AtliQ Hardware

CONSUMER GOODS AD-HOC INSIGHTS

Brief Intro

They are one of the leading computer hardware producers in India and well expanded in other countries too.

-- They manufacture computer hardware components where-in they are grouped into different divisions, further sub-divided into segment & categories

-- Mainly for reference purpose are divided into 3 divisions:

i) Networking and Storage devices (N & S)

E.g.: networking devices like Wi-Fi extenders

E.g.: storage devices like solid state drives, flash drives etc.

ii) Peripherals and Accessories (P & A)

E.g.: Peripherals like Motherboards, hard drives etc.

E.g.: Accessories like Mouse, keyboards etc.

iii) Personal computers

E.g.: Business laptop, gaming laptop

- Situation: The management noticed that they do not get enough insights to make quick and smart data-informed decisions.
- Task: There is a list of 10 ad-hoc requests from the management for which they need immediate action and insights
- Action:
- -- Using MySQL database, run queries to answer the ad hoc requests
- -- Visualize the result grid from the queries
- -- Present it to the stakeholders in a meaningful way

AtliQ's product lines

Networking & Storage:

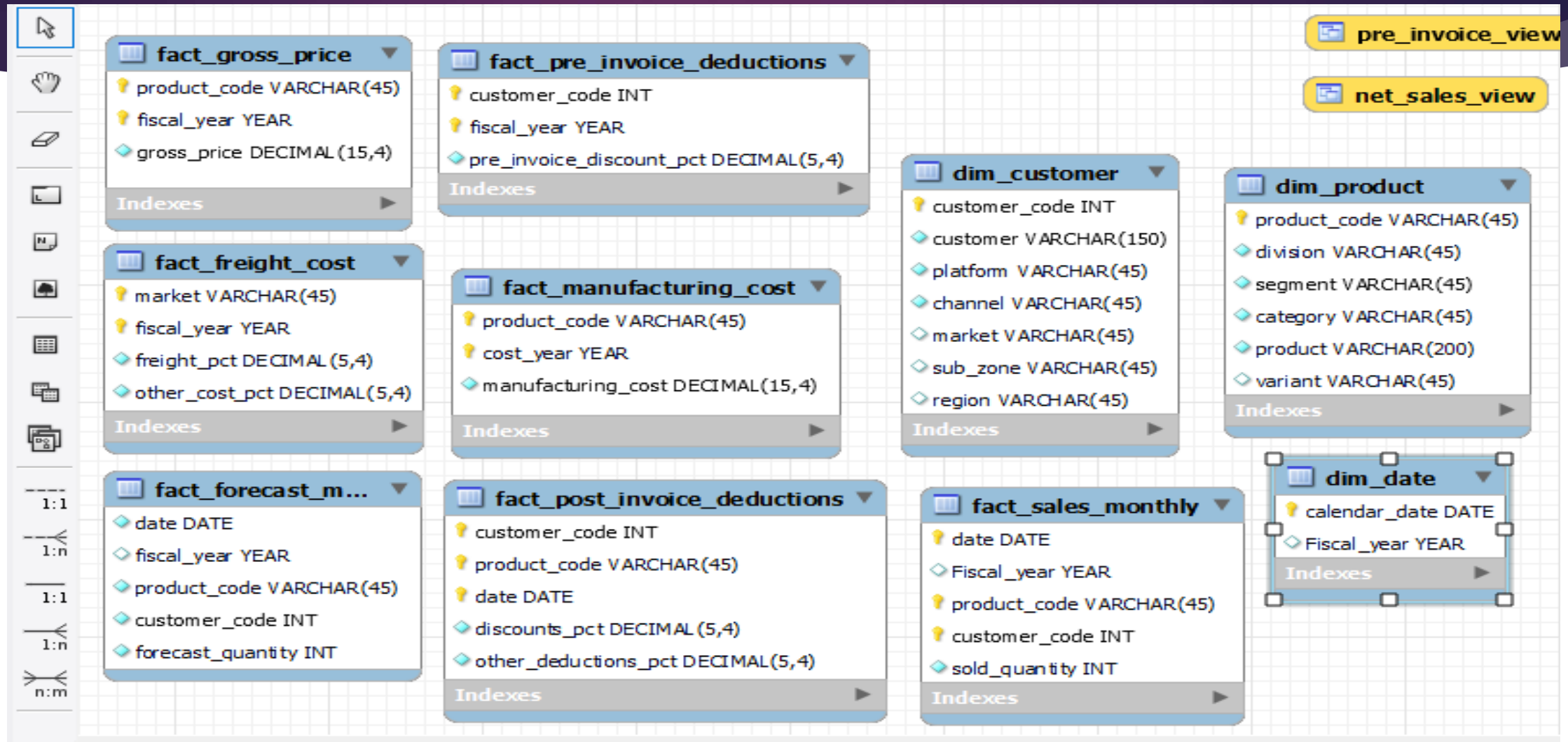
1. Networking: Wi-Fi extender
2. Storage: USB Flash drive, Solid state drive

