AtliQ Hardware

CONSUMER GOODS AD-HOC INSIGHTS

Presented by Md Merajuddin

AGENDA

1. Background of Company
2. Getting familiar with data
3. Ad-Hoc request along with queried result, visualization and Insights

BACKGROUND OF COMPANY

Our Company

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

Background

The management noticed that they do not get enough insights to make quick and smart data-informed decisions. They want to expand their data analytics team by adding several junior data analysts. Tony Sharma, their data analytics director wanted to hire someone who is good at both tech and soft skills. Hence, he decided to conduct a SQL challenge which will help him understand both the skills.

Task

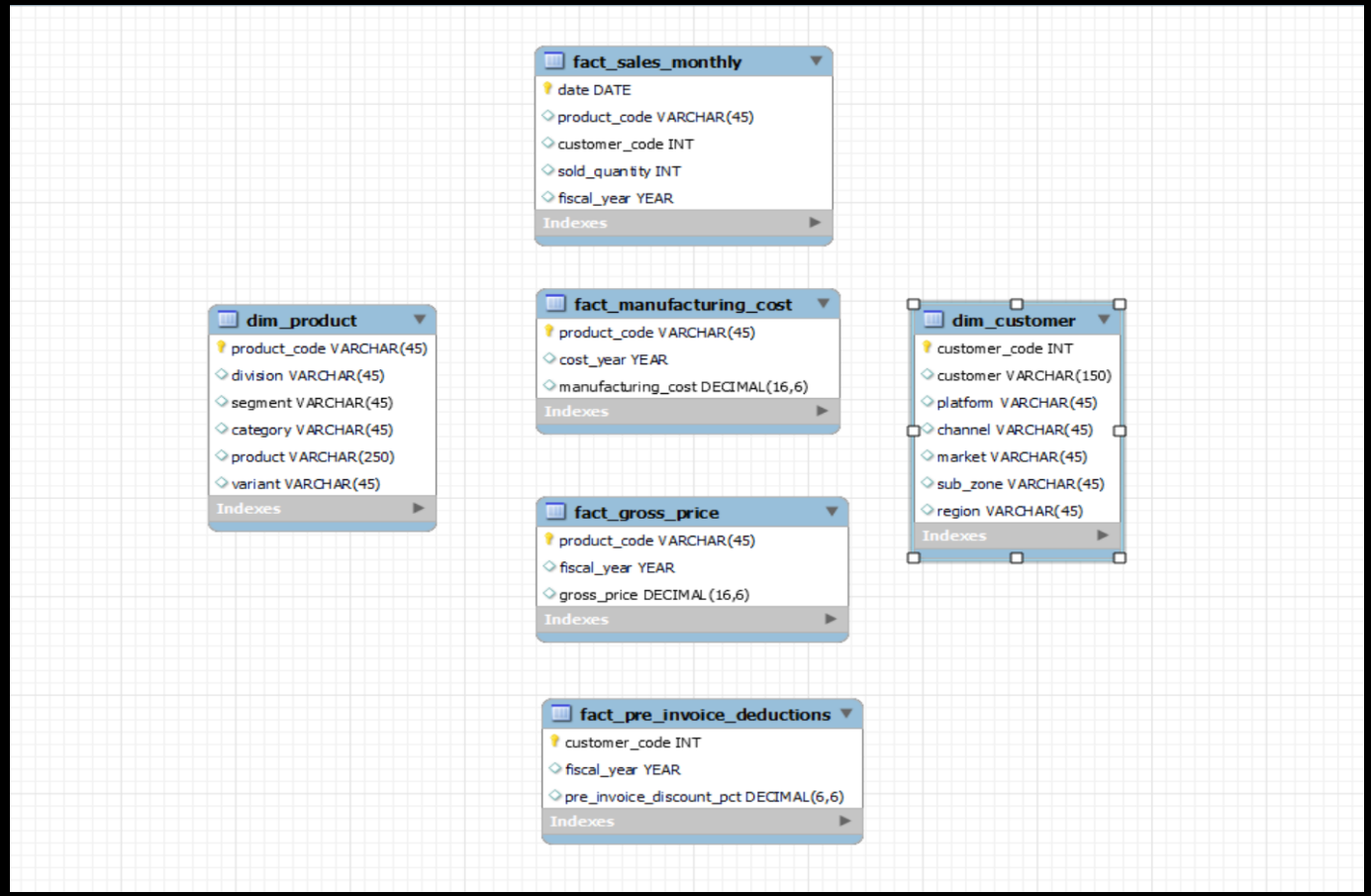
There are 10 Ad-Hoc requests for which the company need insights.

