Agenda

- Background

- Atliq's Markets

- familiar with Data Model

- Ad-hoc requests, queried results and Insights

- **Our Company**
  Atliq Hardwares (imaginary company) - One of the
  leading computer hardware producers in India.
- **Background**
  The management noticed that they do not get enough
  insights to make quick and smart data-informed decisions.
- **Problem**
  There are 10 ad-hoc requests for which the company needs insights.
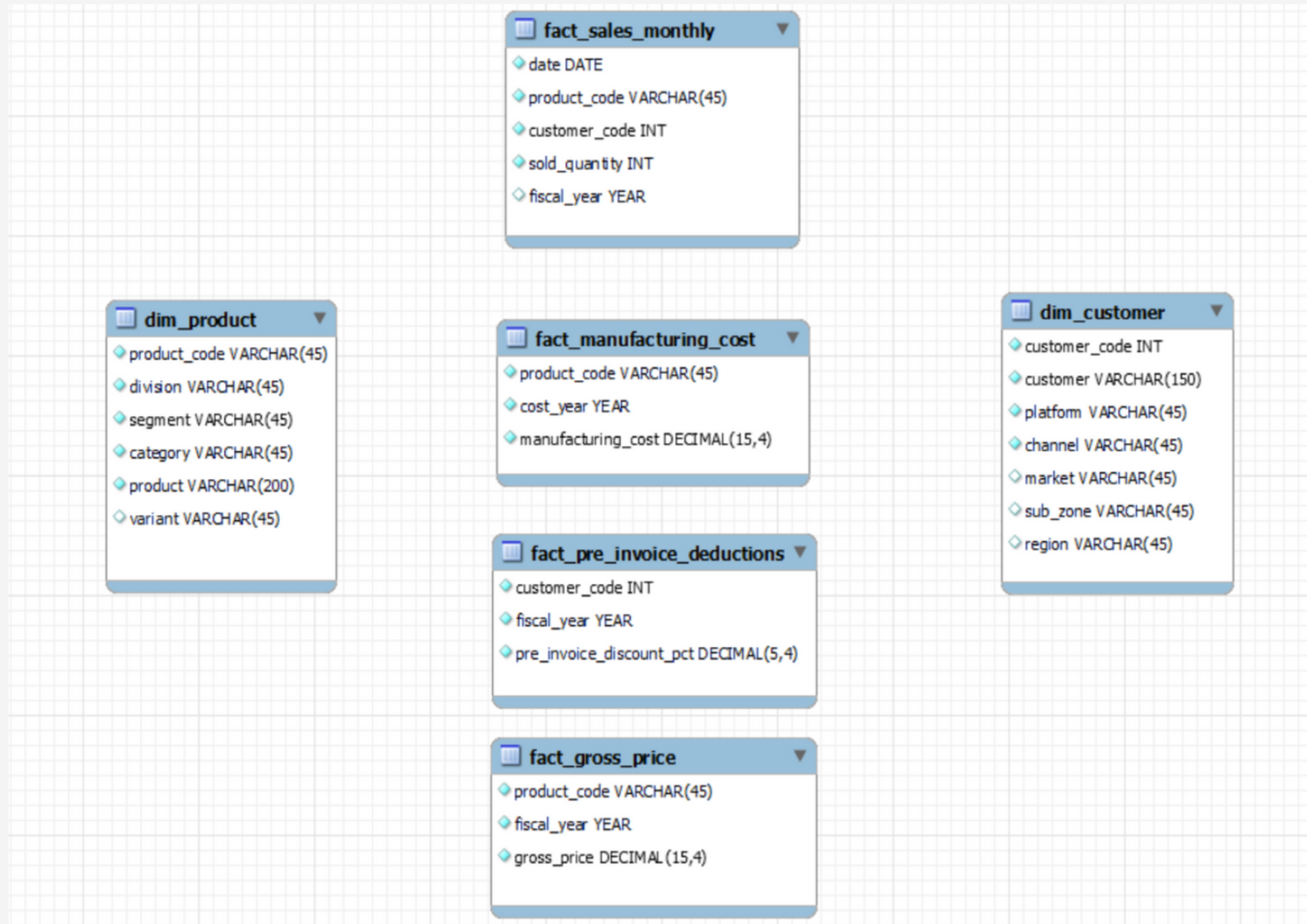- **Approach**
  Run a SQL query to answer these requests. Convert it
  into visualizations and present the Insights to the toplevel management.

Atliq's Markets

Data Model

- **Ad-hoc requests, queried results 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 Exclusive store has established its presence in 8 major markets.


