



Atliq Hardware

# Consumer Good

## AD-HOC Analysis

SQL Project Challenge



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Function : Executive Management

## **Problem Statement:**

The management of Atliq, a top hardware manufacturer in our nation, wants to grow its data analytics team so that it may have access to enough information to make swift and informed choices.

## **Approach:**

- To respond to the ad-hoc request, query the data using SQL.
- Use Powerbi and excel to create the visualisations, and then provide the management with key findings insights.

## Request 1 :

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



The image shows a screenshot of a database query result. It features a table with a single column labeled 'market'. The table contains eight rows, each representing a country. The first row is 'India', which is preceded by a right-pointing triangle icon. The subsequent rows are 'Indonesia', 'Japan', 'Philippines', 'South Korea', 'Australia', 'Newzealand', and 'Bangladesh'. The rows for 'Indonesia', 'Philippines', 'Australia', and 'Bangladesh' are highlighted with a light blue background.

market
▶ India
Indonesia
Japan
Philippines
South Korea
Australia
Newzealand
Bangladesh

The countries where the Atliq Exclusive operates in the APAC region include India, Indonesia, Japan, the Philippines, South Korea, Australia, New Zealand, and Bangladesh.

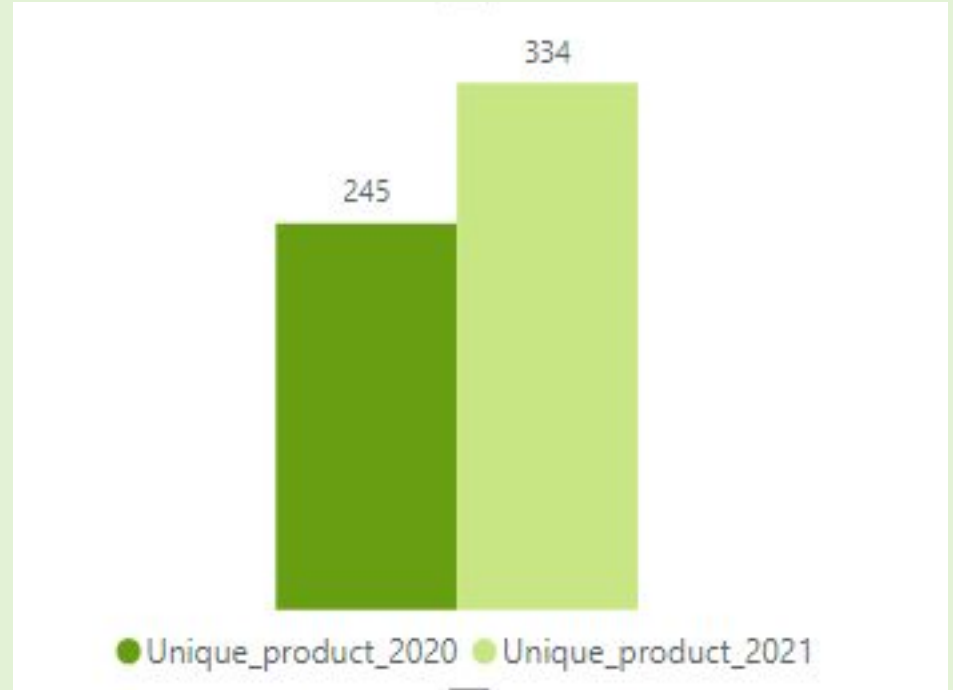
## Request 2 :

What is the percentage of unique product increase in 2021 vs. 2020?

	unique_product_2021	unique_product_2020	precentage_Chg
►	334	245	36.33

# Insights

The unique product that increases in 2021 are 36.33% that means 89 new products were added.



### Request 3 :

Provide a report with all the unique product counts for each segment and sort them in descending order of product counts.

