

INTRODUCTION

• Atliq Hardware, one of the leading computer hardware producers in India with customers worldwide, wants to gain insights into company product sales to make data-informed decisions.





1. List of Markets in APAC Region for "Atliq Exclusive"

SELECT DISTINCT market

FROM dim_customer

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

market

India

Indonesia

Japan

Philiphines

South Korea

Australia

Newzealand

Bangladesh

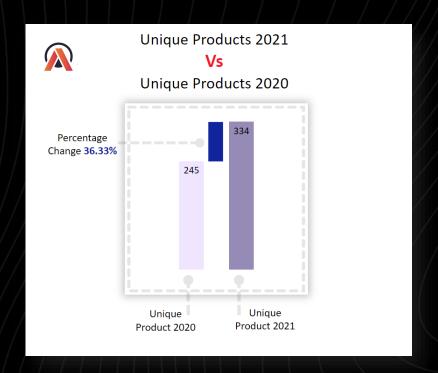




2. Percentage of Unique Product Increase in 2021 vs. 2020

I use Common Table Expressions (CTEs) to first calculate the unique products for 2020 and 2021. Then, we calculate the percentage change based on these counts.

	unique_products_2020	unique_products_2021	percentage_chg
•	245	334	36.33





3. Unique Product Counts by Segment

Here, I join the dim_product and fact_sales_monthly tables, group by the segment, and count distinct product_code values to get the unique product count for each segment, sorted in descending order.

SELECT segment,

COUNT(DISTINCT product_code) AS product_count

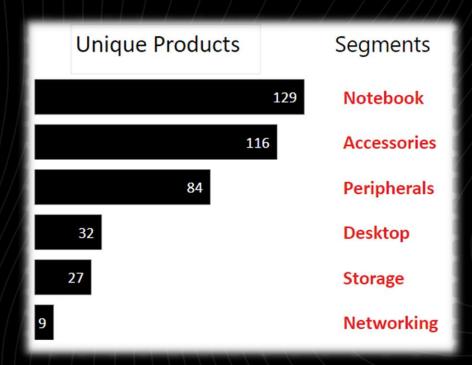
FROM dim_product dp

JOIN fact_sales_monthly fsm

ON dp.product_code = fsm.product_code

GROUP BY segment

ORDER BY product_count DESC;





4. Segment with the Most Increase in Unique Products (2021 vs. 2020)

• This query uses two CTEs to calculate the unique products for each segment in 2020 and 2021. Then, it calculates the difference in product count between the two years and sorts the segments based on the most increase in unique products.

Segment	Product Count 2020	Product Count 2021	Differ	rence
Accessories	69	103	34	1
Desktop	7	22	15	1
Networking	6	9	3	1
Notebook	92	108	16	1
Peripherals	59	75	16	1
Storage	12	17	5	1



5. Products with Highest and Lowest Manufacturing Costs

Here, I join the dim_product and fact_manufacturing_cost tables, and use subqueries to find the maximum and minimum manufacturing costs.

SELECT product_code, product, manufacturing_cost

FROM dim_product dp

MAX(manufacturing_cost)

JOIN fact_manufacturing_cost fmc ON

	product_code	product	manufacturing_cost
•	A6121110208	AQ HOME Allin1 Gen 2	263.4207
	A2118150101	AQ Master wired x1 Ms	0.8654

dp.product_code = fmc.product_code WHERE manufacturing_cost = (SELECT

FROM fact_manufacturing_cost) OR manufacturing_cost = (SELECT MIN(manufacturing_cost)

FROM fact_manufacturing_cost);



6. Top 5 Customers with High Pre-Invoice Discount in 2021 (Indian Market)

 This query joins the fact_pre_invoice_deductions and dim_customer tables, calculates the average discount for each customer, and filters by the Indian market.

