

Consumer Goods- Ad Hoc Insights

Presentation by Arunima Paul



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AtliQ Hardwares

AtliQ Hardwares (imaginary company) is one of the leading computer hardware producers in India and well expanded in other countries too.

Objective: To generate actionable insights from product, sales and customer data to help AtliQ Hardwares make data-informed decisions.



Requests:

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



Insight:

Atliq Exclusive operates in eight markets within the APAC region, which includes India, Indonesia, Japan, Philippines, South Korea, Australia, New Zealand and Bangladesh.



Output:

	market
▶	India
▶	Indonesia
▶	Japan
▶	Philippines
▶	South Korea
▶	Australia
▶	New Zealand
▶	Bangladesh



Requests:

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`



Insight:

The number of unique products increased from 245 in 2020 to 334 in 2021, representing a 36.33% growth in product variety Y-o-Y.

Output:

	<code>unique_products_2020</code>	<code>unique_products_2021</code>	<code>pct_chg</code>
▶	245	334	36.33



Requests:

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



Insight:

The 'Notebook' segment has the highest number of unique products at 129, followed by 'Accessories' with 116 and 'Peripherals' with 84. Segments like 'Desktop', 'Storage' and 'Networking' have significantly fewer products, with no. of 32, 27 and 9 respectively.

Output:

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



Requests:

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



Insight:

In 2021 Accessories segment added the most new products, with an increase of 34 compared to 2020. Notebook and Peripherals segments both added 16 new products. This shows that Accessories and Desktop had the strongest growth in product variety.

Output:

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



Requests:

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

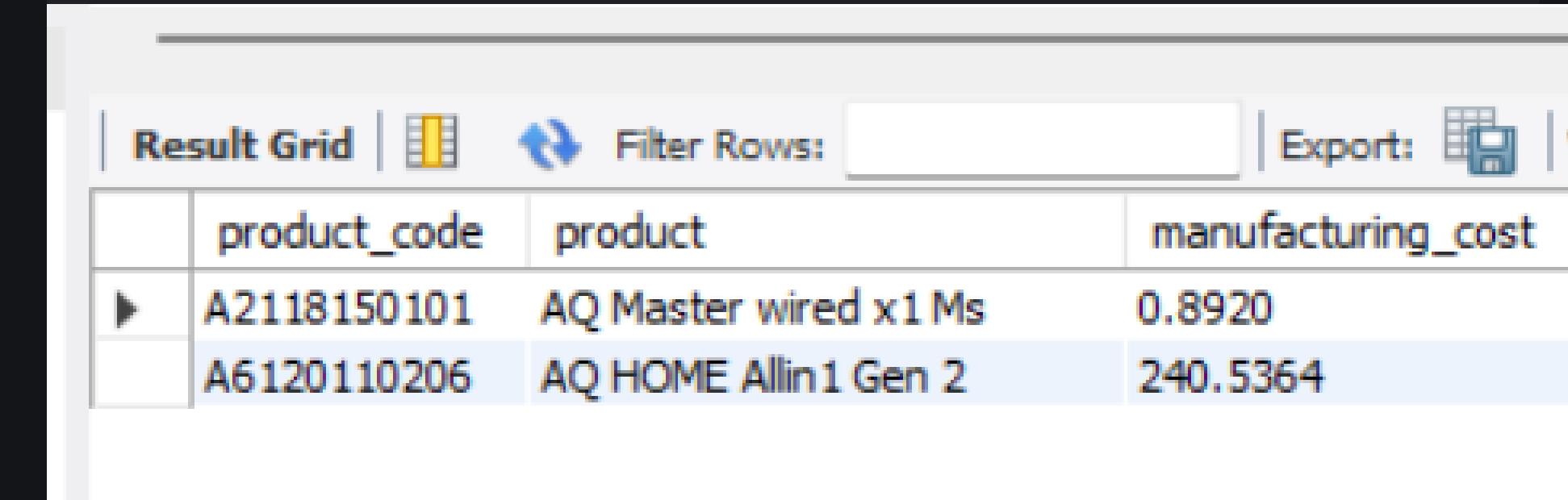
The final output should contain these fields,
product_code
product
manufacturing_cost



Insight:

The product with the highest manufacturing cost is 'AQ HOME Allin1 Gen 2' at 240.54. The product with the lowest manufacturing cost is 'AQ Master wired x1 Ms' at just 0.89. This shows a large difference in production cost between the two products.