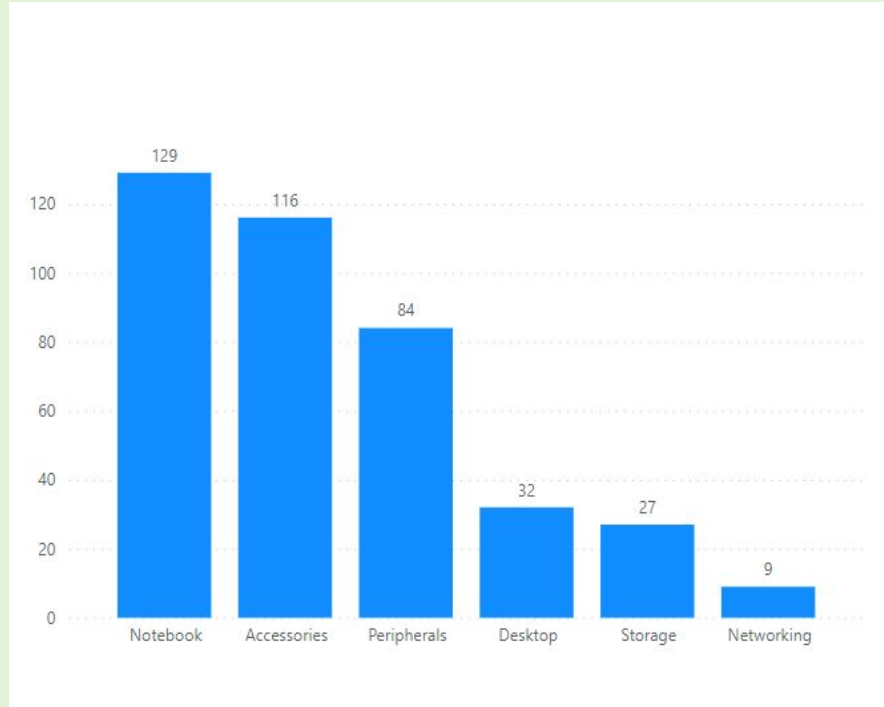
	product_counts	segment
►	129	Notebook
	116	Accessories
	84	Peripherals
	32	Desktop
	27	Storage
	9	Networking

# Insights

The segments we have in the atliq hardware are notebook, accessories, peripheral, desktop, storage, networking.

In that the top 3 segments are

- Notebook
- Accessories
- Peripheral



## Request 4 :

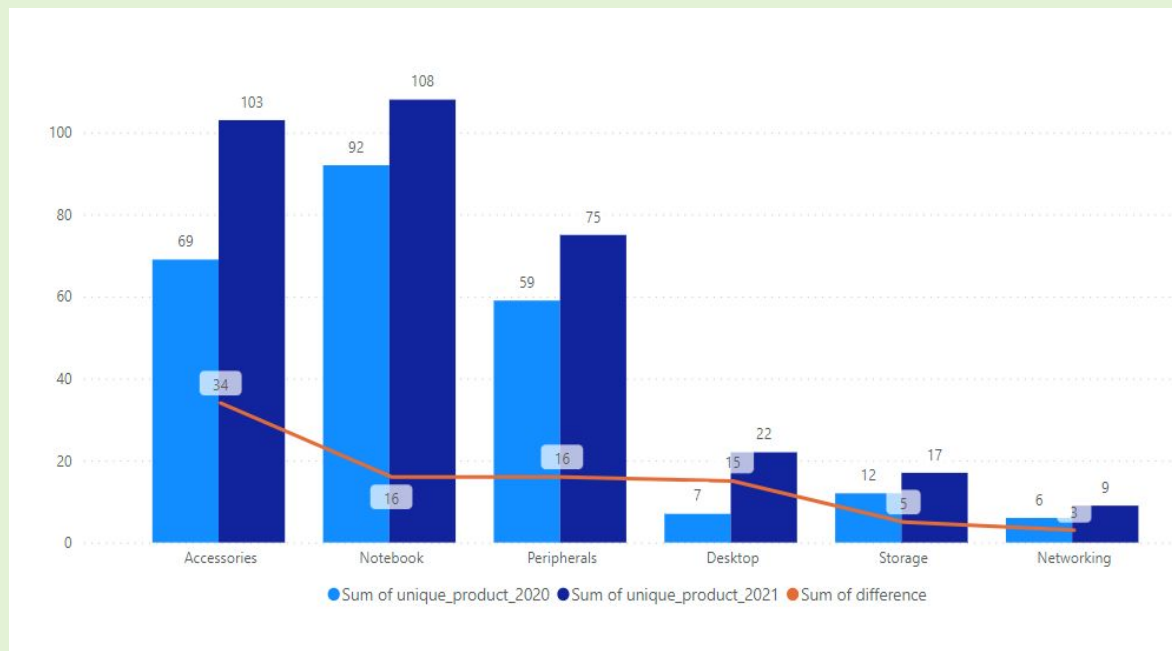
Which segment had the most increase in unique products in 2021 vs 2020?

