

# Ad-Hoc Insights

● Consumer Goods

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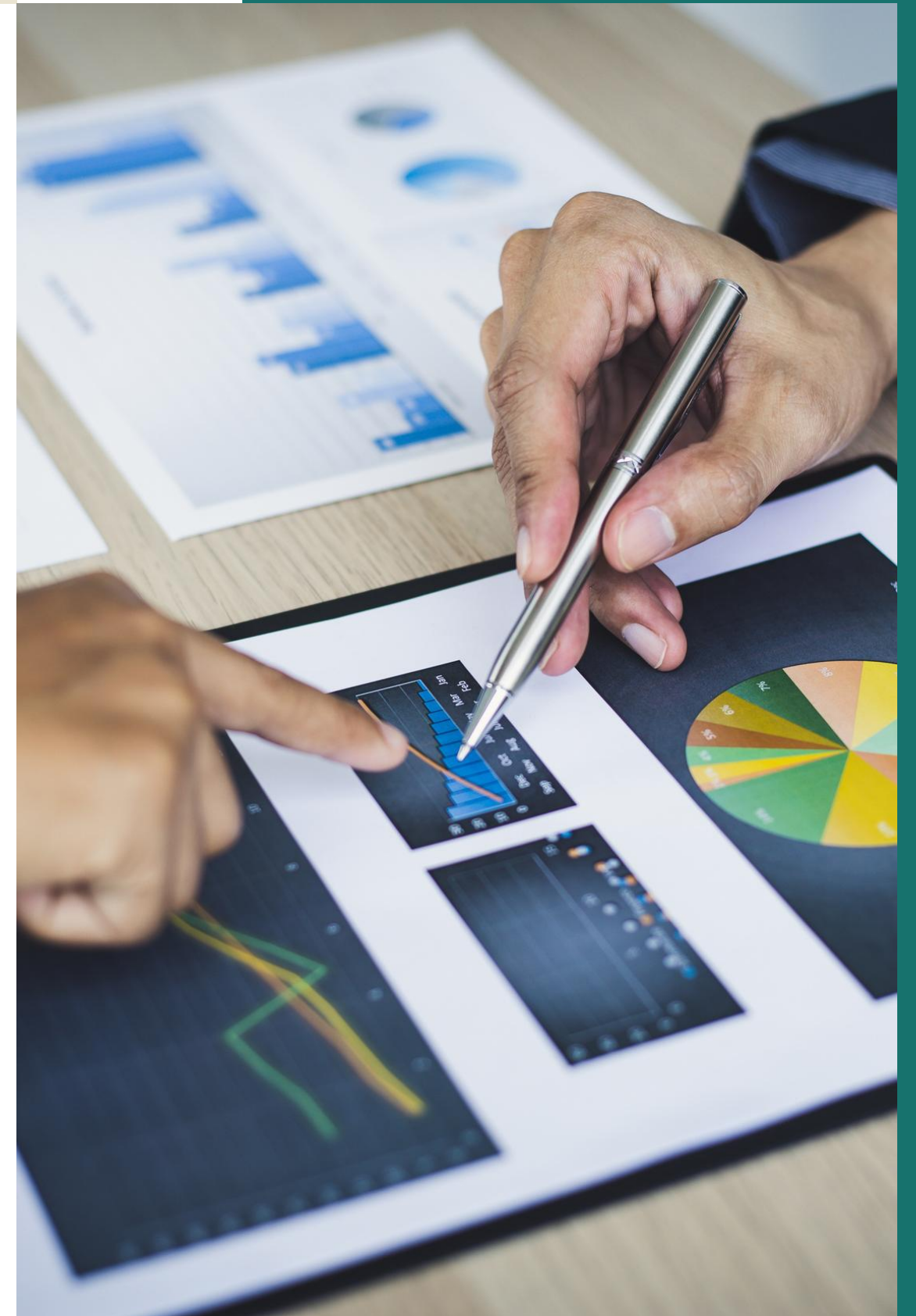
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# OBJECTIVES

## GET TO KNOW BETTER

- AtliqHardware (fictitious corporation) is one of the **major computer hardware** manufacturers in India, with a strong presence in other nations.
- The management noticed that they **do not get enough insights** to make quick and smart data-informed decisions.
- Plan to **expand** the data analytics team by adding junior data analysts
- Run a **SQL query** to answer these requests. Convert it into visualizations and present the **Insights** to the top level management.
- There are **10 ad-hoc requests** for which the company needs insights