SELECT TOP 5 customer_code, customer, AVG(pre_invoice_discount_pct) AS average_discount_percentage

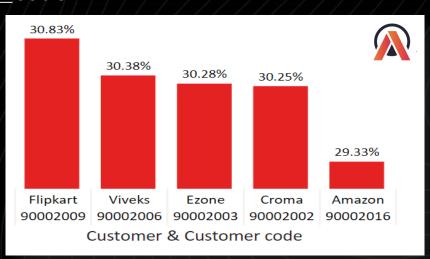
FROM fact_pre_invoice_deductions fpd

JOIN dim_customer dc ON fpd.customer_code = dc.customer_code

WHERE fpd.fiscal_year = 2021 AND dc.market = 'India'

GROUP BY customer_code, customer

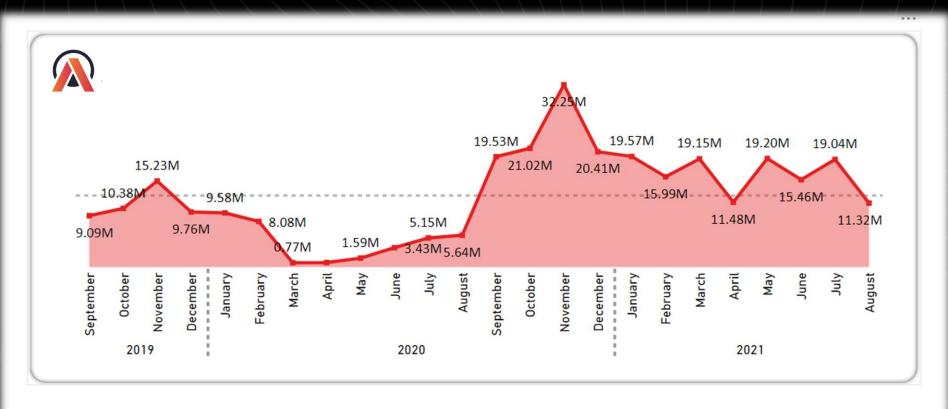
ORDER BY average_discount_percentage DESC;





7. Gross Sales Amount for "Atliq Exclusive" by Month

• In this query, I calculate the gross sales by multiplying the gross price by the sold quantity for each month. We also group the data by year and month.

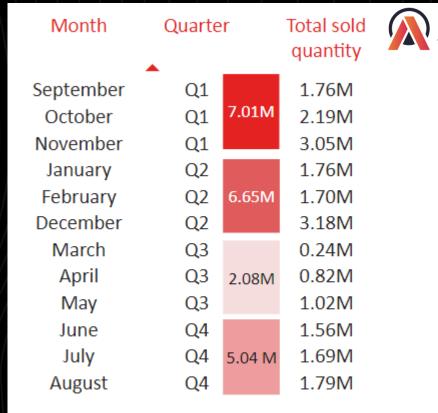


Gross sales amount report for Atlig Exclusive by month





 This query uses a CASE statement to assign months to quarters and calculates the total sold quantity for each quarter in 2020. It then sorts the results to find the quarter with the highest total amount sold.



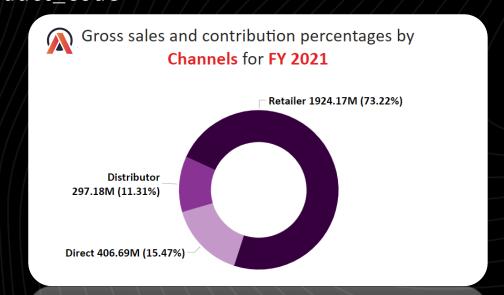
Total sold quantity in FY 2020 by Quarter



9. Channel with Highest Gross Sales in 2021

```
ROUND(SUM(gp.gross_price * fsm.sold_quantity), 2) AS gross_sales_mln,
     ROUND((SUM(gp.gross_price * fsm.sold_quantity) / (SELECT SUM(gross_price *
sold_quantity) FROM fact_sales_monthly WHERE fiscal_year = 2021)) * 100, 2) AS
percentage
FROM fact_sales_monthly fsm
JOIN dim customer dc ON fsm.customer code = dc.customer code
JOIN fact_gross_price gp ON fsm.product_code = gp.product_code
WHERE fsm.fiscal_year = 2021
GROUP BY channel
ORDER BY gross_sales_mln DESC
LIMIT 1;
```

SELECT channel,





10. Top 3 Products in Each Division with High Total Sold Quantity in 2021

I uses the RANK() window function to rank products by their total sold quantities in each division. It selects the top 3 products from each division.

Top 3 highest-selling products by Division for FY 2021