Solution

Run a SQL query to answer these requested questions and convert them into visualization to present it to top level company management.

GETTING FAMILIAR WITH DATA

Data consists of sales data for FY 2020 and 2021, along with other dimension tables such as dim_customer, dim_product, fact_gross_price, fact_manufacturing_cost, fact_sales_monthly, fact_pre_invoice_deductions.



Ad-Hoc request along with queried result, visualization and Insights

REQUEST 1:

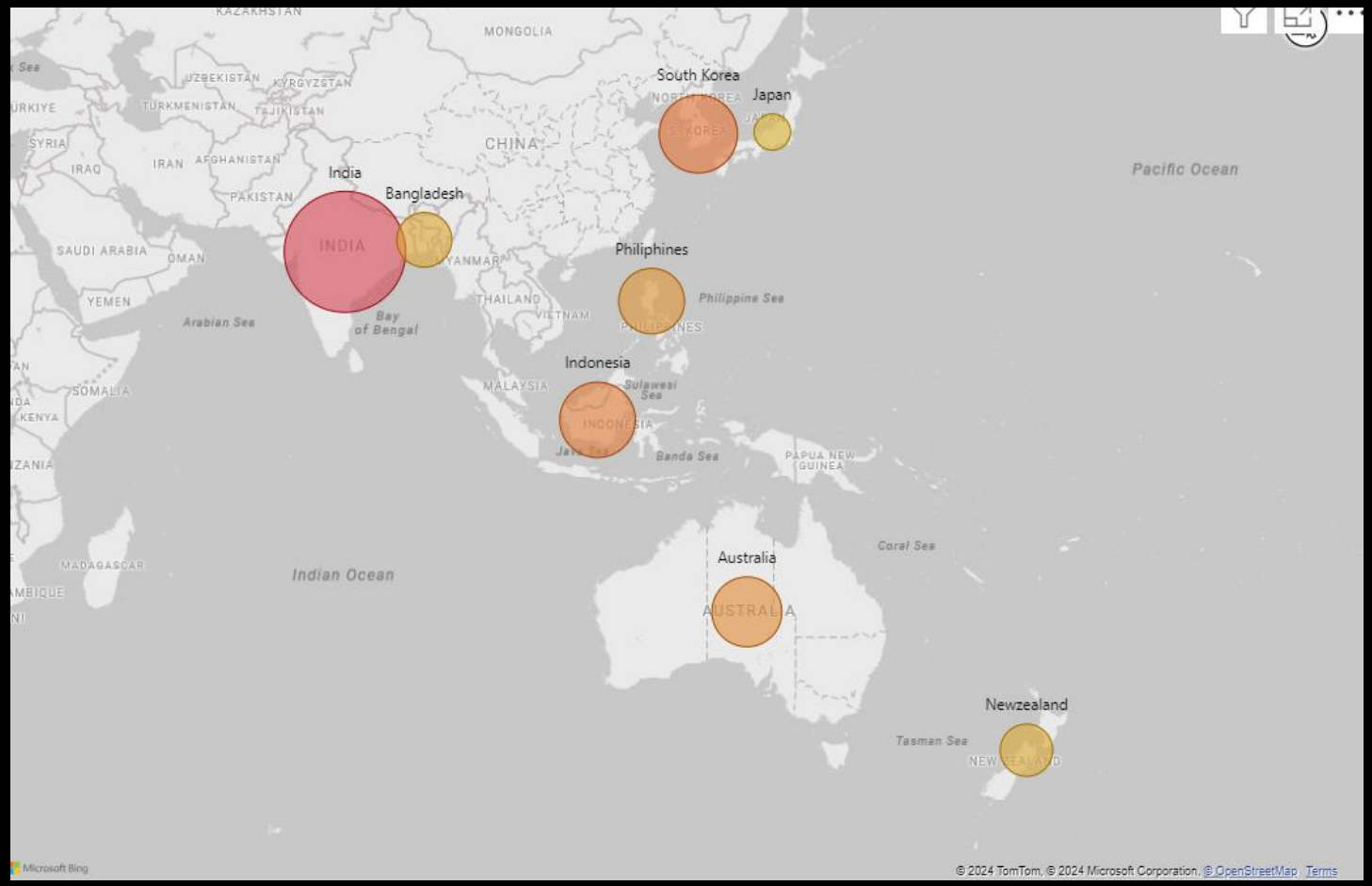
Provide the list of markets in which customer "Atliq Exclusive" operates its business in the APAC region.