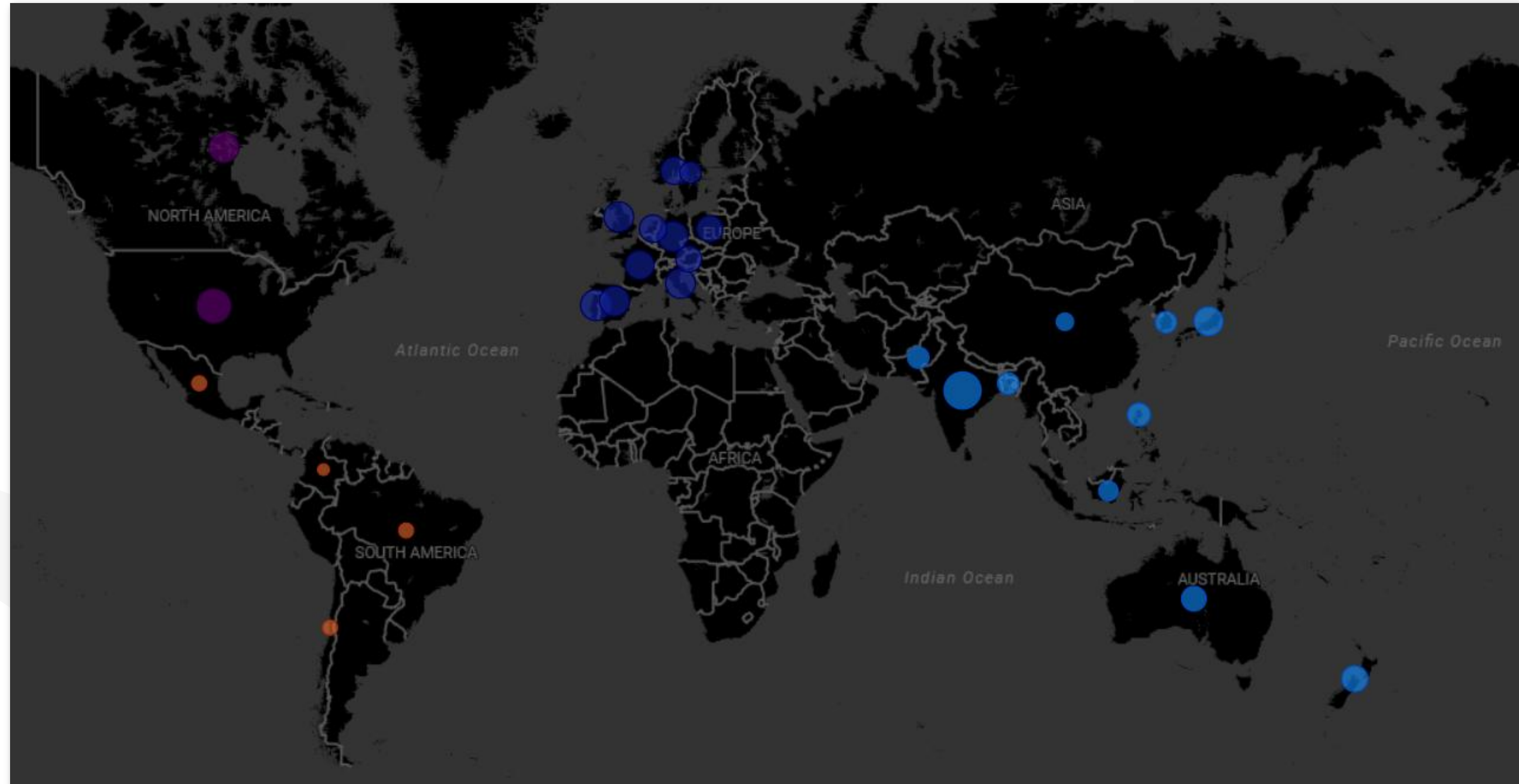
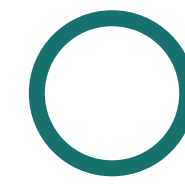






