



AD-HOC INSIGHTS

Consumer Goods Domain

Presented by **Pooja Sureka**

OBJECTIVE

- Atliq Hardware, a global computer hardware manufacturer based in India, is enhancing its data analytics team to support informed decision-making.
- The Director of Data Analytics, Tony Sharma, plans to conduct an SQL challenge to assess both technical skills and soft skills of potential junior data analysts.
- The company has identified 10 specific ad hoc requests, reflecting real-world challenges, for candidates to provide valuable insights.
- Acknowledging the critical role of data insights, Atliq Hardware is strategically focusing on strengthening its data analytics capabilities.
- As part of the initiative, the organization aims to bring in junior data analysts who can effectively address practical challenges in the field.

REQUEST 1

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

OUTPUT

	market
▶	India
	Indonesia
	Japan
	Pakistan
	Philippines
	South Korea
	Australia
	Newzealand
	Bangladesh
	China



INSIGHTS

- Atliq Exclusive has expanded its reach into eight primary markets across the APAC region.

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

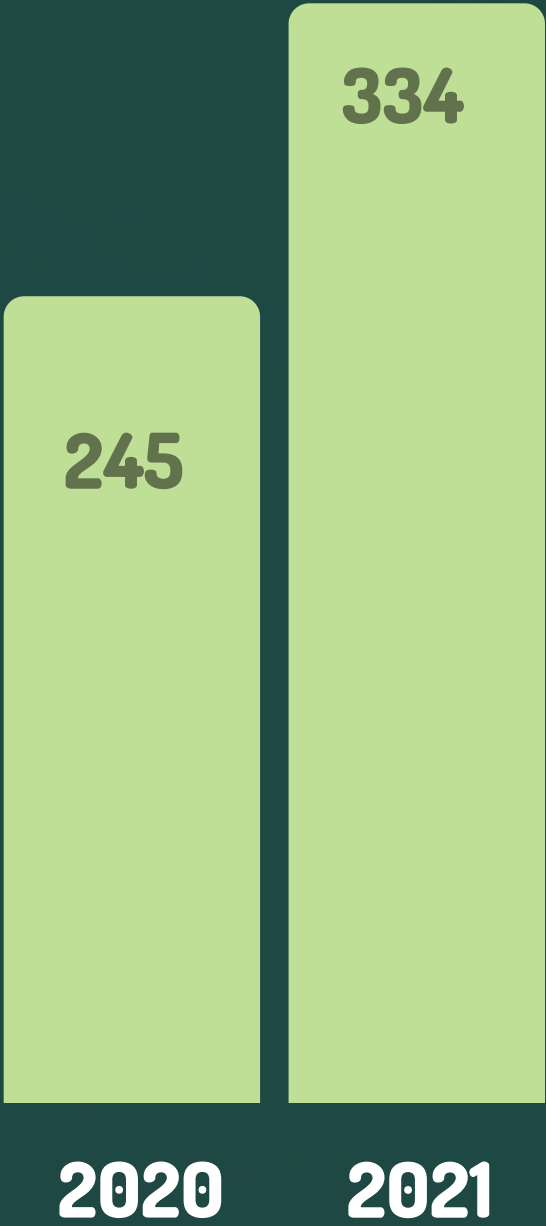
OUTPUT

	product_2020	product_2021	PERCENT_CHANGE
▶	245	334	36.33



INSIGHTS

During the fiscal year 2020, our product count stood at 245, and by FY 2021, it had risen to 334, indicating a notable growth of 36%.



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

OUTPUT

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



INSIGHTS

- Atliq Hardware offers a comprehensive range of products in the Notebook, Peripherals, and Accessories segments.
- Recognizing the strategic imperative to diversify our product portfolio, we aim to expand into the desktop, networking, and storage markets.
- In response to this need, Atliq Hardware is positioned to introduce innovative Trending Products in these targeted markets.

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

OUTPUT

	segment	product_count_20	product_count_21	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



Segment	Product_count_20	Product_count_21	Diffetence
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

- In 2021, Atliq Hardware placed a primary emphasis on extending its footprint in the accessories market, unveiling a total of 34 new accessory products.