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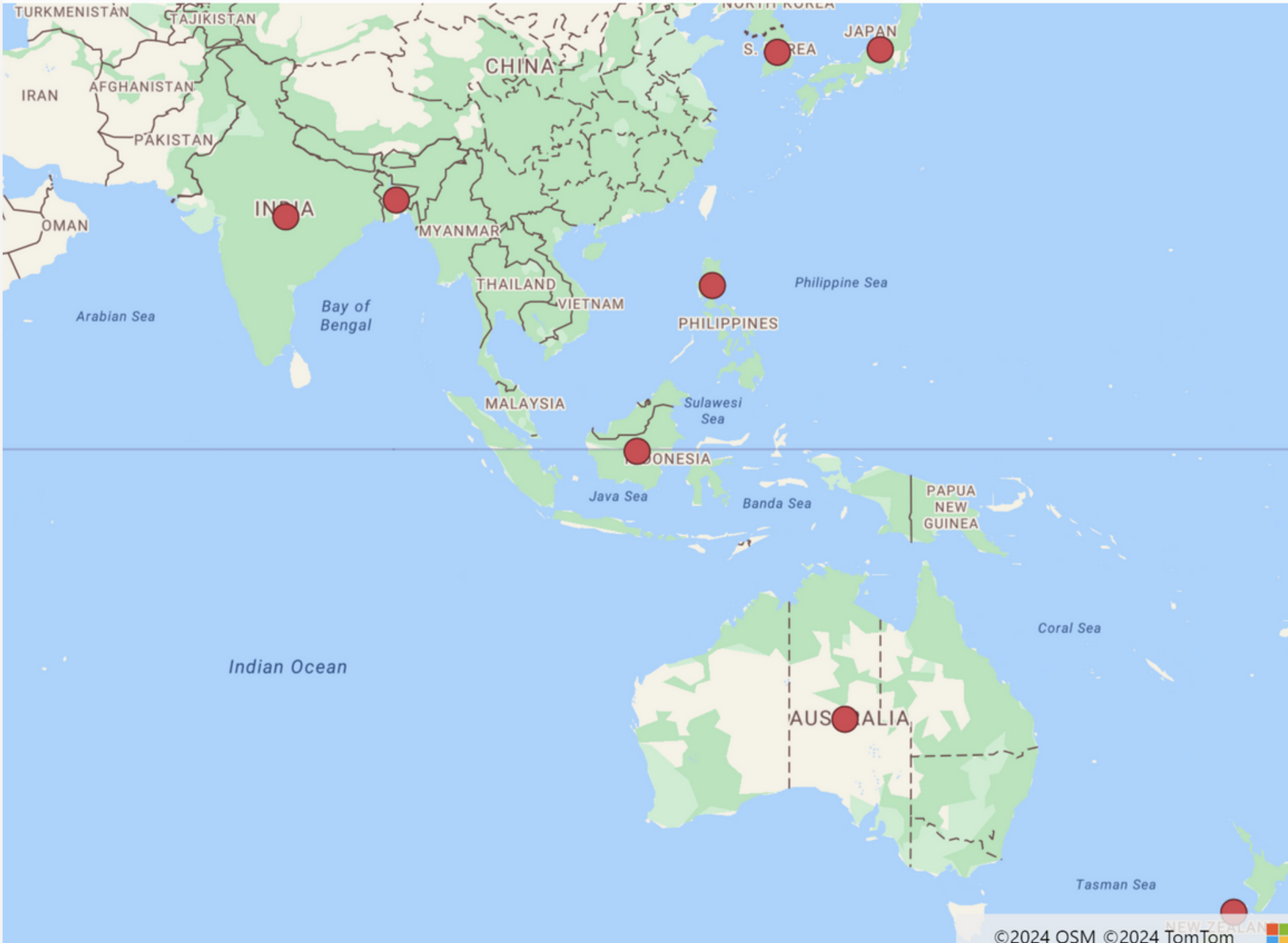
Request 2: What is the percentage of unique product increase in 2021 vs. 2020?
The final output contains these fields:
unique_products_2020, unique_products_2021, percentage_chg

OUTPUT:

unique_products_2020	unique_products_2021	percentage_change
▶ 245	334	36.33

Insights:

With a 36.33% increase in new products, Altiq hardware is building a strong and
dynamic reputation by meeting with the changing needs of the customer
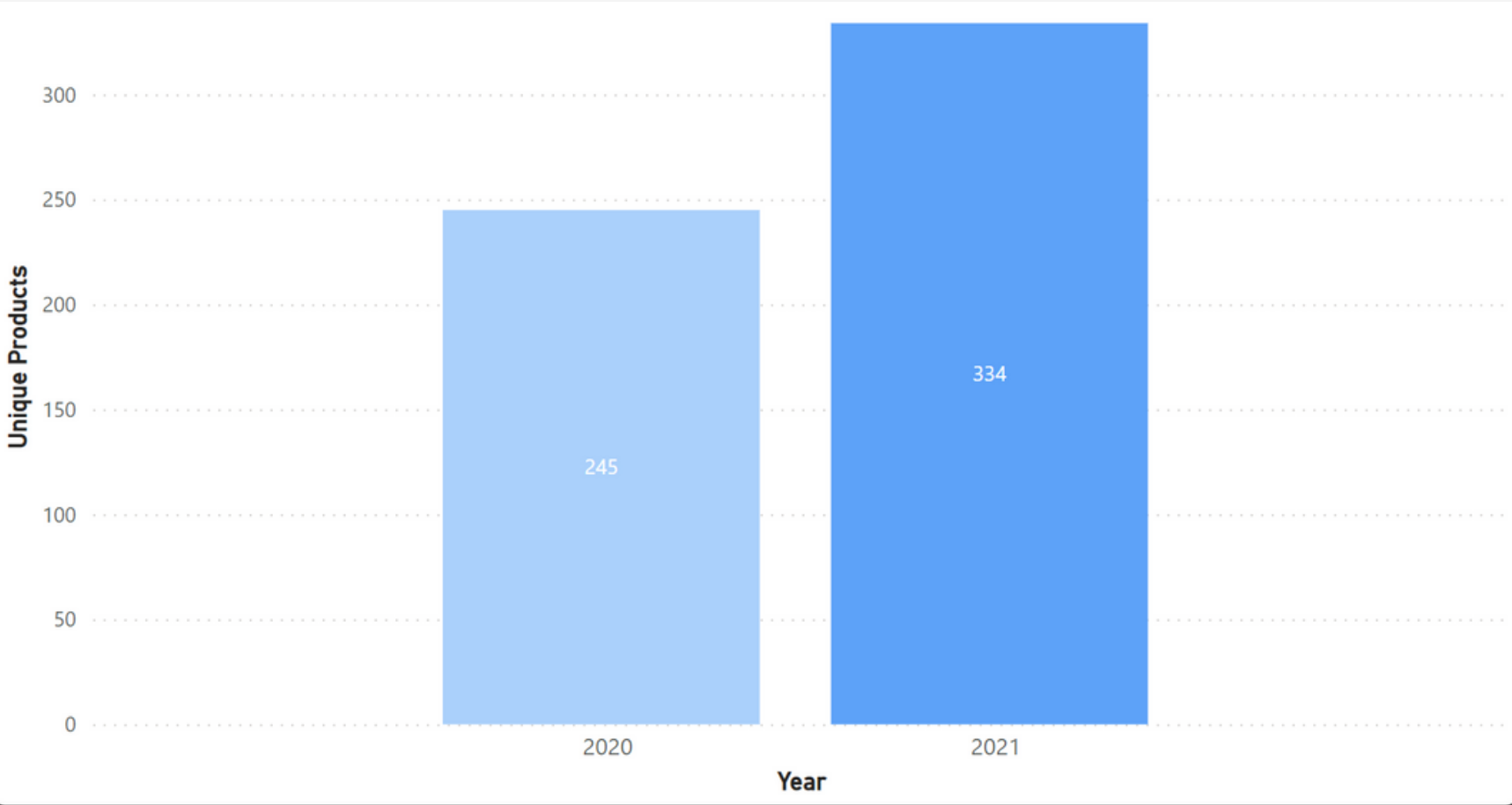
Request 3: Provide a report with all the unique product counts for each segment and sort them in descending order of product counts. The final output contains 2 fields: segment, product_count