# COMPANY DETAILS

Atliq's Markets



# INPUT DATA

Getting familiar with the input data

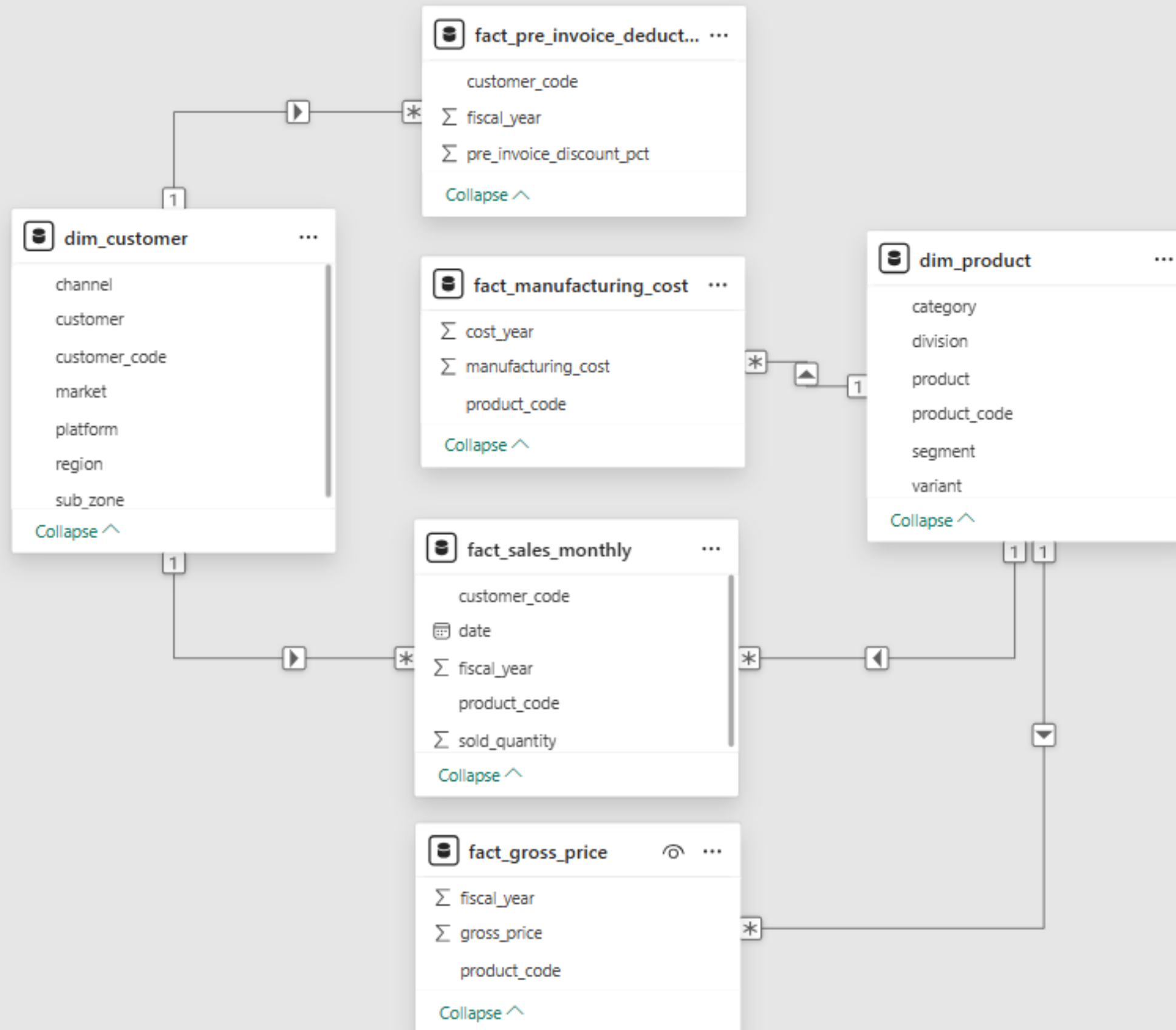
Input data consists of sales data for FY 2020 and FY 2021, along with different other dimension tables like customer details, product details, etc.