Peripherals & Accessories:

1. Peripherals: Internal hard disk drive, graphic card, processors, motherboard
2. Accessories: Mouse, keyboard

Personal computers: i) Notebook ii) desktop

1. Notebook: personal/business/gaming laptops
2. Desktop: personal laptop and business desktop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customer_code INT
fiscal_year YEAR
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Indexes
pre_invoice_view
net_sales_view
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platform VARCHAR(45)
channel VARCHAR(45)
market VARCHAR(45)
sub_zone VARCHAR(45)
region VARCHAR(45)
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Fiscal_year YEAR
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fiscal_year YEAR
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Fiscal_year YEAR
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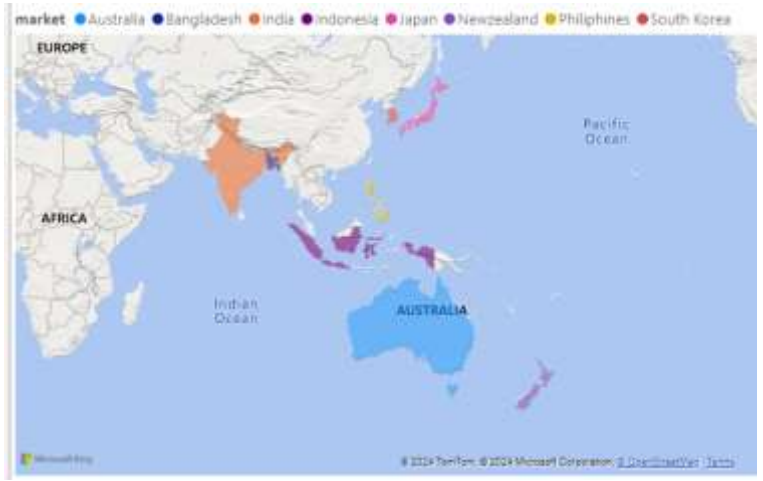
customer_code INT
sold_quantity INT
Indexes
1:1
1:n
1:1
1:n
n:m

AD-HOC REQUESTS FROM THE MANAGEMENT FOR QUICK INSIGHTS

Result Grid | Filter Rows: | Edit: | Export/Import:

customer_code	customer	platform	channel	market	sub_zone	region
70007198	Atliq Exclusive	Brick & Mortar	Direct	South Korea	ROA	APAC
70008169	Atliq Exclusive	Brick & Mortar	Direct	Australia	ANZ	APAC
70009133	Atliq Exclusive	Brick & Mortar	Direct	Newzealand	ANZ	APAC
70010047	Atliq Exclusive	Brick & Mortar	Direct	Bangladesh	ROA	APAC
90002011	Atliq Exclusive	Brick & Mortar	Retailer	India	India	APAC
NULL	NULL	NULL	NULL	NULL	NULL	NULL