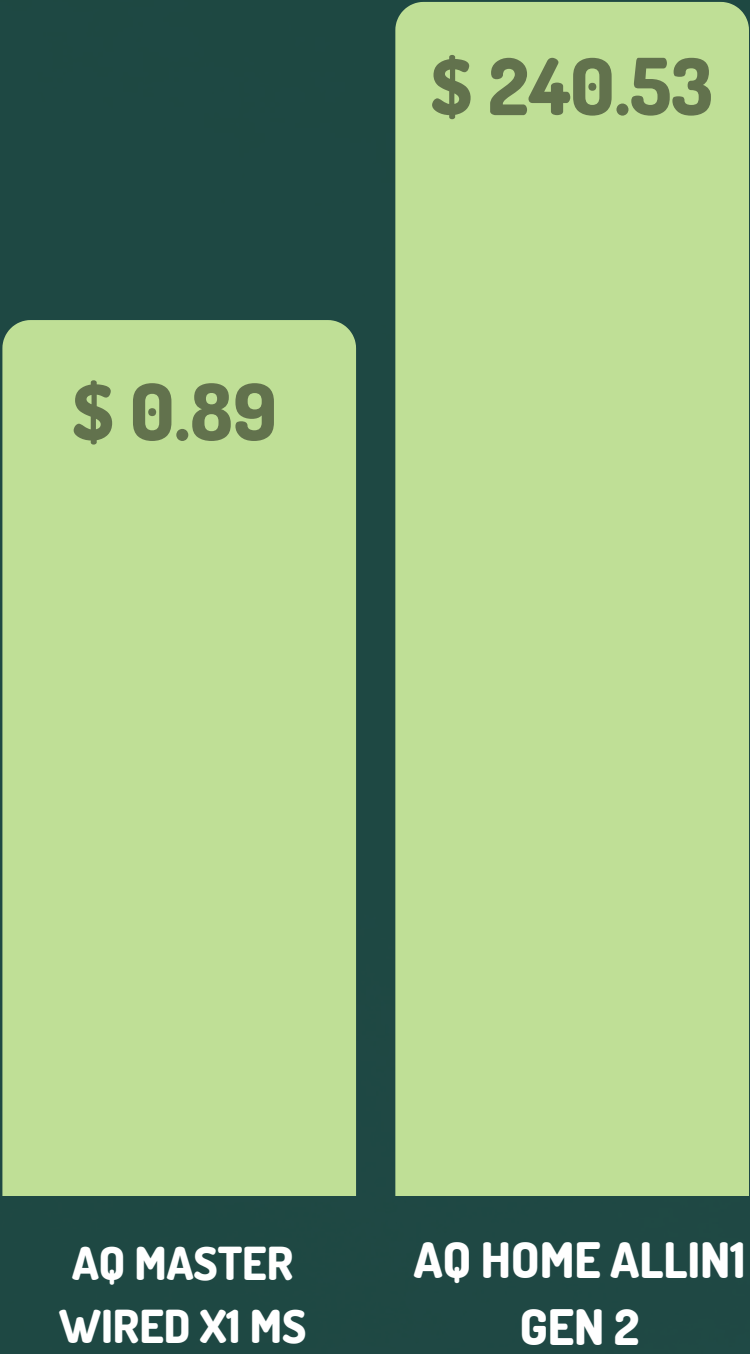
REQUEST 5

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

product_code
product
manufacturing_cost

OUTPUT

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



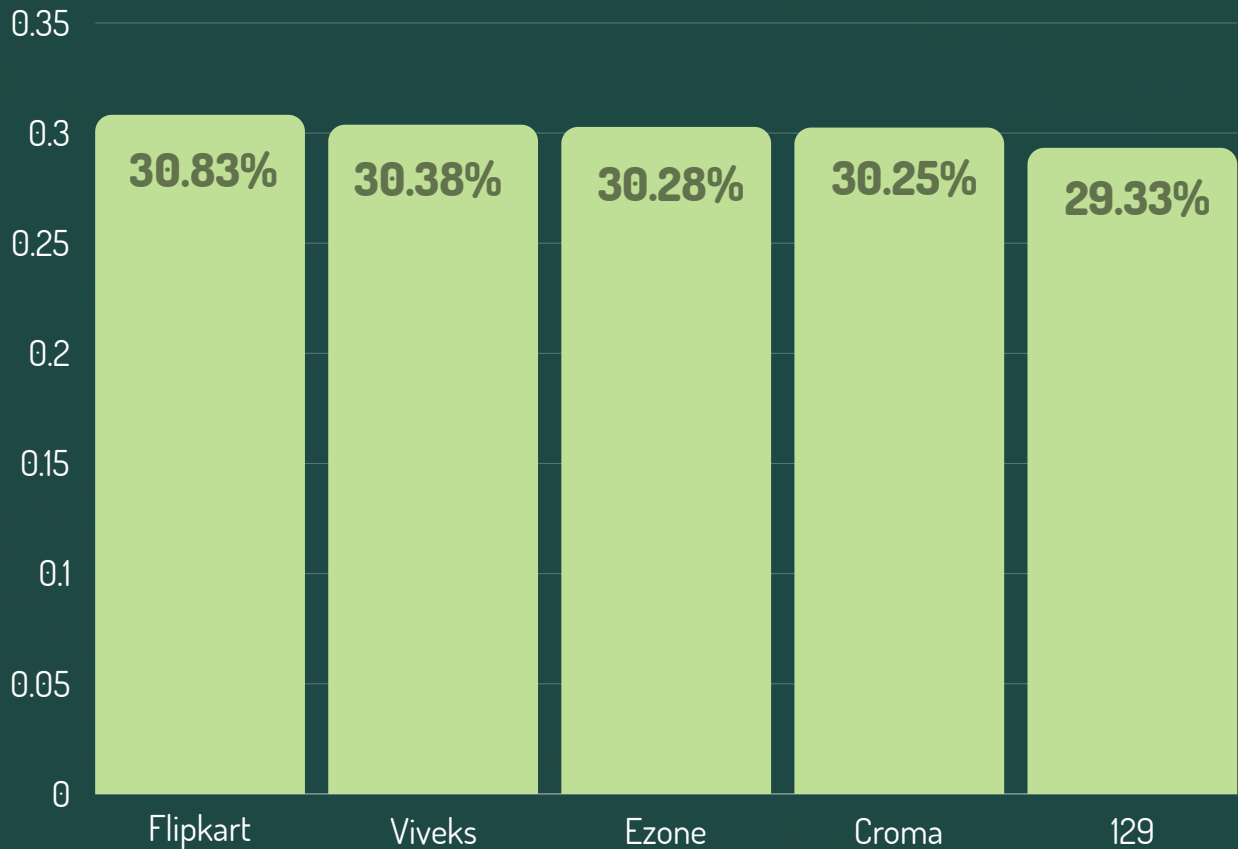
REQUEST 6

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

OUTPUT

	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

- Given that Flipkart maintains the status of being the most heavily discounted customer in the Indian market, boasting a pre-invoice discount percentage of 30.83%, Atliq applied approximately equivalent pre-invoice discount percentages to each of its top 5 clients in 2021.

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

OUTPUT



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

INSIGHTS

- Atliq Exclusive achieved its peak sales in November 2020, with March 2020 marking the lowest point in sales.
- The decrease in sales from March to August can be linked to the repercussions of COVID-19.
- Nevertheless, there is a positive outlook as sales have steadily recovered post-pandemic, demonstrating resilience and surpassing the levels observed in 2020.