OUTPUT:

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

Insights:

- We have a wide range of products under segment: Notebook, Accessories and Peripherals averaging around 110 while segment like Desktop, Storage and Network are lagging with an average of 23 products per segment.

- Product Development team needs to evaluate on products that require redesigning as per modern standards

- Innovations will keep Atliq Hardware ahead in this competitive market
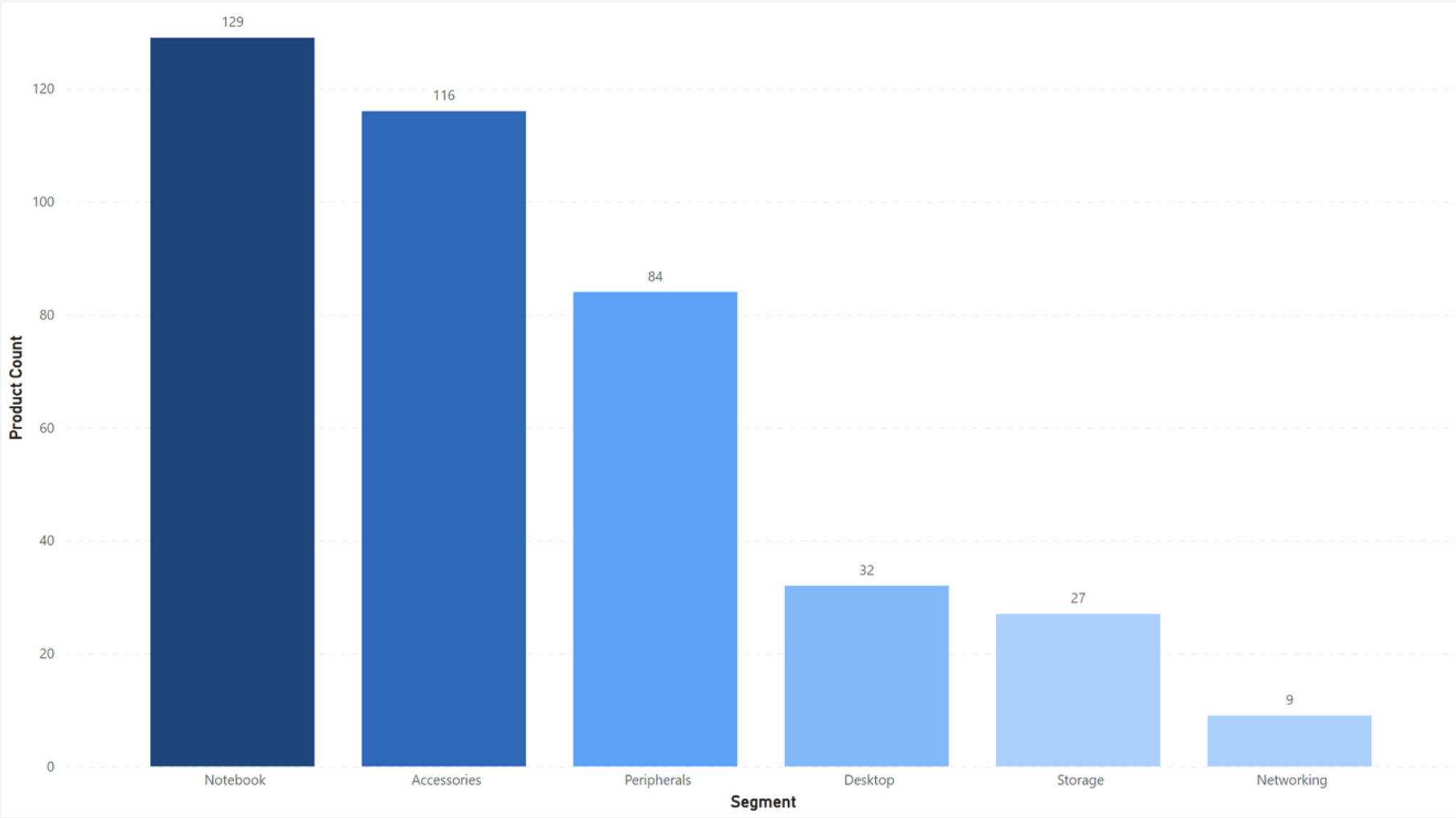
Request 4 Follow up: Which segment had the most increase in unique products in 2021 vs 2020? The final output contains these fields:
segment, product_count_2020, product_count_2021, difference