OUTPUT

market
India
Indonesia
Japan
Philiphines
South Korea
Australia
Newzealand
Bangladesh

INSIGHTS

In the APAC region, our customer "Atliq Exclusive" has established its presence in 8 major markets out of which India is leading followed by South Korea, Indonesia and others.



REQUEST 2:

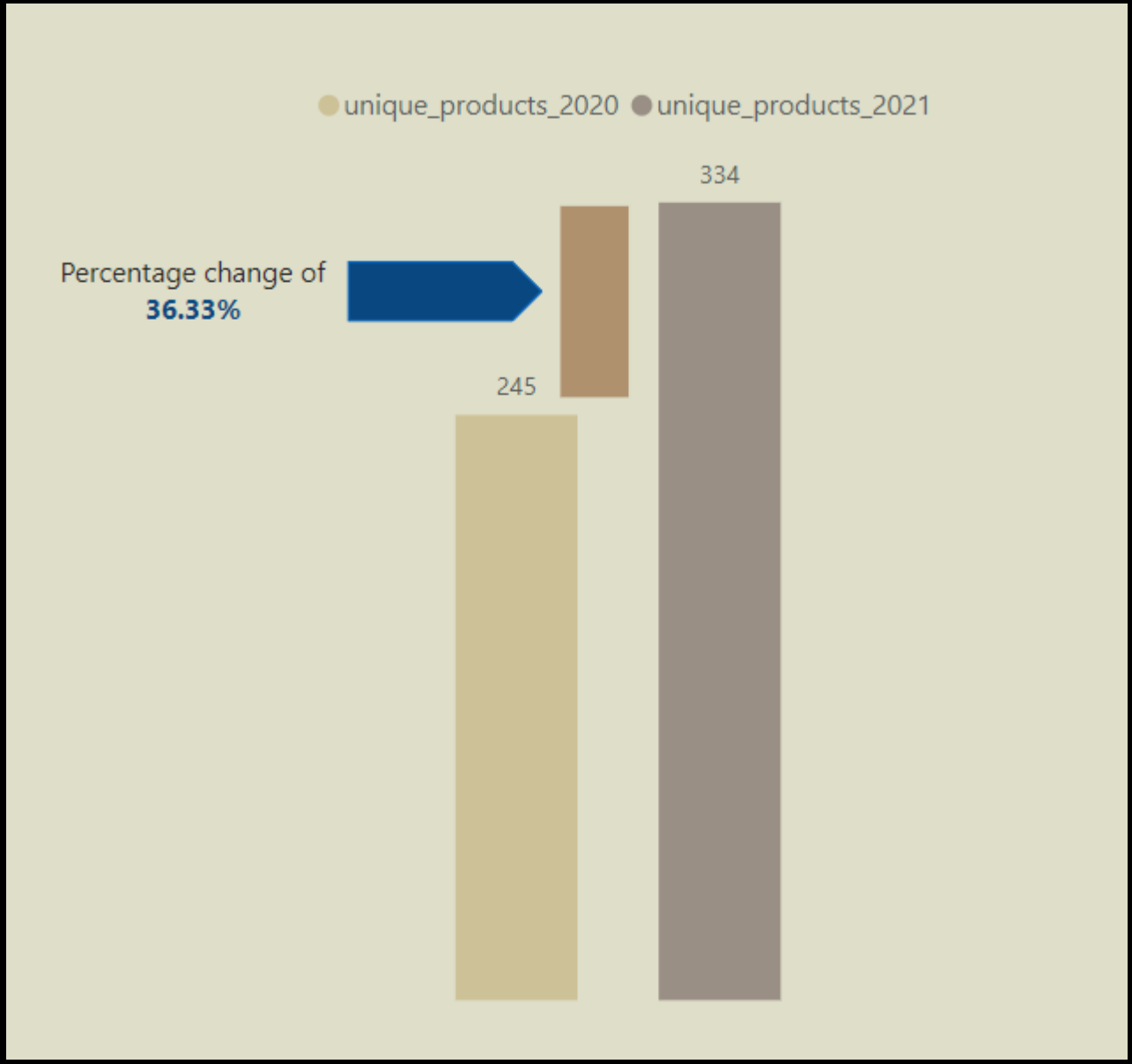
What is the percentage of unique product increase in 2021 vs. 2020?