Output:



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



Requests:

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



Insight:

In the Indian market for FY2021, Flipkart received the highest average pre-invoice discount of 0.31. Viveks, Croma, and Ezone followed closely with an average discount of 0.30. Amazon had a slightly lower average discount of 0.29. These are the top 5 customers by average discount received.

Output:

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

Requests:

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

The final report contains these columns:

Month

Year

Gross sales Amount

Output:

customer	month	year	gross_sales_amount_mln
Atliq Exclusive	1	2020	9.58
Atliq Exclusive	1	2021	19.57
Atliq Exclusive	2	2020	8.08
Atliq Exclusive	2	2021	15.99
Atliq Exclusive	3	2020	0.77
Atliq Exclusive	3	2021	19.15
Atliq Exclusive	4	2020	0.80
Atliq Exclusive	4	2021	11.48
Atliq Exclusive	5	2020	1.59
Atliq Exclusive	5	2021	19.20
Atliq Exclusive	6	2020	3.43
Atliq Exclusive	6	2021	15.46
Atliq Exclusive	7	2020	5.15
Atliq Exclusive	7	2021	19.04
Atliq Exclusive	8	2020	5.64
Atliq Exclusive	8	2021	11.32
Atliq Exclusive	9	2019	9.09
Atliq Exclusive	9	2020	19.53
Atliq Exclusive	10	2019	10.38
Atliq Exclusive	10	2020	21.02
Atliq Exclusive	11	2019	15.23
Atliq Exclusive	11	2020	32.25
Atliq Exclusive	12	2019	9.76
Atliq Exclusive	12	2020	20.41



Insight:

In 2021, Atliq Exclusive saw higher gross sales compared to 2020 in most months. In January, sales increased from 9.58 million in 2020 to 19.57 million in 2021. Similar improvements were seen in February, March, May and August. The highest sales in the dataset occurred in November 2020 at 32.25 million. These patterns suggest stronger performance in the second half of the year, especially during November and December.

Requests:

8. In which quarter of 2020, got the maximum total_sold_quantity?

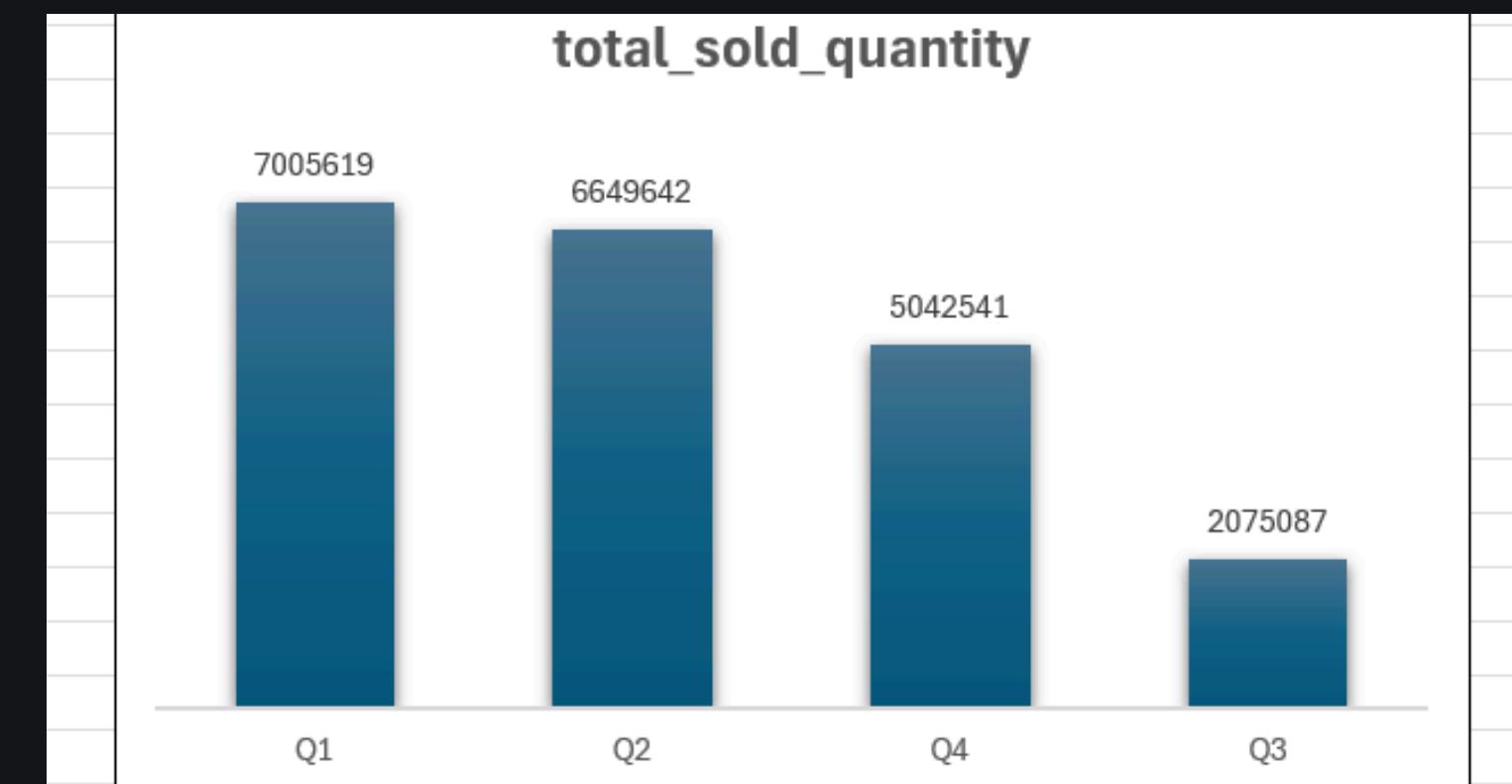
The final output contains these fields sorted by the total_sold_quantity, Quarter, total_sold_quantity