## TOOLS USED

MySQL for Analysis



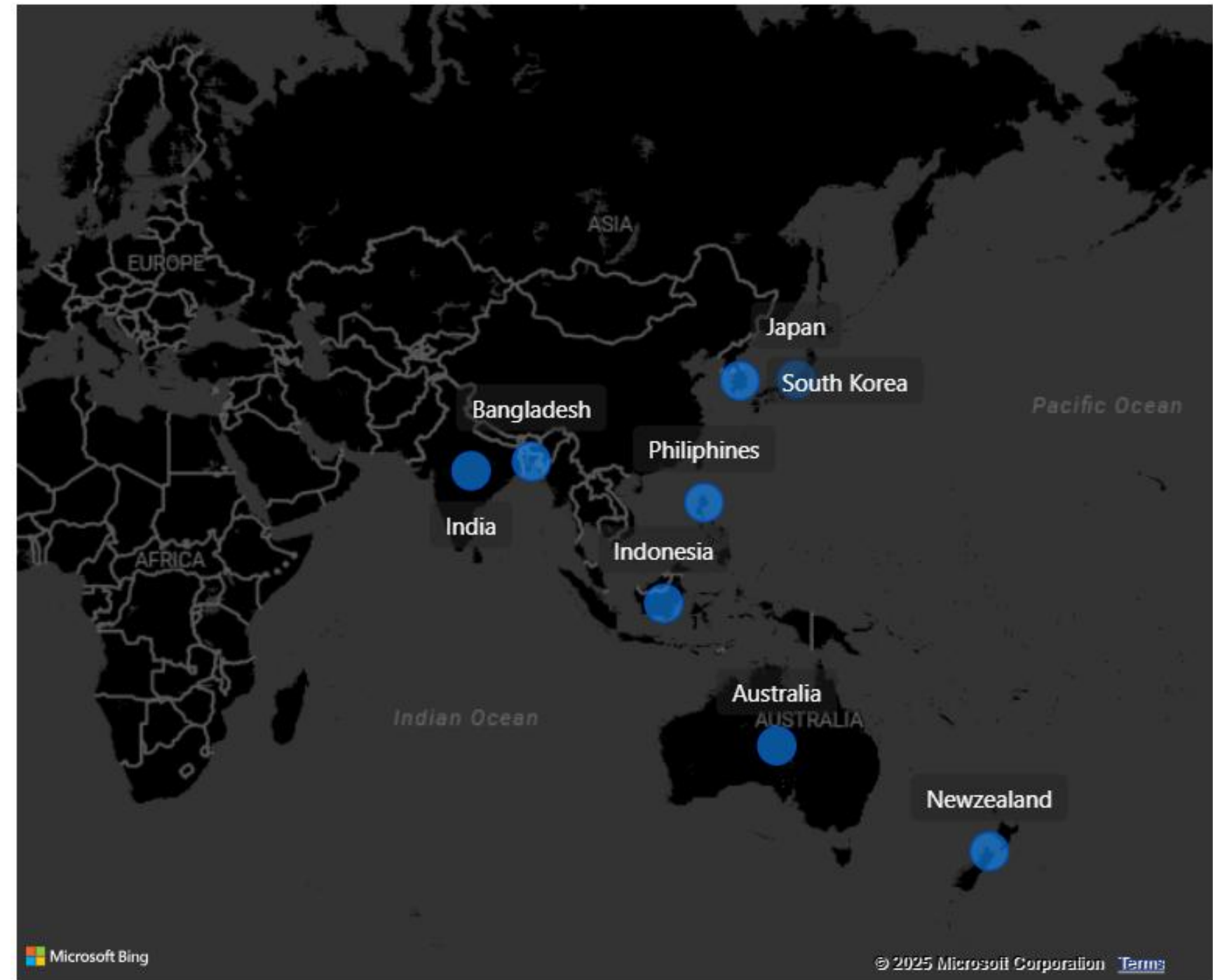
Power BI for Visualization



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

### OUTPUT

market
Australia
Bangladesh
India
Indonesia
Japan
Newzealand
Philiphines
South Korea



In the APAC region, our Exclusive store has established its presence in **8 major markets**.