OUTPUT

unique_products_2020	unique_products_2021	percent_chng
245	334	36.33%

INSIGHTS

In FY 2020 we had 245 unique products while in FY 2021 we have 334 unique products an increment of 36.33%.



REQUEST 3:

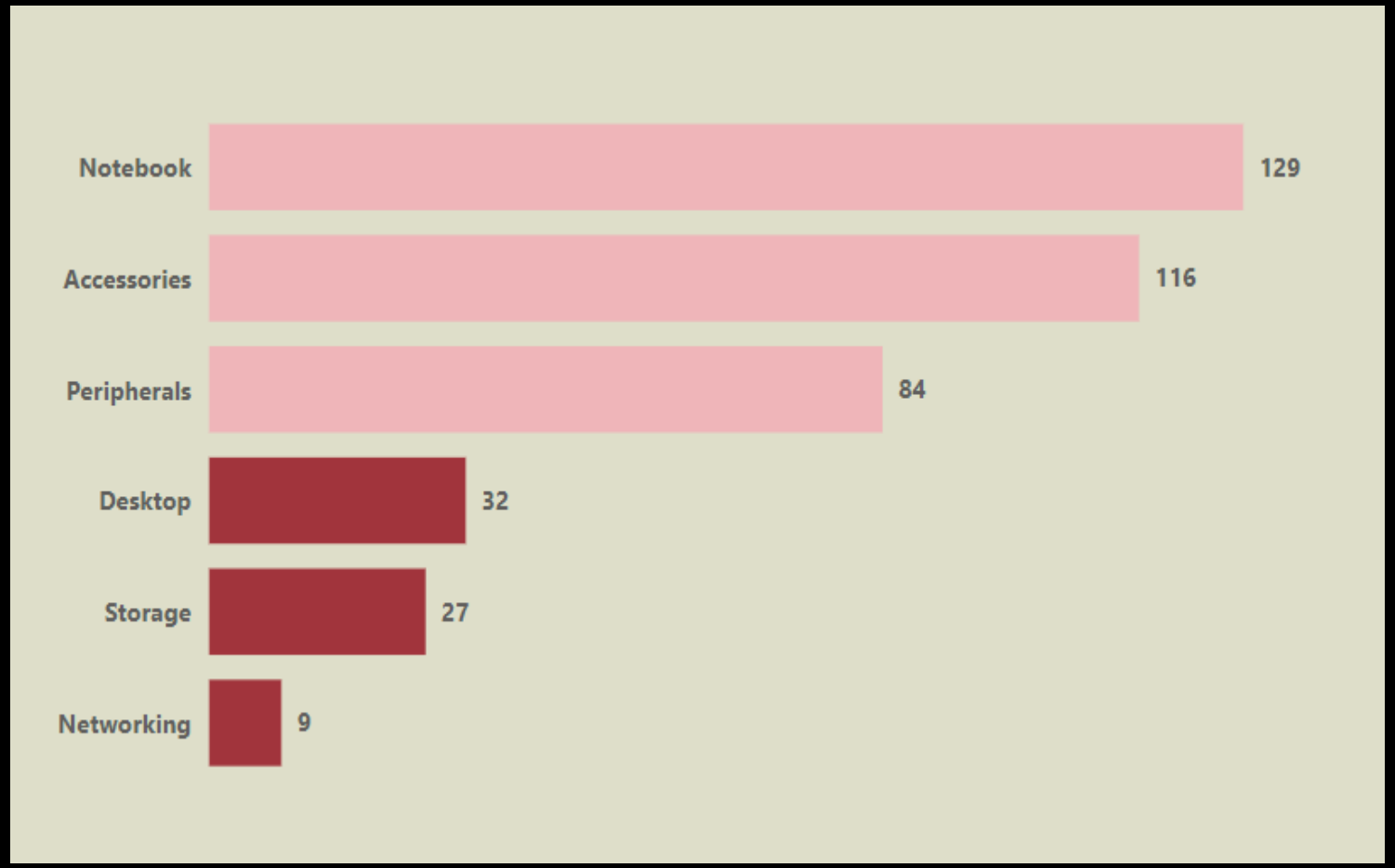
Provide a report with all the unique product counts for each segment and sort them in descending order of product counts.

