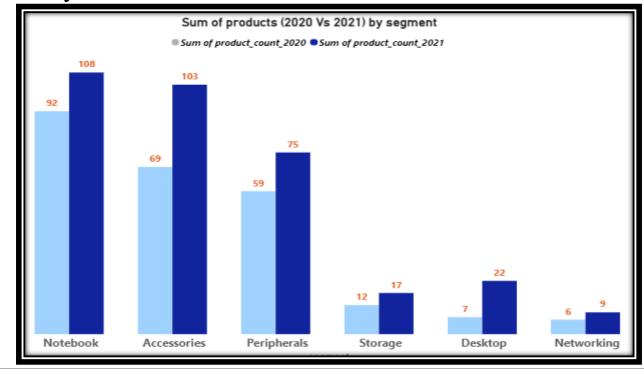
segment product_count_2020 product_count_2021 difference

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

• Insights :-

Atliq Hardware produced more unique products in every segment 2021 than the 2020.

The Accessories segment has the most increase in unique products i.e. 34 more from the previous year.



The highest and lowest manufacturing costs products

• **REQUEST 5** :-

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

product_code
product
manufacturing_cost

Insights:-

The product AQ HOME Allin 1 Gen 2 has the highest manufacturing cost whearas the product AQ Master wired 1 Ms has the lowest manufacturing cost

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

Average high pre invoice discount percentage in 2021

• **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. The final output contains these fields,

customer_code
customer
average_discount_percentage

| Γ | | 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 |
| Ĺ | | | | |

• Insights:-

Flipkart has the top of the list which has the high discount followed by Viveks wheareas the average discount percentage Ezone, croma, Amazon.



Gross sales amount for "Atliq Exclusive" for each month

• **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. The final report contains

these columns:

Month

Year

Gross sales Amount

| Month | Year | Grass sales Amount |
|-----------|------|--------------------|
| | | Gross_sales_Amount |
| September | 2019 | 9092670.339 |
| November | 2019 | 15231894.97 |
| December | 2019 | 9755795.058 |
| January | 2020 | 9584951.939 |
| March | 2020 | 766976.4531 |
| April | 2020 | 800071.9543 |
| May | 2020 | 1586964.477 |
| July | 2020 | 5151815.402 |
| August | 2020 | 5638281.829 |
| September | 2020 | 19530271.3 |
| November | 2020 | 32247289.79 |
| December | 2020 | 20409063.18 |
| January | 2021 | 19570701.71 |
| March | 2021 | 19149624.92 |
| April | 2021 | 11483530.3 |
| May | 2021 | 19204309.41 |
| July | 2021 | 19044968.82 |
| August | 2021 | 11324548.34 |
| October | 2019 | 10378637.6 |
| February | 2020 | 8083995.548 |
| June | 2020 | 3429736.571 |
| October | 2020 | 21016218.21 |
| February | 2021 | 15986603.89 |
| June | 2021 | 15457579.66 |

The maximum Total sold quantity quarter of 2020

• **REQUEST 8** :-

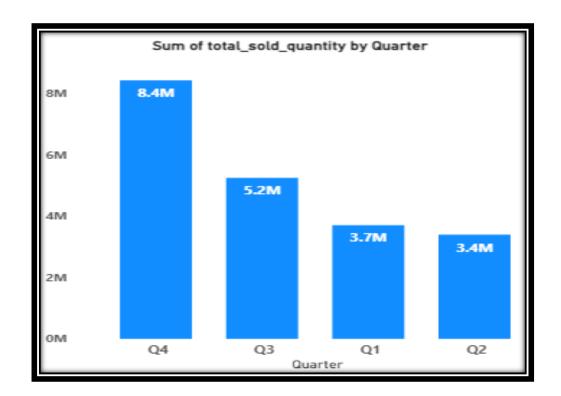
In which quarter of 2020, got the maximum total_sold_quantity? The final output contains these fields sorted by the total_sold_quantity,

Quarter total_sold_quantity

| | Quarter | total_sold_quantity |
|---|---------|---------------------|
| • | Q4 | 8425822 |
| | Q3 | 5246770 |
| | Q2 | 3395899 |
| | Q1 | 3704398 |

• Insights:-

Quarter 4 of the fiscal year 2020 got the highest total sold quantity whereas the Quarter 2 has the lowest sold quantity.