Insight:

In the fiscal year 2020, Q1 had the highest total sold quantity with over 7 million units. Q2 followed with around 6.65 million units. Q4 saw a drop to 5.04 million and Q3 had the lowest sales with just over 2 million units. This shows that the beginning of the fiscal year had the strongest sales performance.

Output:

qtr	total_sold_quantity
Q1	7005619
Q2	6649642
Q4	5042541
Q3	2075087



Requests:

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

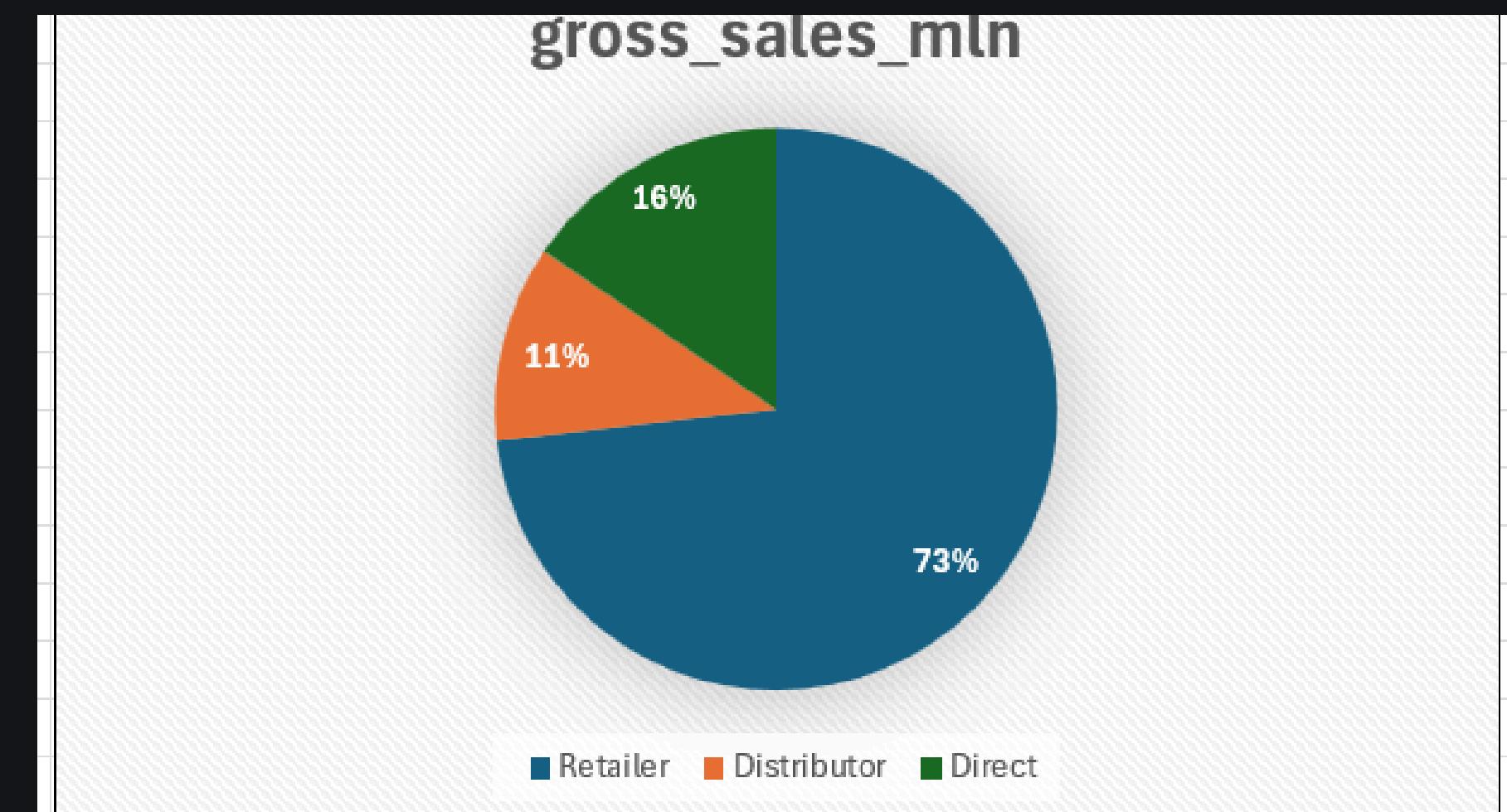
The final output contains these fields, channel
gross_sales_mln
percentage