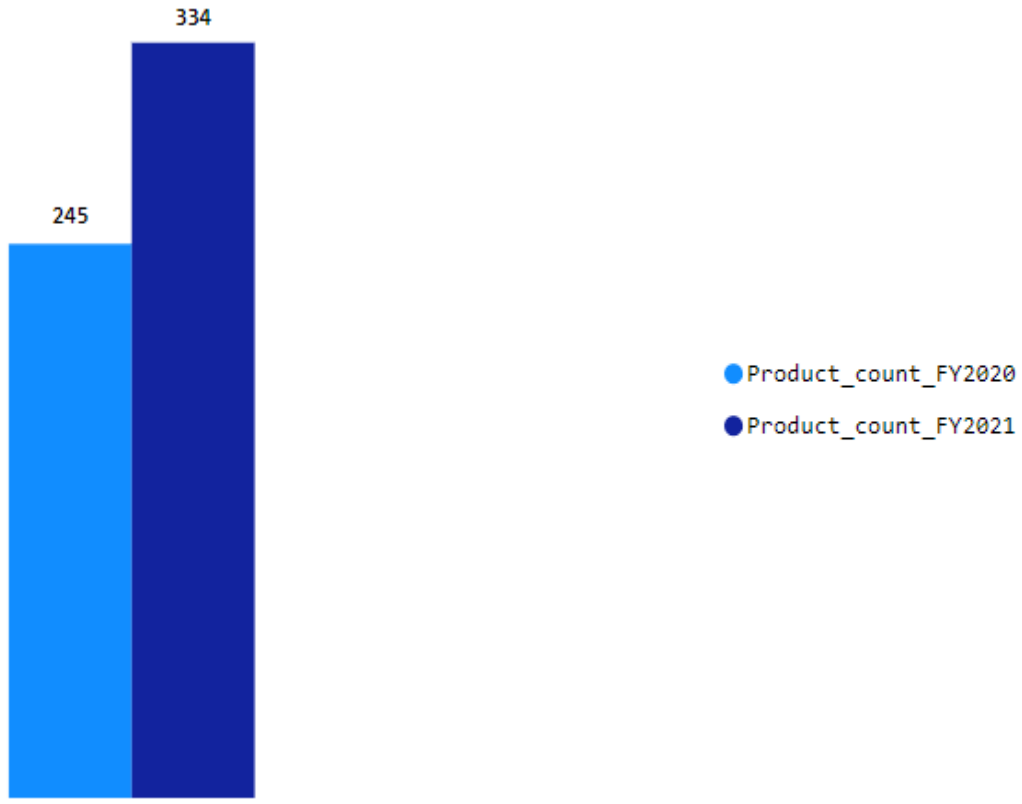
India



Request #1:
Provide the list of markets in which, the customer "AtliQ Exclusive" operates its business in the APAC region

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

	unique_products_FY20	unique_products_FY21	percent_change
▶	245	334	36.33 %



Request #2:

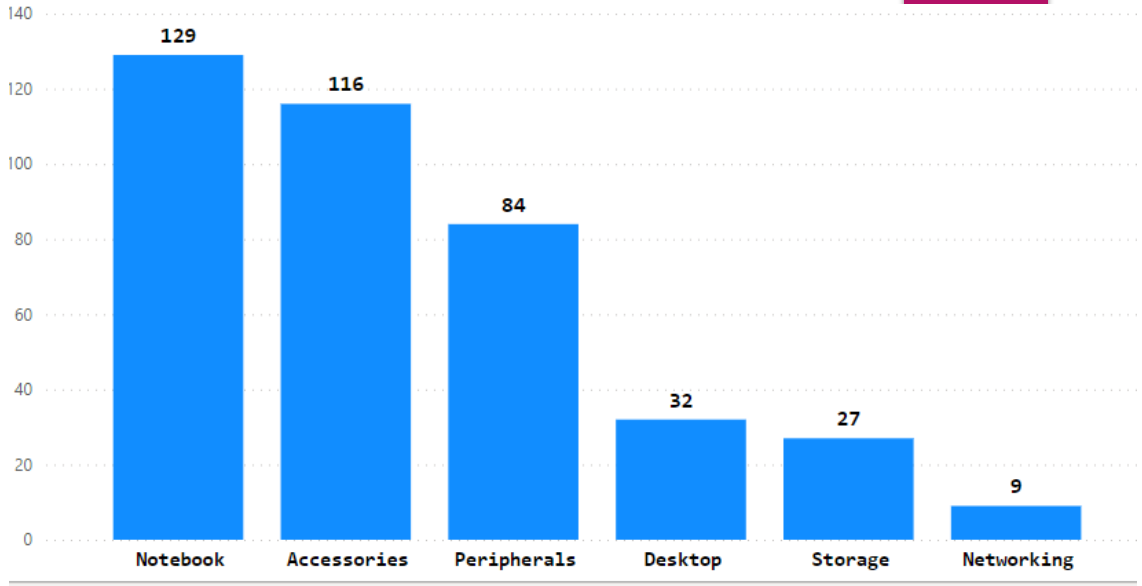
What is the percentage of unique product increase in 2021 vs. 2020? The final output contains these fields:

i) unique_products_2020
ii) unique_products_2021
iii) Percentage_change

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

product_code	product	segment	unique_products
A4118110101	AQ Aspiron	Notebook	129
A2118150101	AQ Master wired x1 Ms	Accessories	116
A0118150101	AQ Dracula HDD – 3.5 Inch SATA 6 Gb/s 5400 RPM 256 MB Cache	Peripherals	84
A5820110101	AQ BZ Allin1	Desktop	32
A6218160101	AQ Digit SSD	Storage	27
A7118160101	AQ Wi Power Dx1	Networking	9

Result 107



Request #3:

Provide a report with all the unique product counts for each segment & sort them in descending order of product count. The o/p shall contain these 2 fields:

i) segment ii) product count

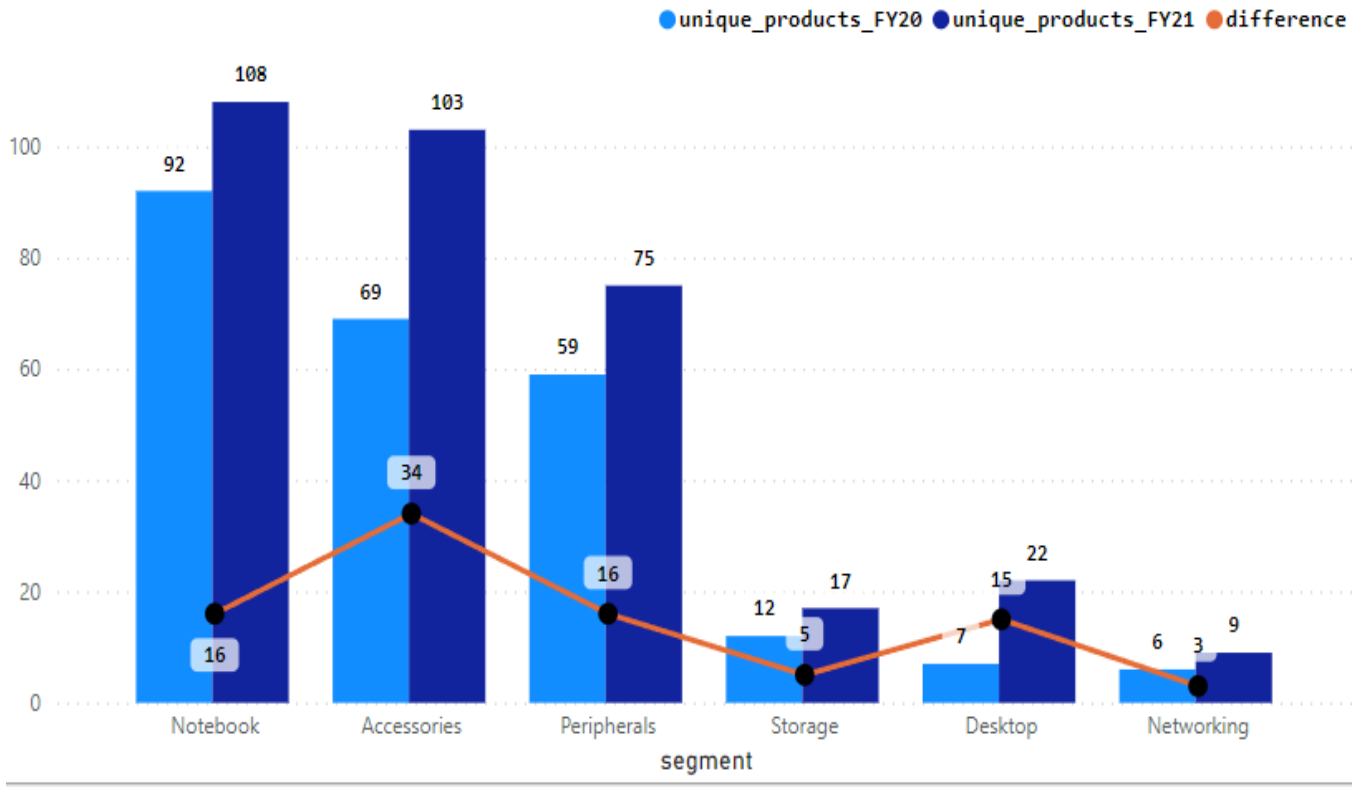
Request #4:

Which segment had the most increase in unique products in 2021 vs 2020?
The final output contains these fields:
i) segment ii) product_count_FY20 iii) product_count_FY21 & iv) %_difference

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

segment	unique_products_FY20	unique_products_FY21	difference	percentage_diff
Desktop	7	22	15	214.29
Networking	6	9	3	50.00
Accessories	69	103	34	49.28
Storage	12	17	5	41.67
Peripherals	59	75	16	27.12
Notebook	92	108	16	17.39

Result 108



Result Grid | Filter Rows: | Export: | Wrap Cell Content:

product_code	product	Mfg_costs
A2118150101	AQ Master wired x1 Ms	0.87
A6121110208	AQ HOME Allin1 Gen 2	263.42

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AQ HOME Allin1 Gen 2
263.42
Mfg_costs