	segment	unique_product_2021	unique_product_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

By analysing Request 2, we already knew that 89 new products were added to the Atliq hardware line in 2021, with Accessories having the highest unique product growth and Networking having the least.



## Request 5 :

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

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

# Insights

In that visualisation, it was evident that AQ HOME Allin1 Gen2 had the highest production costs while AQ Master wired x1 Ms had the lowest.



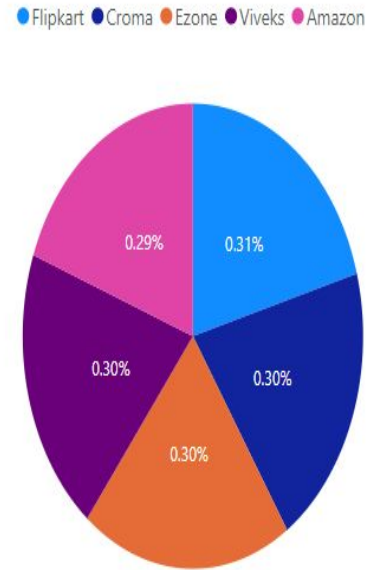
## Request 6 :

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.

	customer	customer_code	Avg_pct
►	Flipkart	90002009	0.31%
	Viveks	90002006	0.30%
	Croma	90002002	0.30%
	Ezone	90002003	0.30%
	Amazon	90002016	0.29%

# Insights

Flipkart, Viveks, Croma, Ezone, and Amazon are the top 5 clients that, on average, earned a significant pre-invoice discount percentage for the fiscal year 2021 in the Indian market.



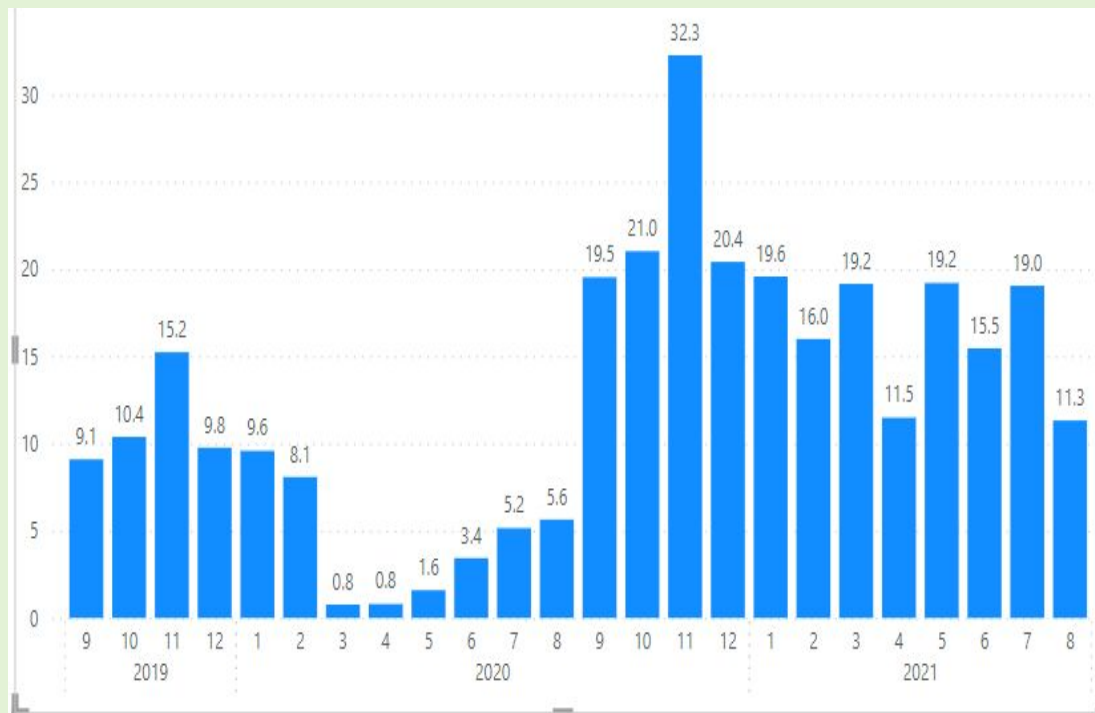
## Request 7 :