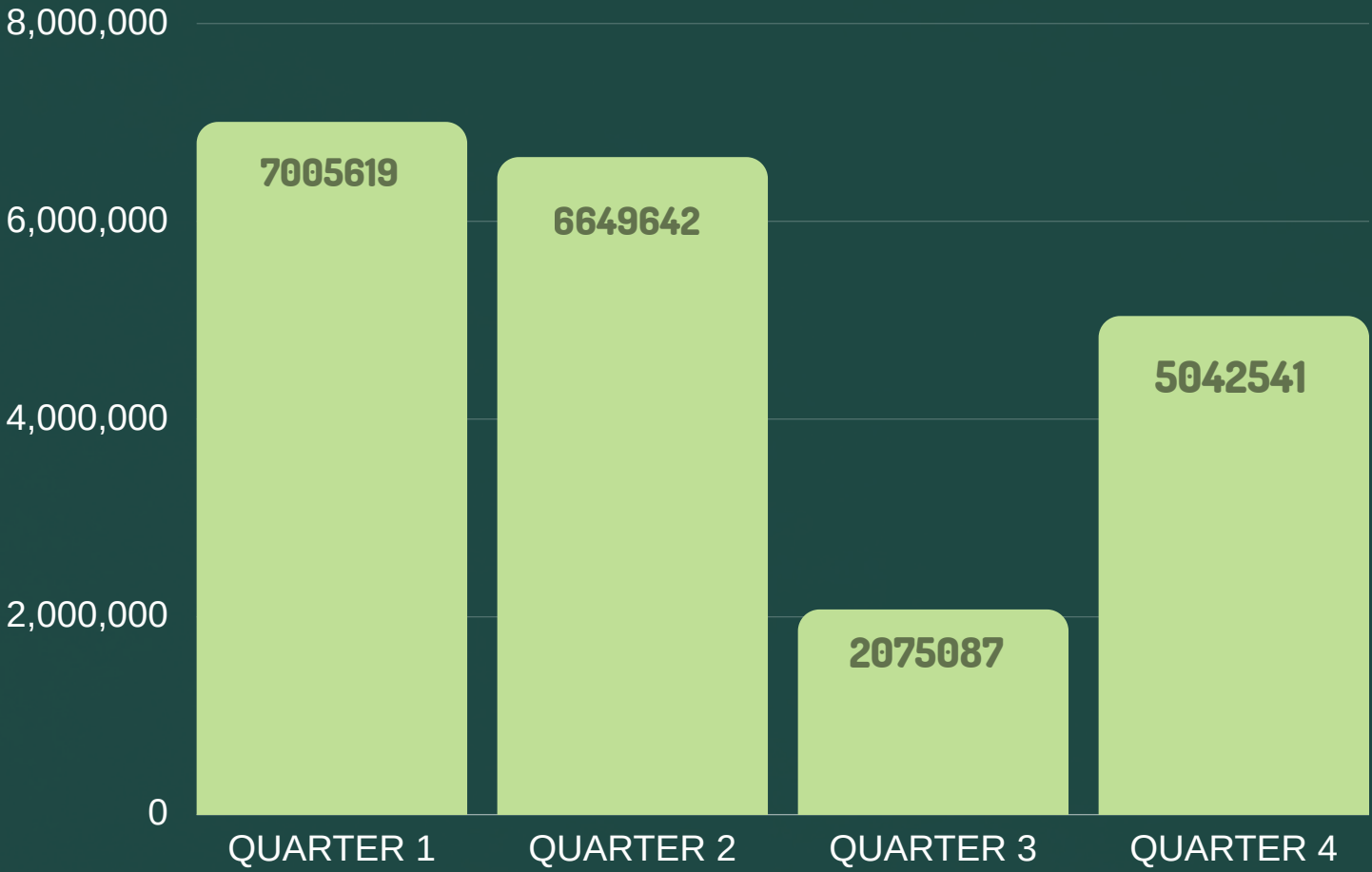
REQUEST 8

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

OUTPUT

	QN	total_sold_quantity
▶	QUARTER 1	7005619
	QUARTER 2	6649642
	QUARTER 3	2075087
	QUARTER 4	5042541



INSIGHTS

- During the third quarter of fiscal year 2020 (March, April, and May), characterized by the peak of COVID-19 and extensive lockdowns affecting businesses, the quantity sold sharply declined to 2.1 million.
- Interestingly, there was a notable surge in demand for computer accessories during this period, likely driven by a large number of students either beginning or continuing their coursework online.
- This increased demand probably played a role in the early rebound observed in the fourth quarter