OUTPUT:

segment	product_count_2020	product_count_2021	difference
Accessories	69	103	34
Notebook	92	108	16
Peripherals	59	75	16
Desktop	7	22	15
Storage	12	17	5
Networking	6	9	3

Insights:

- With the introduction of 34 new products, Accessories segment has the highest increase in number of unique products

- Notebook and Peripherals each has an increment of 16 new unique products

- Product Development team has done a good job in the Desktop segment by increasing unique products from 7 to 22

- Networking segment is at the bottom with 3 new products introduced since 2020
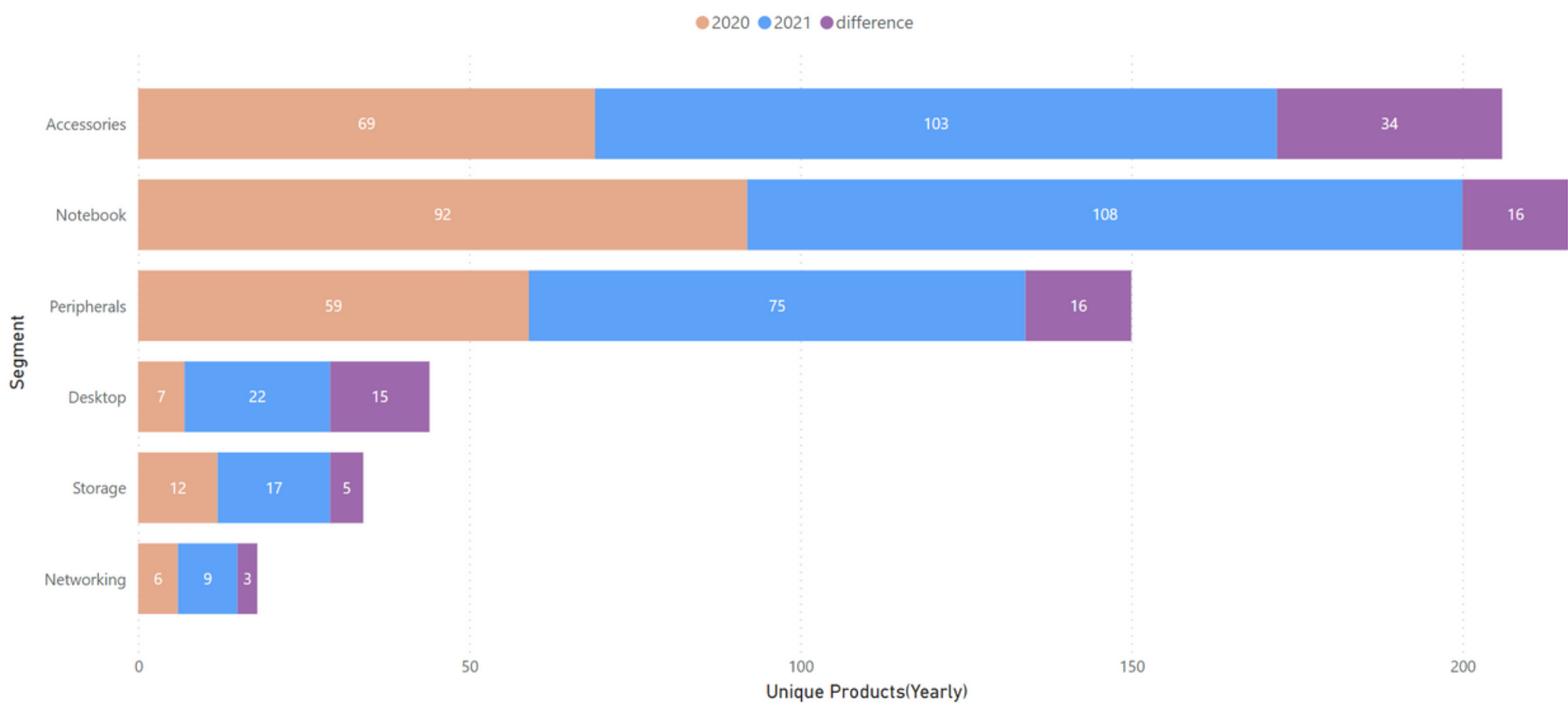
Request 5: Get the products that have the highest and lowest manufacturing costs.
The final output should contain these fields:
product_code, product, manufacturing_cost

OUTPUT:

	product_code	product	cost_year	manufacturing_cost
▶	A6120110206	AQ HOME Allin1 Gen 2 (Plus 3)	2021	240.5364
	A2118150101	AQ Master wired x1 Ms (Standard 1)	2020	0.8920

| Highest manufacturing cost	Lowest manufacturing cost
AQ HOME Allin1 Gen 2 (Plus 3) Category: Personal Desktop $240.54	AQ Master wired x1 Ms (Standard 1) Category: Mouse $0.89