OUTPUT

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

INSIGHTS

We have a wide variety of products under the segments of Notebooks, Accessories, Peripherals, Desktop, Storage and Networking. However, we need to diversify our production in the Segment of Desktop, Storage and Networking as they have lower production.



REQUEST 4:

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

OUTPUT

segment	product_count_2021	product_count_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

Desktop segment saw highest increase in its products of 34 followed by Notebook 16 and Peripherals 16.

Segment	Product Count 2021	Product Count 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

REQUEST 5:

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

OUTPUT

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

REQUEST 6:

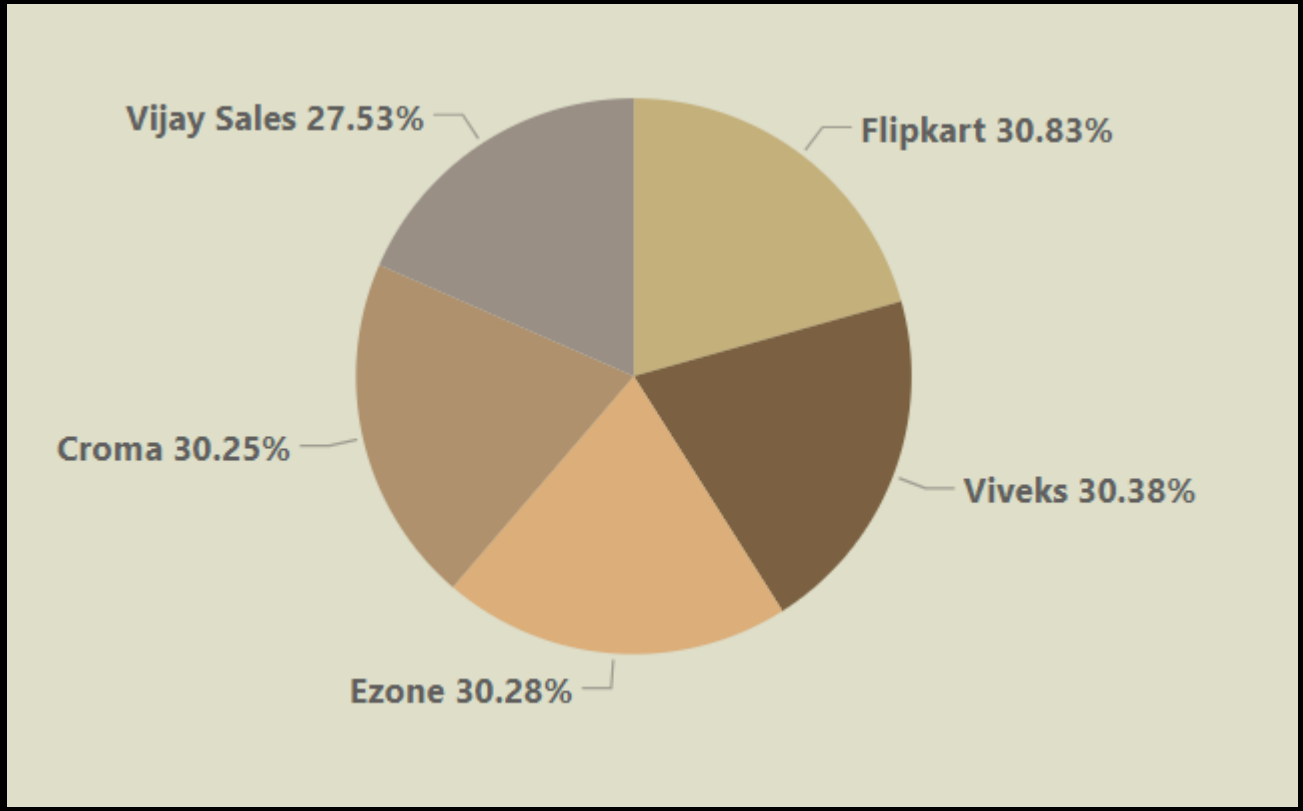
Generate a report which contains the top 5 customers who received an average high pre invoice discount percentage for the fiscal year 2021 and in the Indian market.

OUTPUT

customer_code	customer	average_discount_percentage
90002009	Flipkart	30.83%
90002006	Viveks	30.38%
90002003	Ezone	30.28%
90002002	Croma	30.25%
90002016	Amazon	29.33%

INSIGHTS

For Indian market in 2021, we offered nearly equal discount percentage to all top 5 our customers on which Flipkart received highest discount of 30.83%.