AQ Master wired x1 Ms
0.87
Mfg_costs
```

Request #5:

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

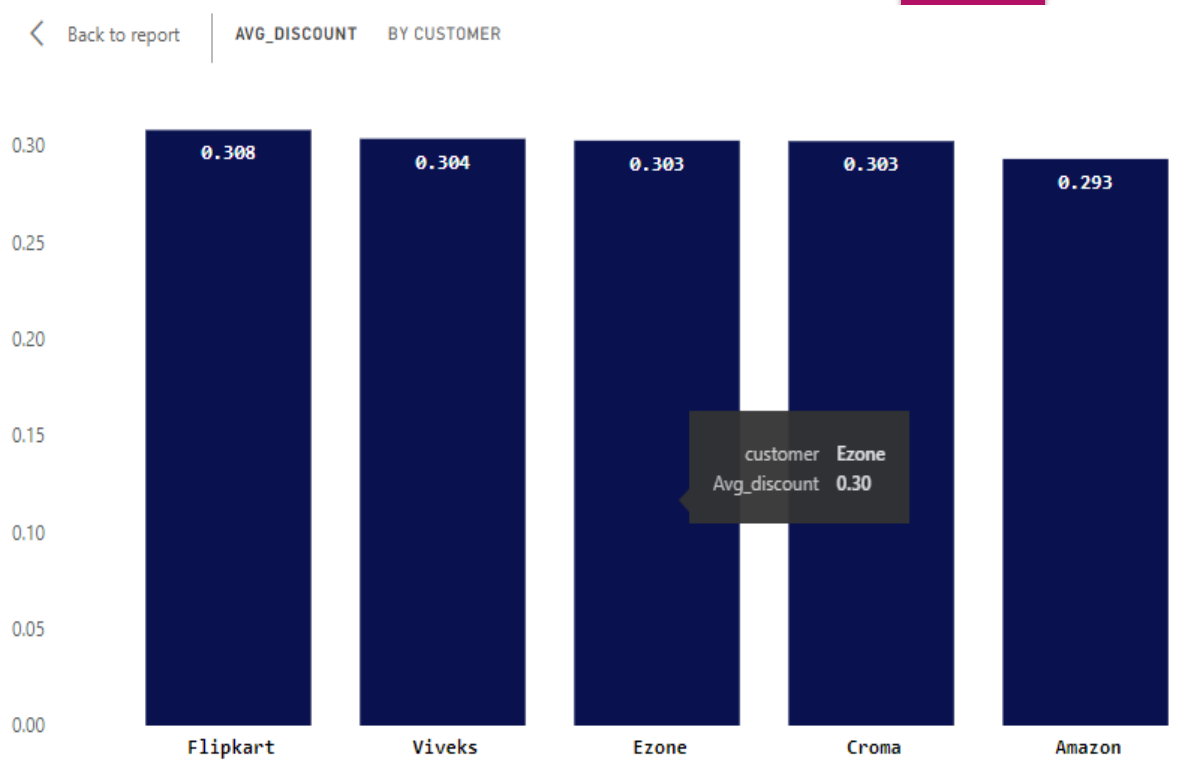
i) product code

ii) product

iii) manufacturing cost

Result Grid | Filter Rows:

customer_code	customer	Avg_discount
90002009	Flipkart	0.3083
90002006	Viveks	0.3038
90002003	Ezone	0.3028
90002002	Croma	0.3025
90002016	Amazon	0.2933



Request #6:

Generate a report which contains the top 5 customers who received an average high pre-invoice discount % for the fiscal year 2021 & for India market.

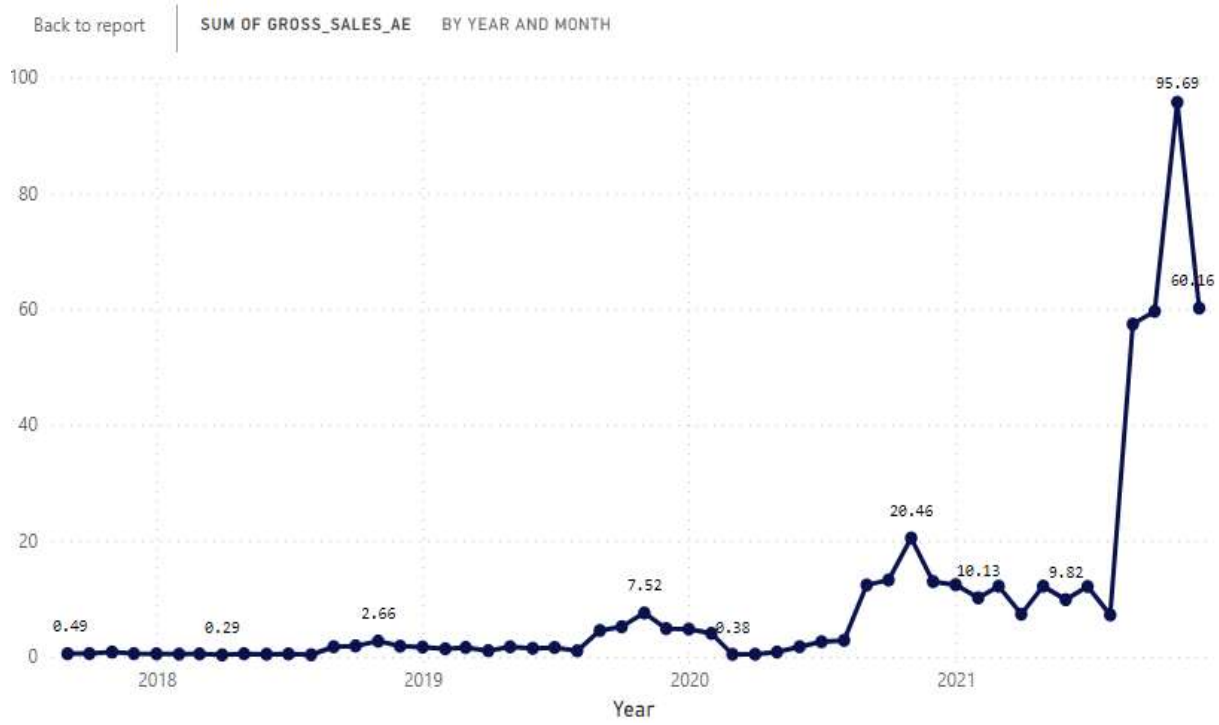
The o/p shall have these fields:

i) customer ii) customer code iii) average discount %

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