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:

- Flipkart has received the highest pre invoice discount percent i.e., 30.83%

- Top 5 Customers have a collective average around 30.21%

- FY 2021, Average discount provided to all customers in Indian market was 24.16%
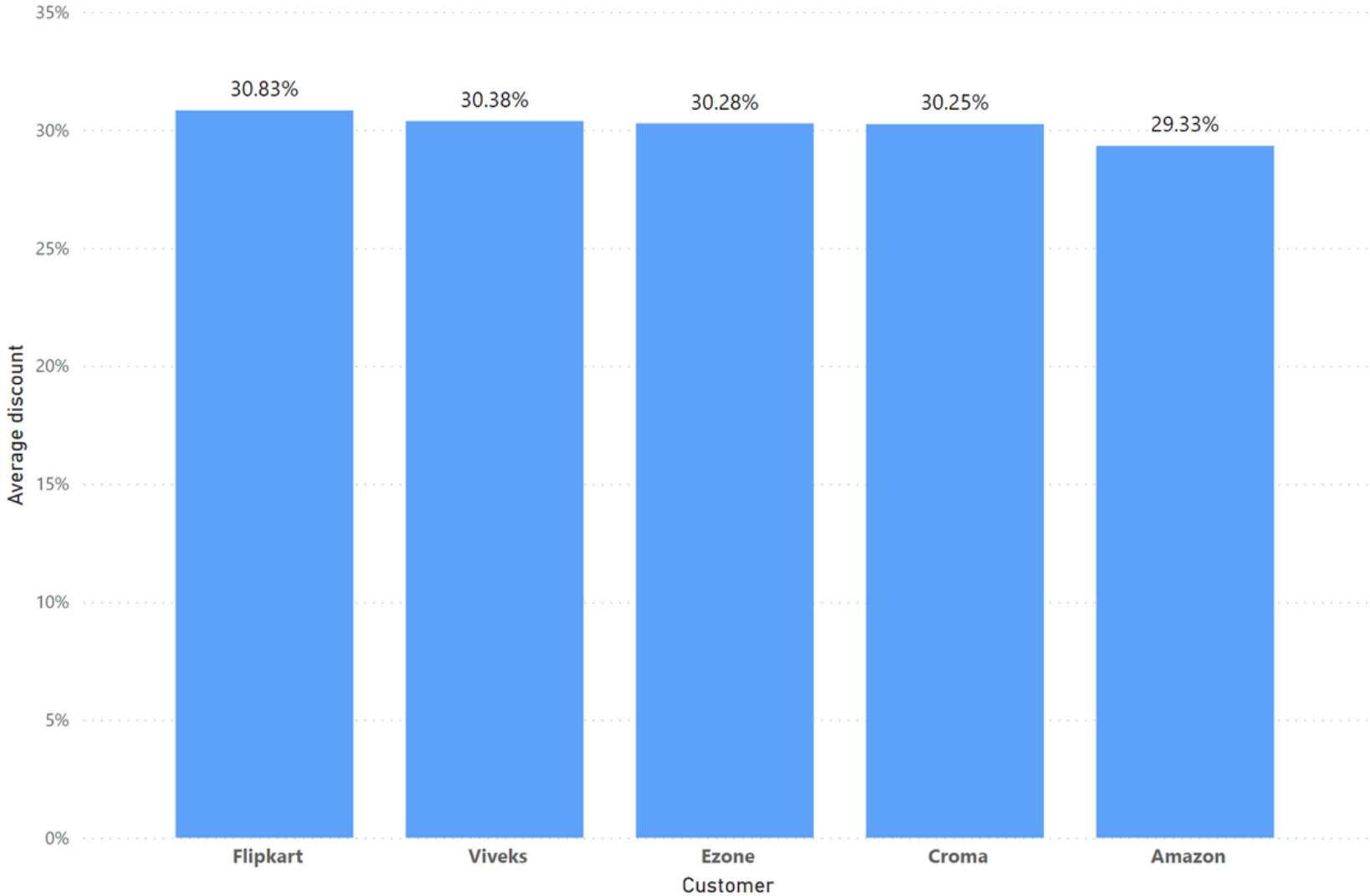
Request 7: Get the complete report of the Gross sales amount for the customer "Atliq Exclusive" for each month. This analysis helps to get an idea of low and high performing months and take strategic decisions. The final report contains these columns: Month, Year, Gross sales Amount

OUTPUT:

months	year	gross_sales
September	2019	9.09M
October	2019	10.38M
November	2019	15.23M
December	2019	9.76M
January	2020	9.58M
February	2020	8.08M
March	2020	0.77M
April	2020	0.80M
May	2020	1.59M
June	2020	3.43M
July	2020	5.15M
August	2020	5.64M
September	2020	19.53M
October	2020	21.02M
November	2020	32.25M
December	2020	20.41M
January	2021	19.57M
February	2021	15.99M
March	2021	19.15M
April	2021	11.48M
May	2021	19.20M
June	2021	15.46M
July	2021	19.04M
August	2021	11.32M

Insights:

- For Atliq Exclusive Store maximum sales were recorded in November 2020($20.46 Million) and lowest sales recorded in March 2020 ($0.38 Million)