REQUEST 7:

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

Month	gross_sales_amount	Year
January	9.58M	2020
February	8.08M	2020
March	0.77M	2020
April	0.80M	2020
May	1.59M	2020
June	3.43M	2020
July	5.15M	2020
August	5.64M	2020
September	9.09M	2020
October	10.38M	2020
November	15.23M	2020
December	9.76M	2020
January	19.57M	2021
February	15.99M	2021
March	19.15M	2021
April	11.48M	2021
May	19.20M	2021
June	15.46M	2021
July	19.04M	2021
August	11.32M	2021
September	19.53M	2021
October	21.02M	2021
November	32.25M	2021
December	20.41M	2021

INSIGHTS

For our customer Atliq Exclusive, November 2020 was highest sales of 20.5M and March 2020, April 2020 saw a lowest sales of 0.4M each because of Covid-19 pandemic. After the month of August market started growing and we witnessed an increase in sales afterwards.

REQUEST 8:

In which quarter of 2020, got the maximum total sold quantity?

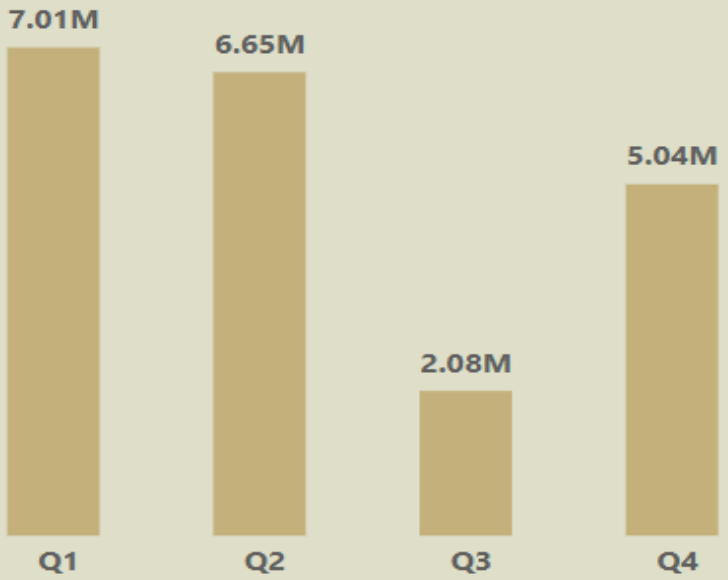
OUTPUT

Quarter	total_sold_quantity
Q1	7.01M
Q2	6.65M
Q4	5.04M
Q3	2.08M

INSIGHTS

For FY 2020, we witnessed highest total sold quantity of 7.01M in which November month generated 3.05M.
The effect of Covid-19 is clearly seen as total sold quantity decreased to 2.08M in Q3 on which March and April have only 02.4M and 0.82M sales.

Month	Quarters	Total Sold Quantity
November	Q1	3.05M
October	Q1	2.19M
September	Q1	1.76M
December	Q2	3.18M
February	Q2	1.70M
January	Q2	1.76M
April	Q3	0.82M
March	Q3	0.24M
May	Q3	1.02M
August	Q4	1.79M
July	Q4	1.69M
June	Q4	1.56M



REQUEST 9:

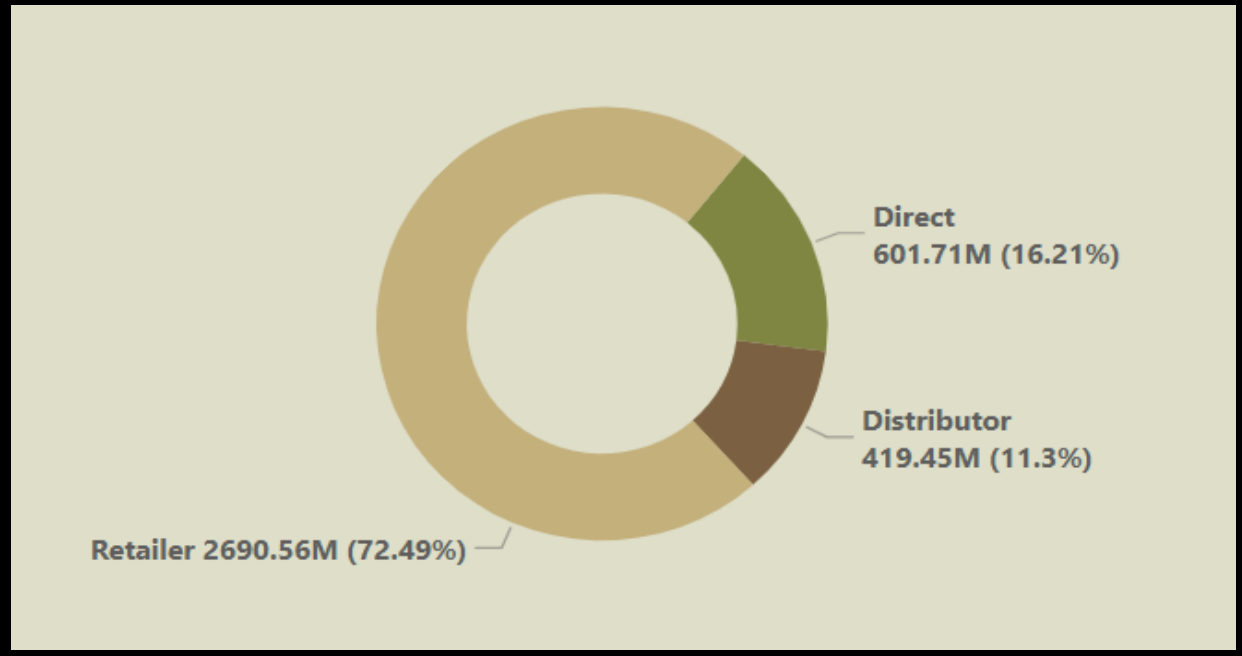
Which channel helped to bring more gross sales in the fiscal year 2021 and the percentage of contribution?

OUTPUT

	channel	gross_sales_mln	percentage
▶	Retailer	1924.17M	73.22%
	Direct	406.69M	15.47%
	Distributor	297.18M	11.31%

INSIGHTS

The majority of sales took place via Retailer which is 2690.56M (72.49%), followed by Direct of 601.71M (16.21%) and Distributor of 419.45M (11.3%)



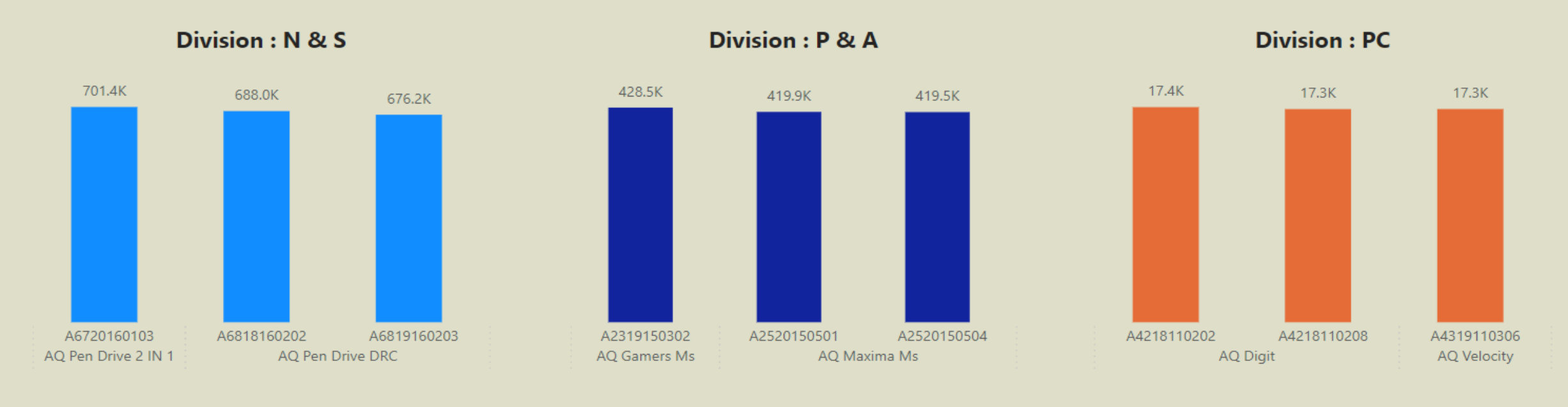
REQUEST 10:

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

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

INSIGHTS



The top 3 selling products in N&S is pen drive.

The top 3 selling products in P&A is mouse.

The top 3 selling products in PC is Laptop.

THANK YOU!