fiscal_year	date	fiscal_month	customer	Gross_sales_AE
2022	2021-12-01	April	Atliq Exclusive	60.16 M
2022	2021-11-01	March	Atliq Exclusive	95.69 M
2022	2021-10-01	February	Atliq Exclusive	59.61 M
2022	2021-09-01	January	Atliq Exclusive	57.40 M
2021	2021-03-01	July	Atliq Exclusive	12.14 M
2021	2021-02-01	June	Atliq Exclusive	10.13 M

Result 112



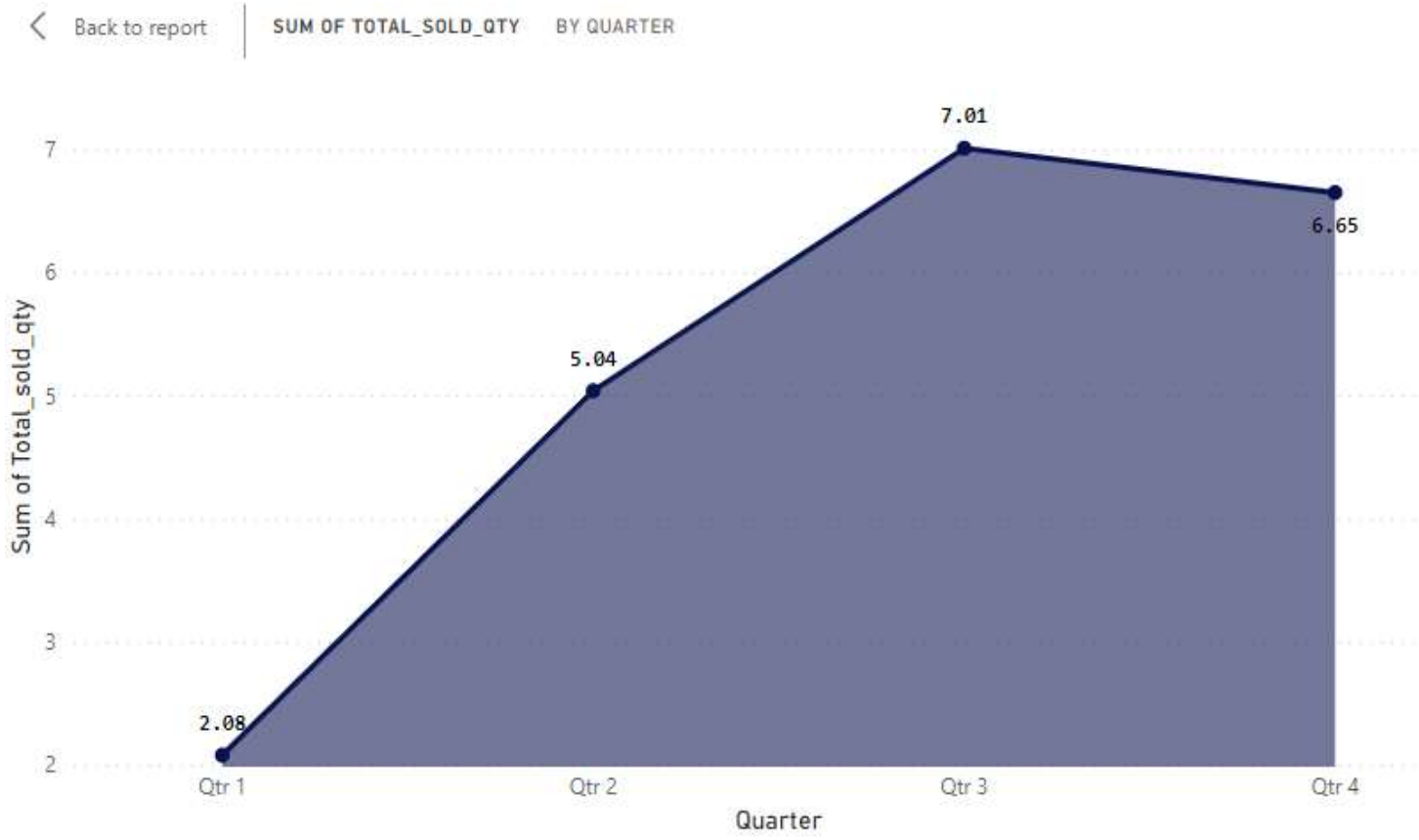
Request #7:
Generate a monthly Gross Sales report for the customer 'AtliQ Exclusive'.
The report shall have these fields:
i) Month ii) Year iii) Gross Sales amount

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:
i) Quarter
ii) Total sold quantity

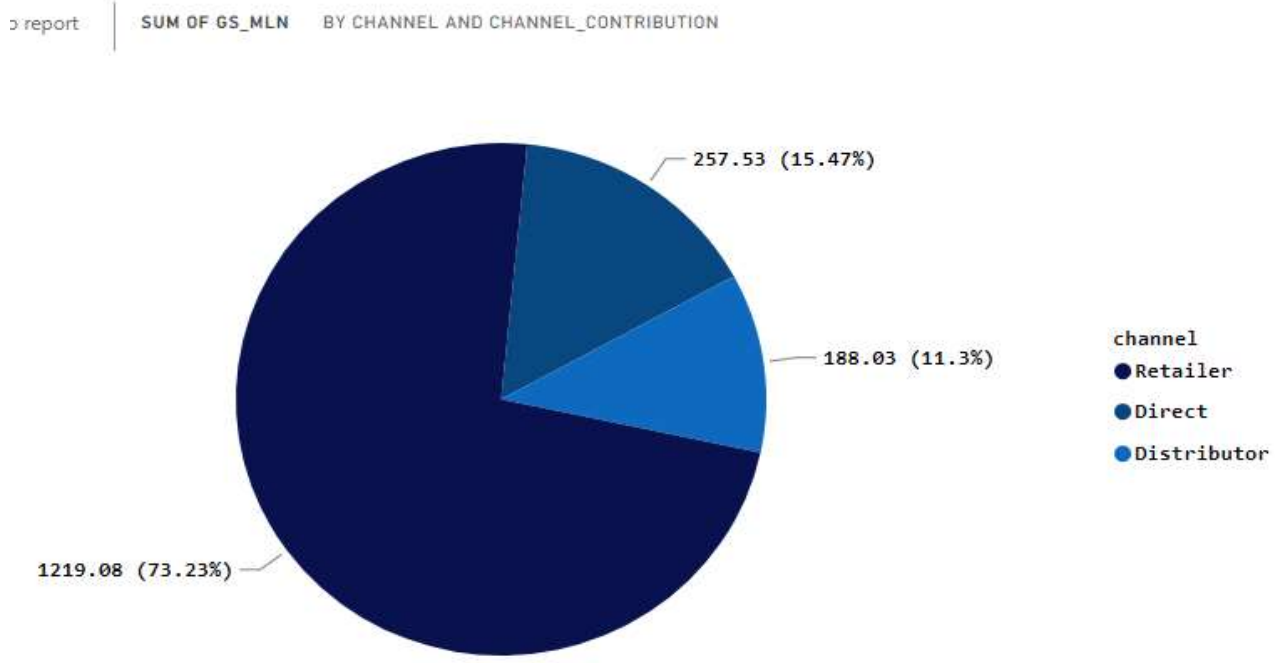