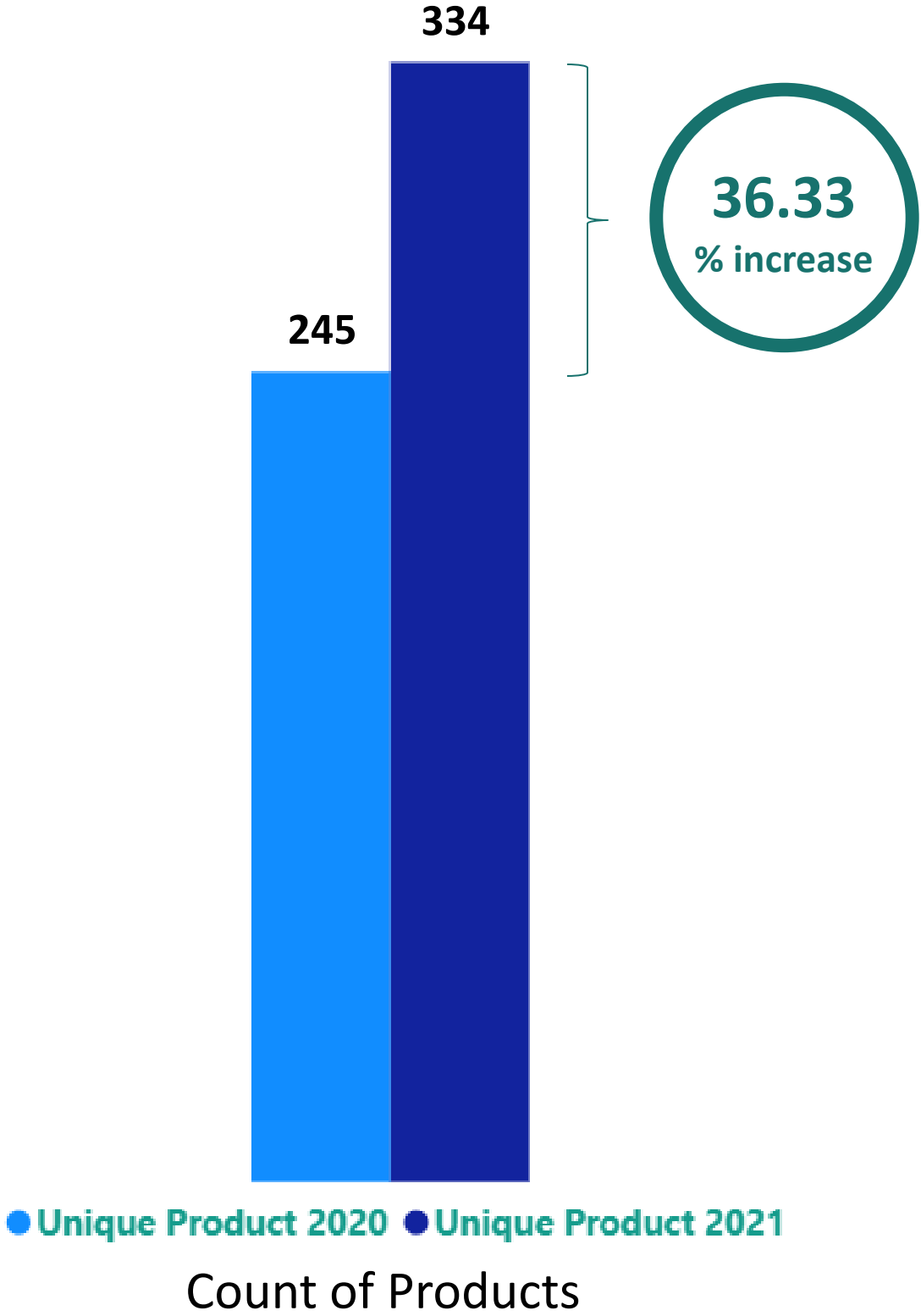
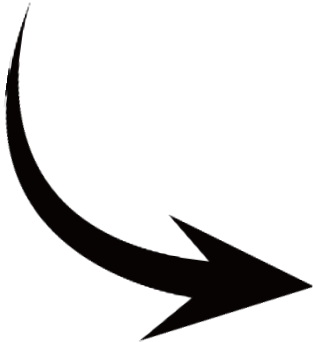
2. What is the percentage of unique product increase in 2021 vs. 2020? The final output contains these fields: unique\_products\_2020, unique\_products\_2021, percentage\_chg

OUTPUT

	unique_products_2020	unique_products_2021	percentage_chg
▶	245	334	36.33

**Insights:**

In FY 2020, we had a total of **245 products**, but in FY 2021, our count increased by **36%** to **334 products**.