- Low sales from March to August were due to pandemic when stores were shut

- Sales started improving from September 2020 onwards due to ease in lockdown restrictions and the onset of festival season in India and other markets
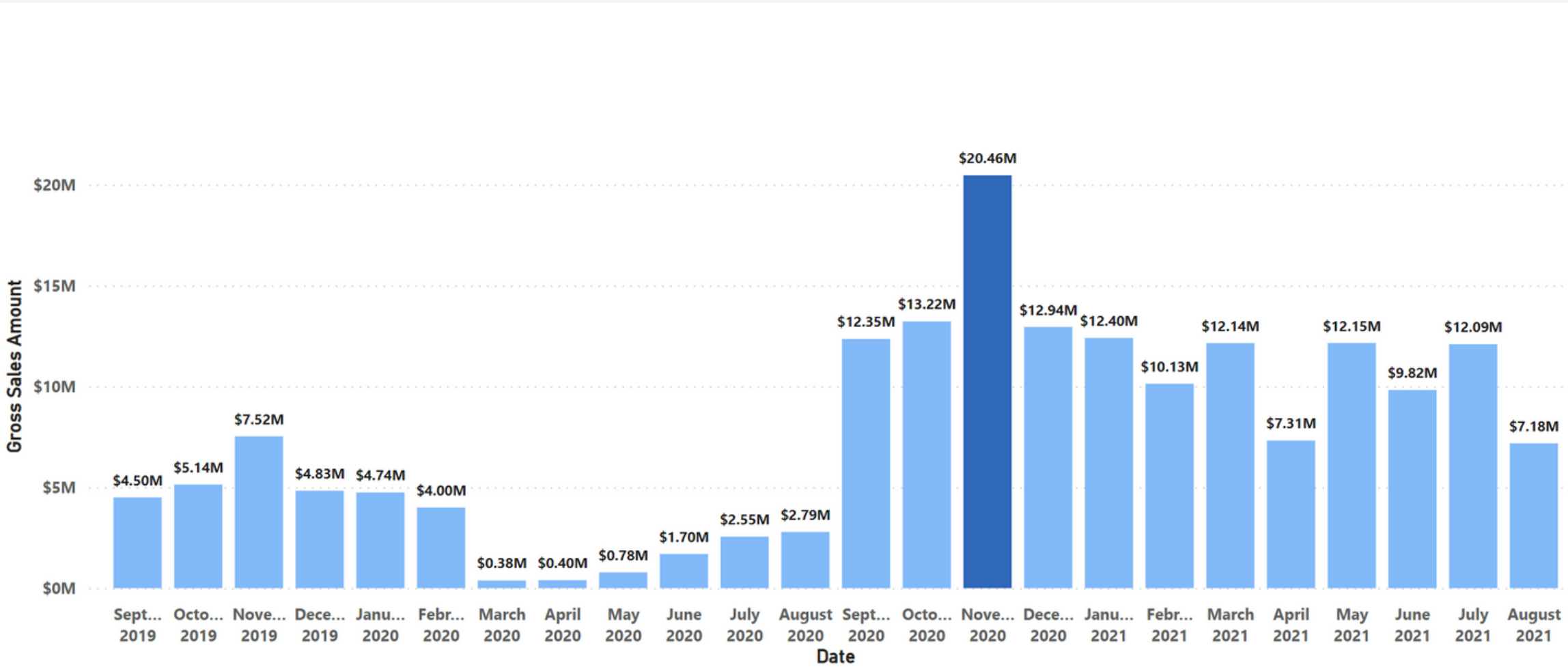
Request 8: In which quarter of 2020, got the maximum total_quantity_sold?
The final output contains these fields sorted by the total_quantity_sold:
Quarter, total_quantity_sold

OUTPUT:

quarter	total_sold_quanity_in_millions
Q1	7.01
Q2	6.65
Q4	5.04
Q3	2.08

Insights:

- Q1(September November) had the maximum quantity sold for FY 2020

- Sales dropped in Q3(March May) because of pandemic

- Increase in sales recorded in Q4(June August)
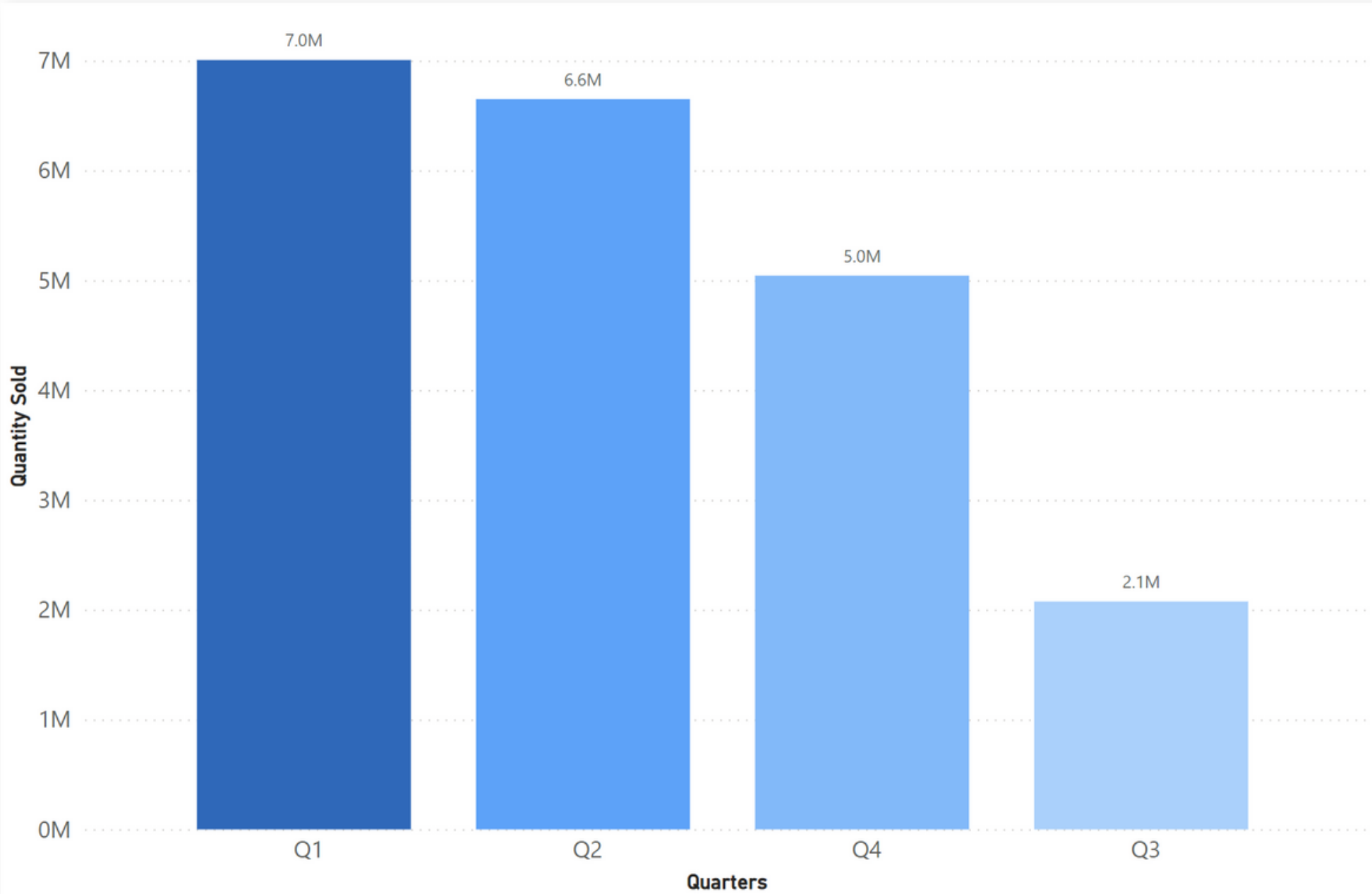
Request 9: Which channel helped to bring more gross sales in the fiscal year 2021 and the percentage of contribution?
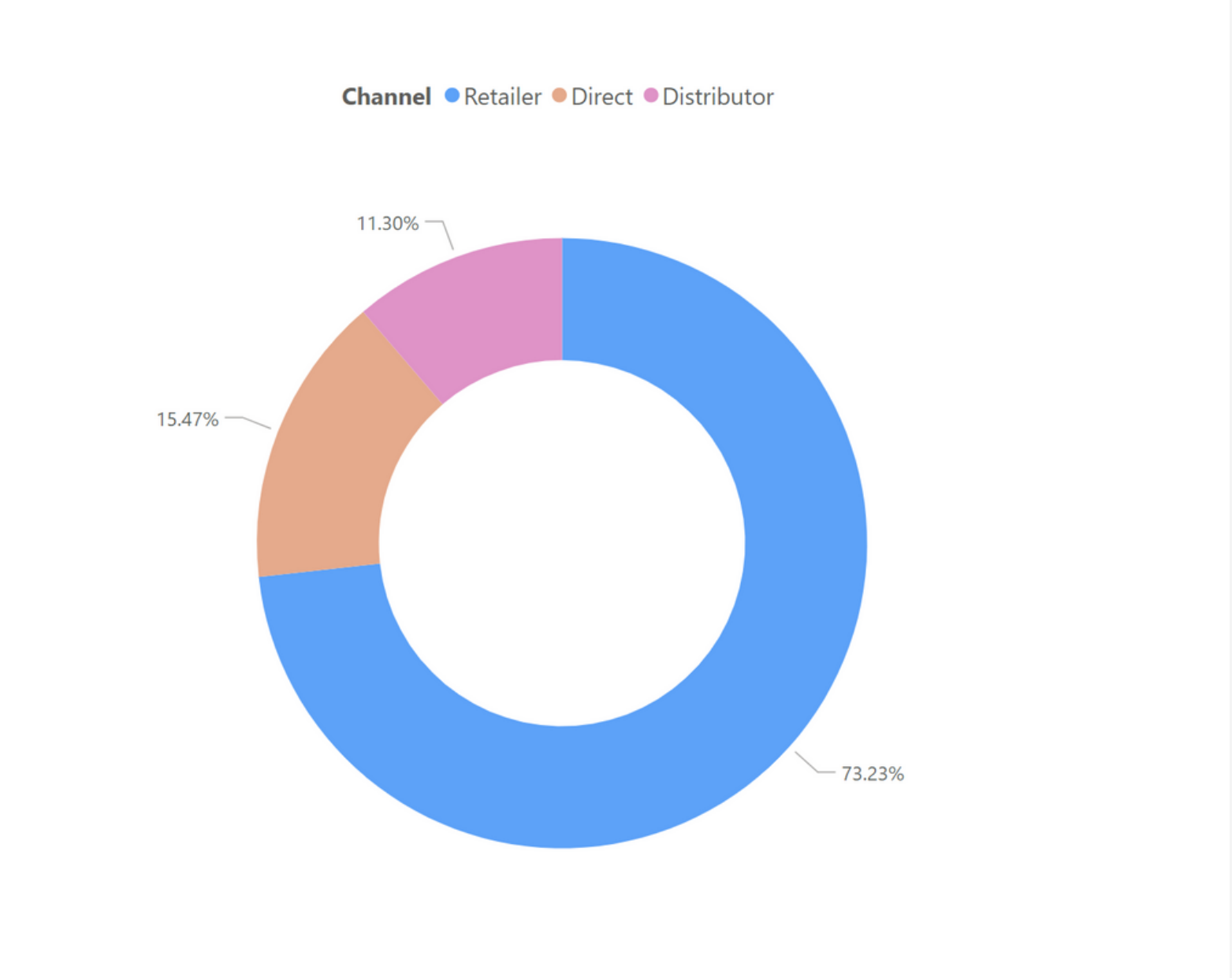The final output contains these fields:
channel, gross_sales_mln, percentage