Insight:

In FY2021, the Retailer channel generated the highest gross sales, contributing 1924.17 million which is 73.22% of total sales. The Direct channel made 406.69 million (15.48%) and the Distributor channel had the lowest contribution at 297.18 million (11.31%). This shows that most of the sales came through retailers.

Output:

	channel	gross_sales_mln	pct
▶	Retailer	1924.17	73.22
	Distributor	297.18	11.31
	Direct	406.69	15.48



Requests:

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

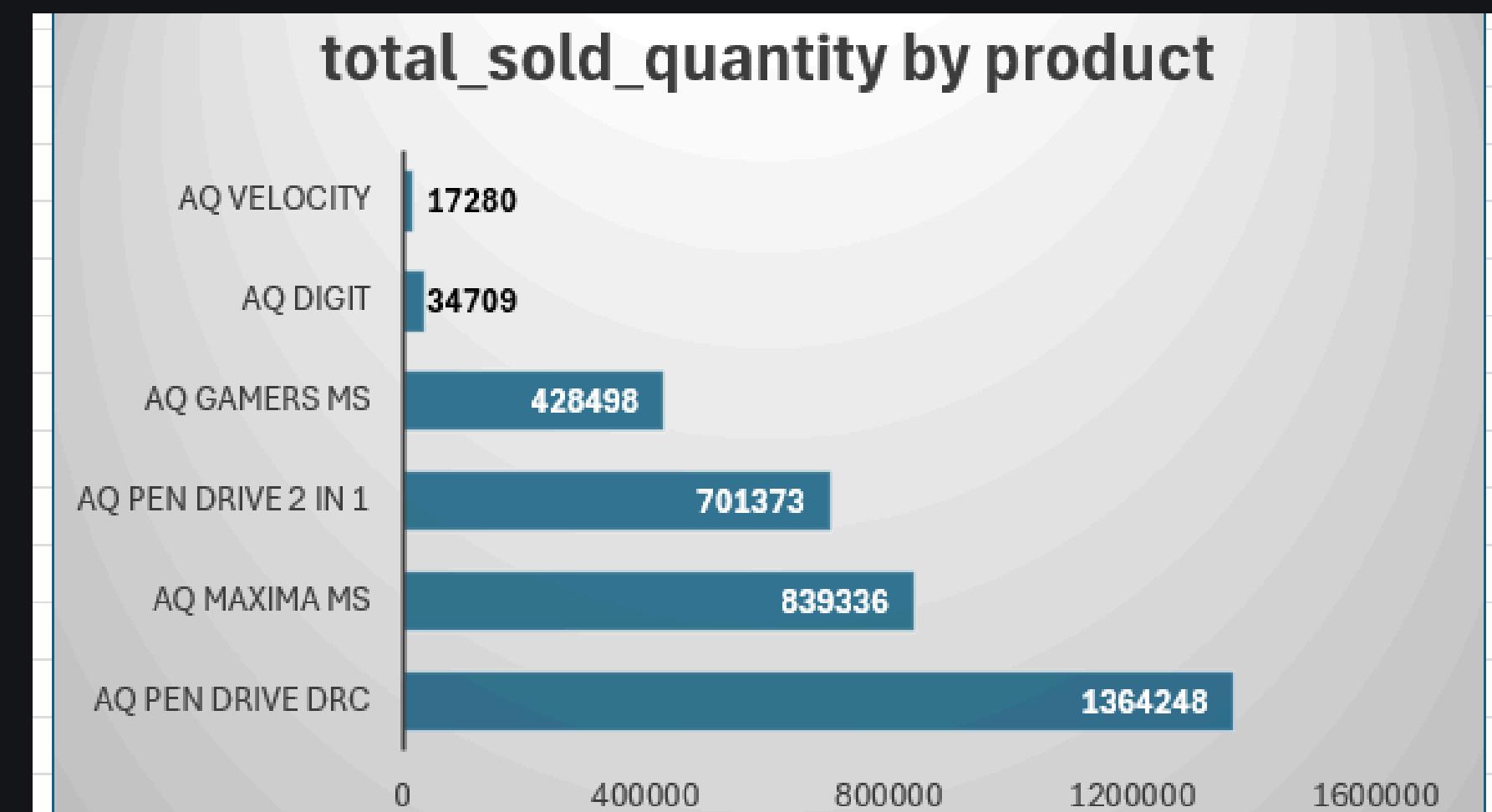
Output:

division	product_code	product	total_sold_quantity	rank_order
N & S	A6720160103	AQ Pen Drive 2 IN 1	701373	1
N & S	A6818160202	AQ Pen Drive DRC	688003	2
N & S	A6819160203	AQ Pen Drive DRC	676245	3
P & A	A2319150302	AQ Gamers Ms	428498	1
P & A	A2520150501	AQ Maxima Ms	419865	2
P & A	A2520150504	AQ Maxima Ms	419471	3
PC	A4218110202	AQ Digit	17434	1
PC	A4319110306	AQ Velocity	17280	2
PC	A4218110208	AQ Digit	17275	3

Insight:

The top-selling product is 'AQ Pen Drive 2 IN 1' from the N & S division with 7,01,373 units sold. Other high-performing products are 'AQ Pen Drive DRC' and 'AQ Gamers Ms' with over 400,000 units sold. In the PC division, 'AQ Digit' and 'AQ Velocity' had much lower sales, with under 18,000 units each. This shows that products from the N & S and P & A divisions are selling in much higher volumes compared to the PC division.

total_sold_quantity by product



1. Strong market presence in 8 APAC countries.
2. Product Growth (2020 vs 2021)- Growth Rate increased by 36.33%
3. Focus is more in Notebook and Accessories segments.
4. Larger discounts are given by the major players.
5. Retail is the dominant channel. Direct and Distributor channels are underperformed.
6. Sales were highest in Q1, Q3 were significantly underperformed.
7. Products from N & S and P & A divisions dominate in sales volume.

Summary of Insights



Highest Cost Product: AQ HOME Allin1 Gen 2 – ₹240.54

Lowest Cost Product: AQ Master wired x1 Ms – ₹0.89

Best Seller: AQ Pen Drive 2 IN 1 - 701,373 units sold.

Recommendations:

Product Strategy

- Expand high-growth segments like Accessories, Notebook.
- Review the performance of low-selling PC products.

Sales Strategy

Explore ways to boost Q3 sales such as mid-year promotions or new product launches to increase sales.

Channel Strategy

Explore growth opportunities in Direct and Distributor channels.

Cost Management

Analyze high-cost products for savings or premium pricing.

Conclusion

From this analysis we can find that AtliQ Hardwares is making good and effective progress in expanding their product base using their retailer channels. However, they need to utilise the key opportunities to improve their profitability, they need to expand their lower performing channels and product lines to increase sales along with seasonal demand patterns.

Thank You

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