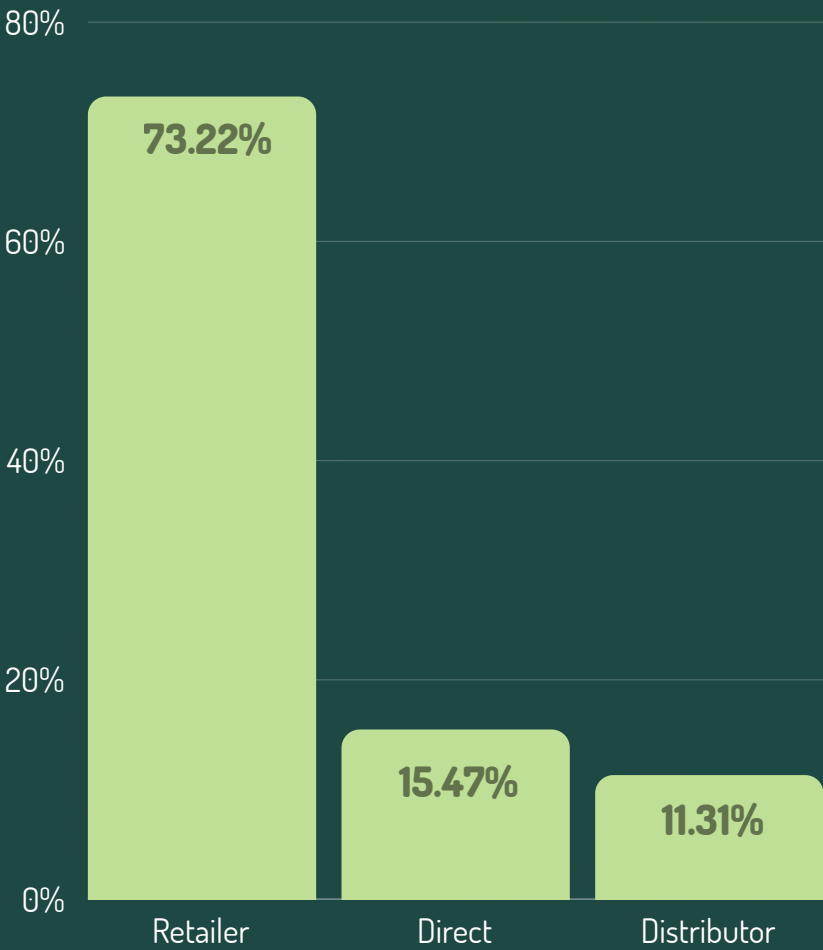
REQUEST 9

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

OUTPUT

	channel	gross_sales_mln	percentage
▶	Retailer	1924170397.91	73.22
	Direct	406686873.90	15.47
	Distributor	297175879.72	11.31



INSIGHTS

- The majority of Atliq's overall sales, a significant 73%, were conducted through retailers, forming a substantial portion of its total sales.
- In contrast, sales through direct and distributor channels accounted for a comparatively smaller share of the total revenue.

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

OUTPUT



	division	product_code	product	total_sold_quantity	rn
▶	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

INSIGHTS

- The three best-selling product in the N & S division were pen drivers.
- The three best-selling product in the P & A division were pen mouse.
- The three best-selling product in the PC division were laptops.

RECOMMENDATIONS FOR ENHANCING ATLIQ'S SALES PERFORMANCE

- Ensure top-notch customer service to foster lasting relationships.
- Deploy a robust marketing strategy across diverse channels.
- Cultivate a distinctive brand identity and convey your unique value proposition.
- Allocate resources to train the sales team for enhanced effectiveness.
- Provide competitive pricing and appealing promotional offers.
- Expand and improve product offerings to align with market demands.
- Regularly collect customer feedback for continuous improvement.

THANK YOU

For Watching!

 Pooja Sureka