OUTPUT:

channel	gross_sales_in_millions	percentage
Retailer	1924.17	73.22
Direct	406.69	15.47
Distributor	297.18	11.31

Insights:
Retailers with $1219.08 Million which is 73.23% of gross sales for FY 2021
followed by Direct channel with $257.53 Million and Distributor with $188.03 Million.

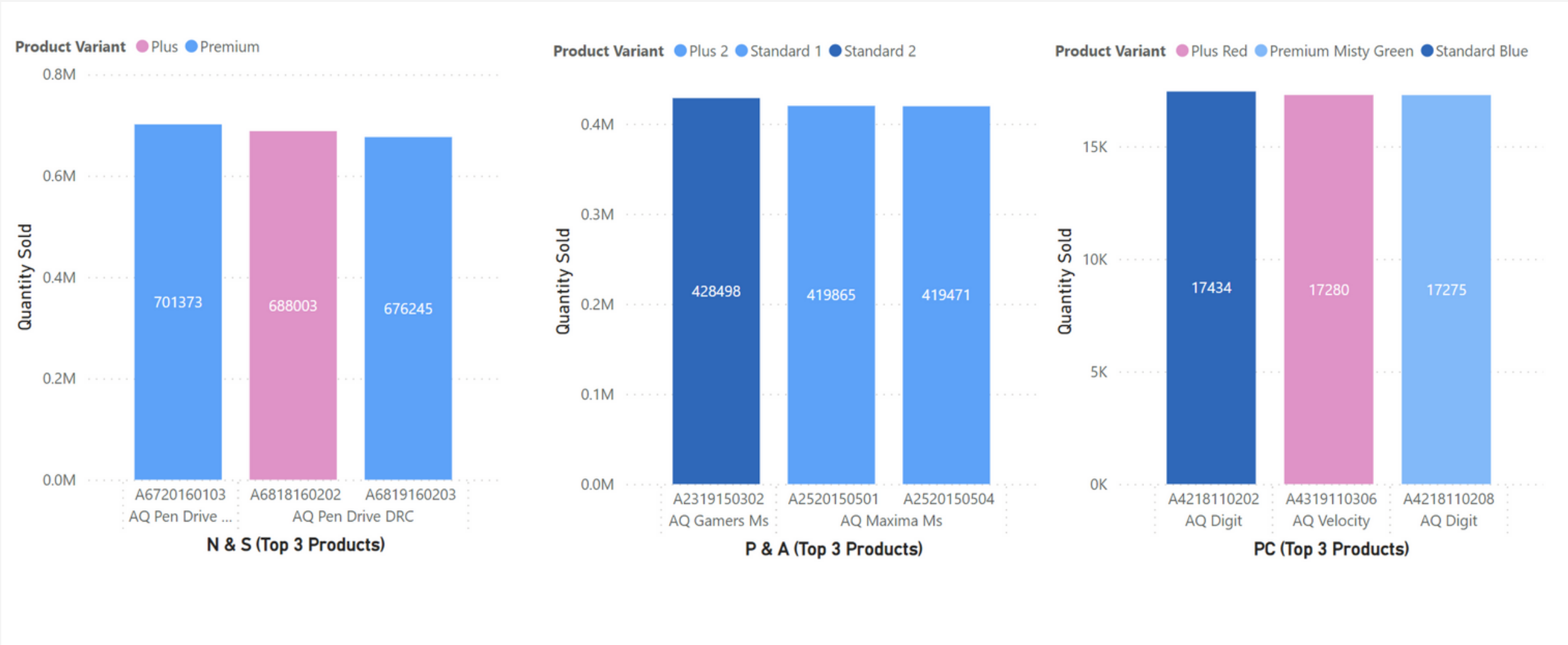Channel ● Retailer ● Direct ● Distributor

11.30%

15.47%

73.23%

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	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	1
P & A	A2520150501	AQ Maxima Ms(Standard 1)	419865	2
P & A	A2520150504	AQ Maxima Ms(Plus 2)	419471	3
PC	A4218110202	AQ Digit(Standard Blue)	17434	1
PC	A4319110306	AQ Velocity(Plus Red)	17280	2
PC	A4218110208	AQ Digit(Premium Misty Green)	17275	3

Insights:

- For N&S, the top selling product is AQ Pen Drive 2 IN 1 with a total of 7,01,373 quantities sold in FY 2021 followed by two variants of AQ Pen Drive DRC with 6,88,003 and 6,76,245 quantity sold respectively
- For P&A, top selling product is AQ Gamers Ms with 4,28,498 quantities sold followed by two variants of AQ Maxima Ms
- For PC, top selling product is AQ Digit PC with 17,434 quantities sold
- The company can take some strategic decisions to improve sale in PC division

Thank You