Result Grid | Filter Rows: | Export: | Wrap Cell Content:

date	Fiscal_Quarters	customer_code	product_code	Total_sold_qty
2019-12-01	Quarter-2	70002018	A0118150101	6.65 M
2019-09-01	Quarter-1	70002017	A0118150101	7.01 M
2020-06-01	Quarter-4	70002017	A0118150101	5.04 M
2020-03-01	Quarter-3	70002017	A0118150101	2.08 M



Request #9:

Which channel helped to bring more gross sales in the fiscal year 2021 & the percentage of contribution?
The final output contains these fields:
i) Channel ii) Gross Sales % in million



Result Grid | Filter Rows:

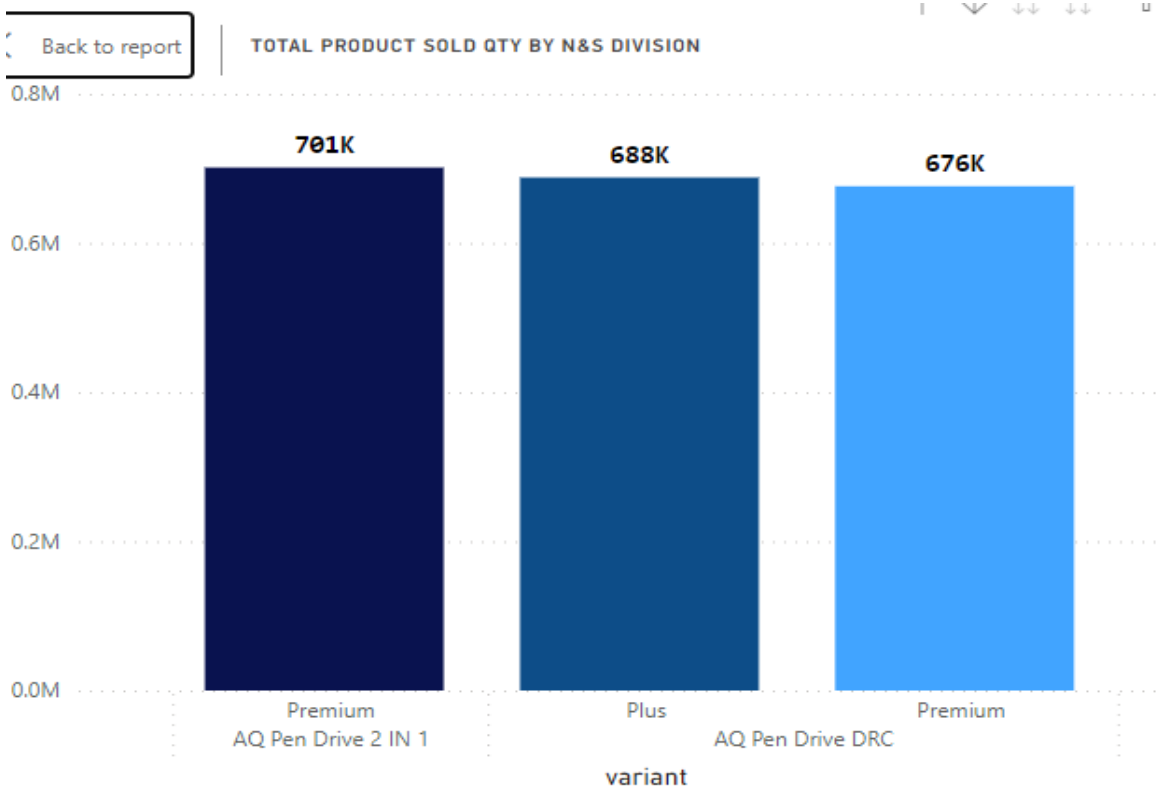
channel	GS_mln	Channel_contribution
Retailer	1219.08	73.23 %
Direct	257.53	15.47 %
Distributor	188.03	11.30 %

Request #10:

Get the Top 3 products in each division that have highest total sold quantity in the fiscal year 2021?

The final output contains these fields:

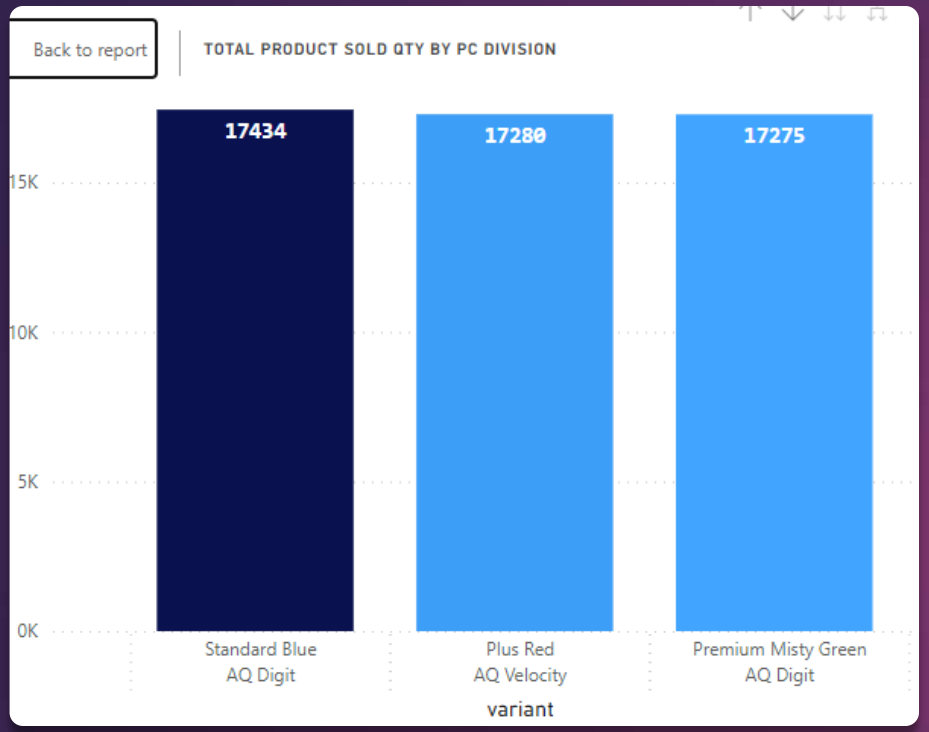
i) Division ii) Product code iii) Product iv) Total Sold Qty v) Rank Order



Result Grid | Filter Rows: | Export: | Wrap Cell Content:

division	product_code	product	variant	Total_Sold_Qty	Rank_order
N & S	A6720160103	AQ Pen Drive 2 IN 1	Premium	701373	1
N & S	A6818160202	AQ Pen Drive DRC	Plus	688003	2
N & S	A6819160203	AQ Pen Drive DRC	Premium	676245	3
P & A	A2319150302	AQ Gamers Ms	Standard 2	428498	428498
P & A	A2520150501	AQ Maxima Ms	Standard 1	419865	2
P & A	A2520150504	AQ Maxima Ms	Plus 2	419471	3

Result 116



Top-3 products for PC & P&A Divisions