Channel gross sales & percentage of contribution in 2021

• **REQUEST 9** :-

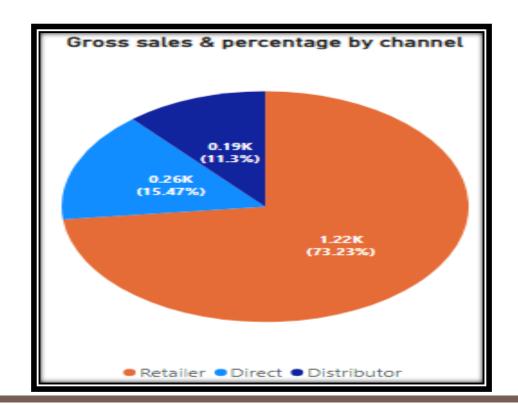
Which channel helped to bring more gross sales in the fiscal year 2021 and the percentage of contribution? The final output contains these fields, channel gross_sales_mln percentage

| | channel | gross_sales_mln | percentage |
|---|-------------|-----------------|------------|
| • | Distributor | 188.03 | 11.30 |
| | Direct | 257.53 | 15.47 |
| | Retailer | 1219.08 | 73.23 |

• Insights:-

The Retailer channel is the highest gross sales with 73.23% in year 2021.

The Direct has the 15.47 % & Distributor has the 11.30 which is lowest contribution.



Top 3 products in each division

• **REQUEST 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

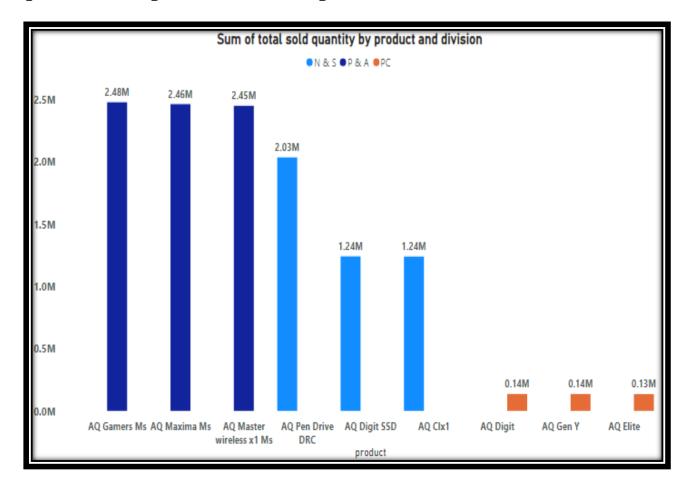
product_code
product
total_sold_quantity

rank_order

| | division | product_code | product | total_sold_quantity | rank_order |
|---|----------|--------------|--------------------------|---------------------|------------|
| • | N & S | A6818160201 | AQ Pen Drive DRC | 2034569 | 1 |
| | N & S | A6218160101 | AQ Digit SSD | 1240149 | 2 |
| | N & S | A6419160301 | AQ Clx1 | 1238683 | 3 |
| | P & A | A2319150301 | AQ Gamers Ms | 2477098 | 1 |
| | P&A | A2520150501 | AQ Maxima Ms | 2461991 | 2 |
| | P&A | A2218150201 | AQ Master wireless x1 Ms | 2448784 | 3 |
| | PC | A4218110201 | AQ Digit | 135092 | 1 |
| | PC | A4620110601 | AQ Gen Y | 135031 | 2 |
| | PC | A4419110401 | AQ Elite | 134431 | 3 |

• Insights:-

Atliq Hardware produced has 3 product divisions N&S, P&A, PC.



THANK YOU?