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.

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

# Insights

1. March and April in 2020 were the least productive months.
2. November 2020 had the best overall performance.



## Request 8 :

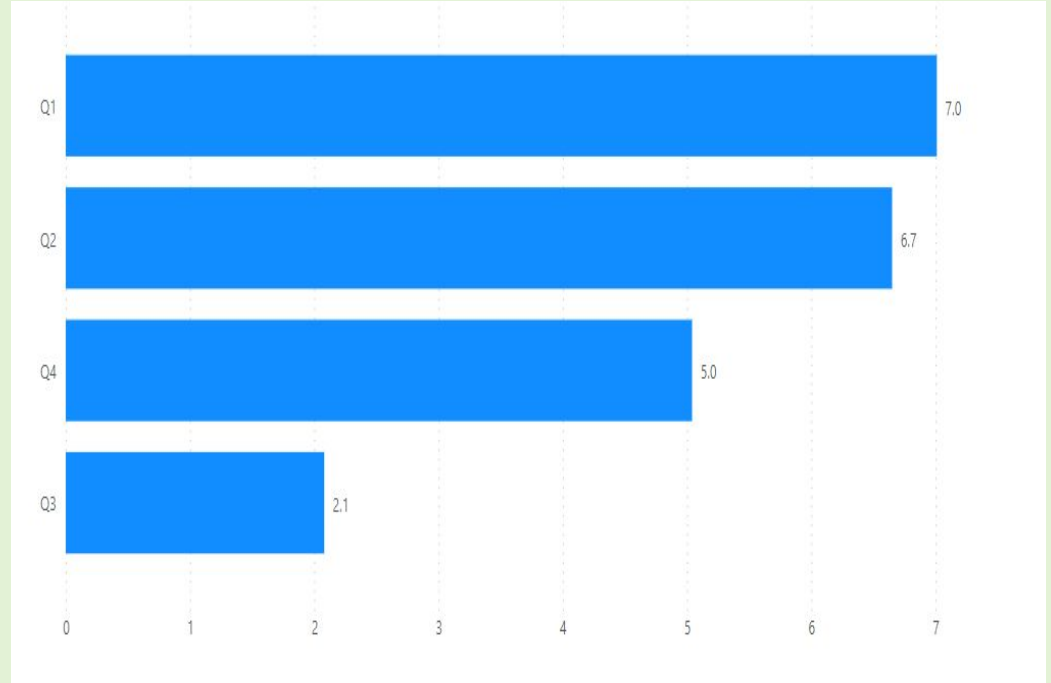
In which quarter of 2020, got the maximum total\_sold\_quantity? The final output contains these fields sorted by the total\_sold\_quantity

	Sold_quantity_mln	quarter
	7.01	Q1
	6.65	Q2
	5.04	Q4
	2.08	Q3



# Insights

The highest total sold quantity was recorded in Quarter One (Sep, Oct, Nov) of 2020, while the lowest total sold quantity was recorded in Quarter Three.



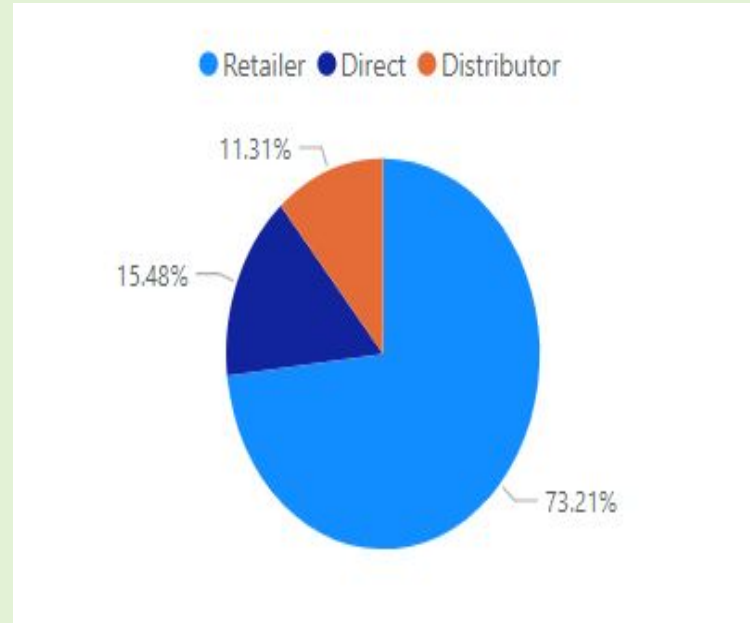
## Request 9 :

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

channel	gross_sales_mln	percentage
Retailer	1924.17	73.22
Direct	406.69	15.48
Distributor	297.18	11.31

# Insights

The retail channel contributed 73.21% of the total increase in gross sales for the fiscal year 2021.



# Request

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:

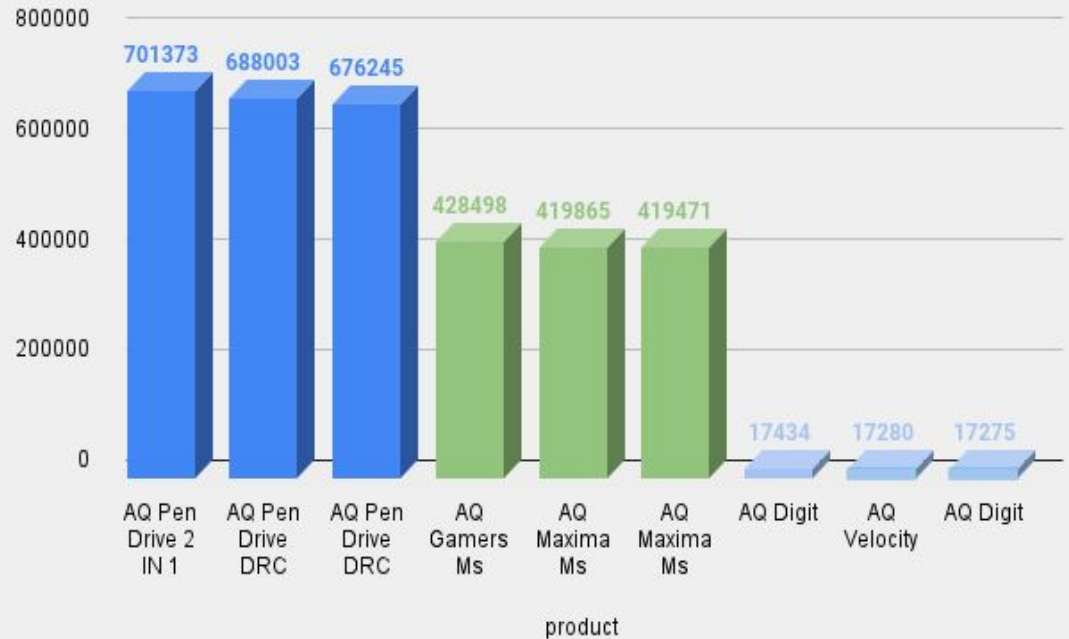
Get the Top 3 products in each division that have a high total\_sold\_quantity in the fiscal\_year 2021?

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

# Insights

In the fiscal year 2021, the top three items in each division with the highest total sales quantity are:

- 1) N&S - [AQ Pen Driver 2 IN 1, AQ Pen Driver DTC]
- 2) P&A - [AQ Maxima MS, AQ Gamers MS]
- 3) Computer: [AQ Digit, AQ Velocity, AQ Digit]



I appreciate you taking the time to review my work, and your comments are appreciated.

**THANK YOU :)**