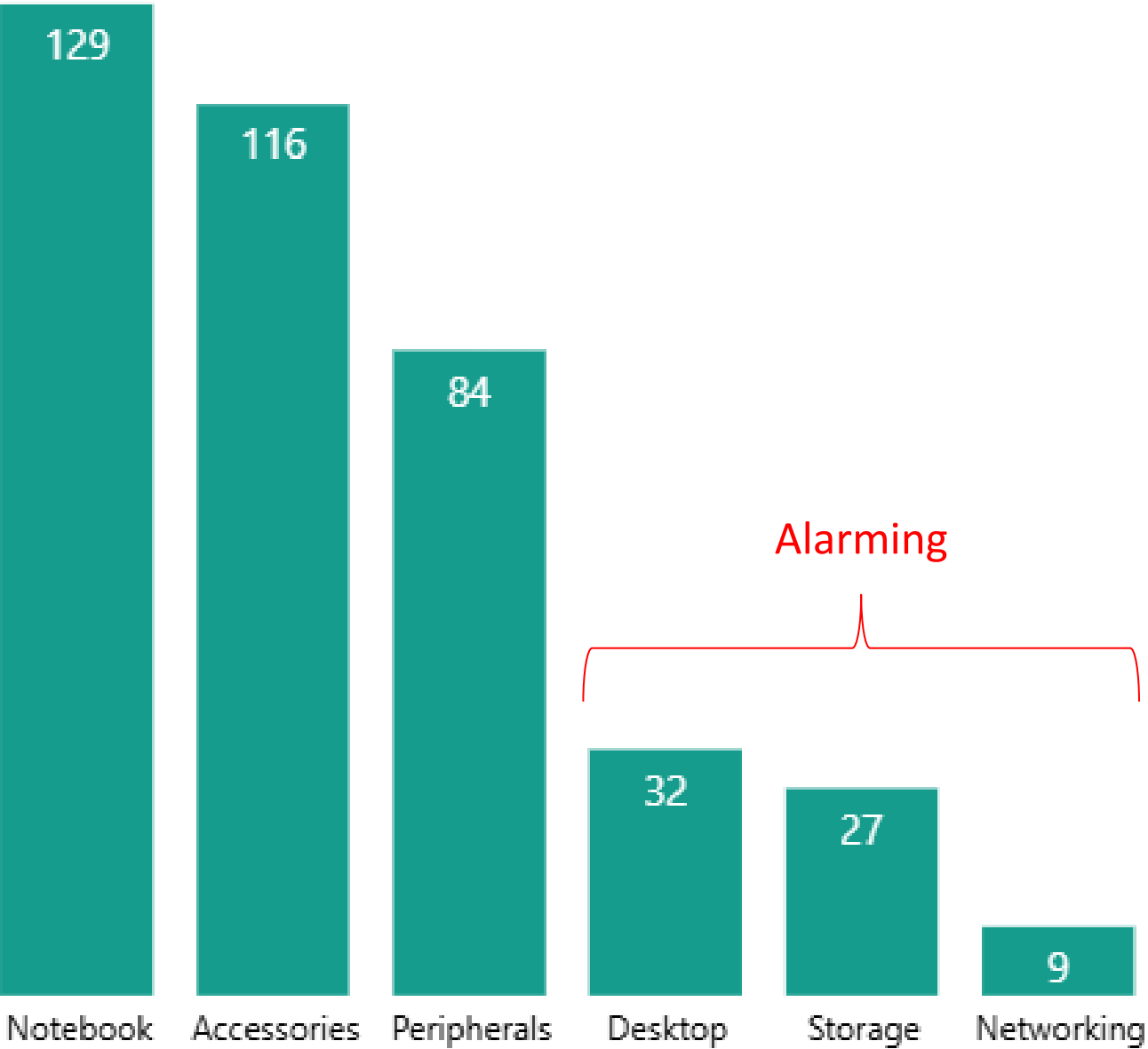




3. Provide a report with all the unique product counts for each segment and sort them in descending order of product counts. The final output contains 2 fields: segment and product\_count.

OUTPUT

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



**Insights:**  
Segments: notebooks, accessories, and peripherals are showing significant manufacturing **growth** as compared to desktops, storage, and networking.

How many **products** are there in each **segments**?

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

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:

- 1. Accessories had the **largest** increase in production.
- 2. Storage and networking are experiencing **slower** production growth than other segments.

Unique product difference per segment from **2020** to **2021**

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



Products having the **highest** and **lowest** manufacturing costs


240.54\$



A6120110206  
AQ HOME Allin1 Gen 2

Personal Desktop

0.89\$



A2118150101  
AQ Master wired x1 Ms

Mouse

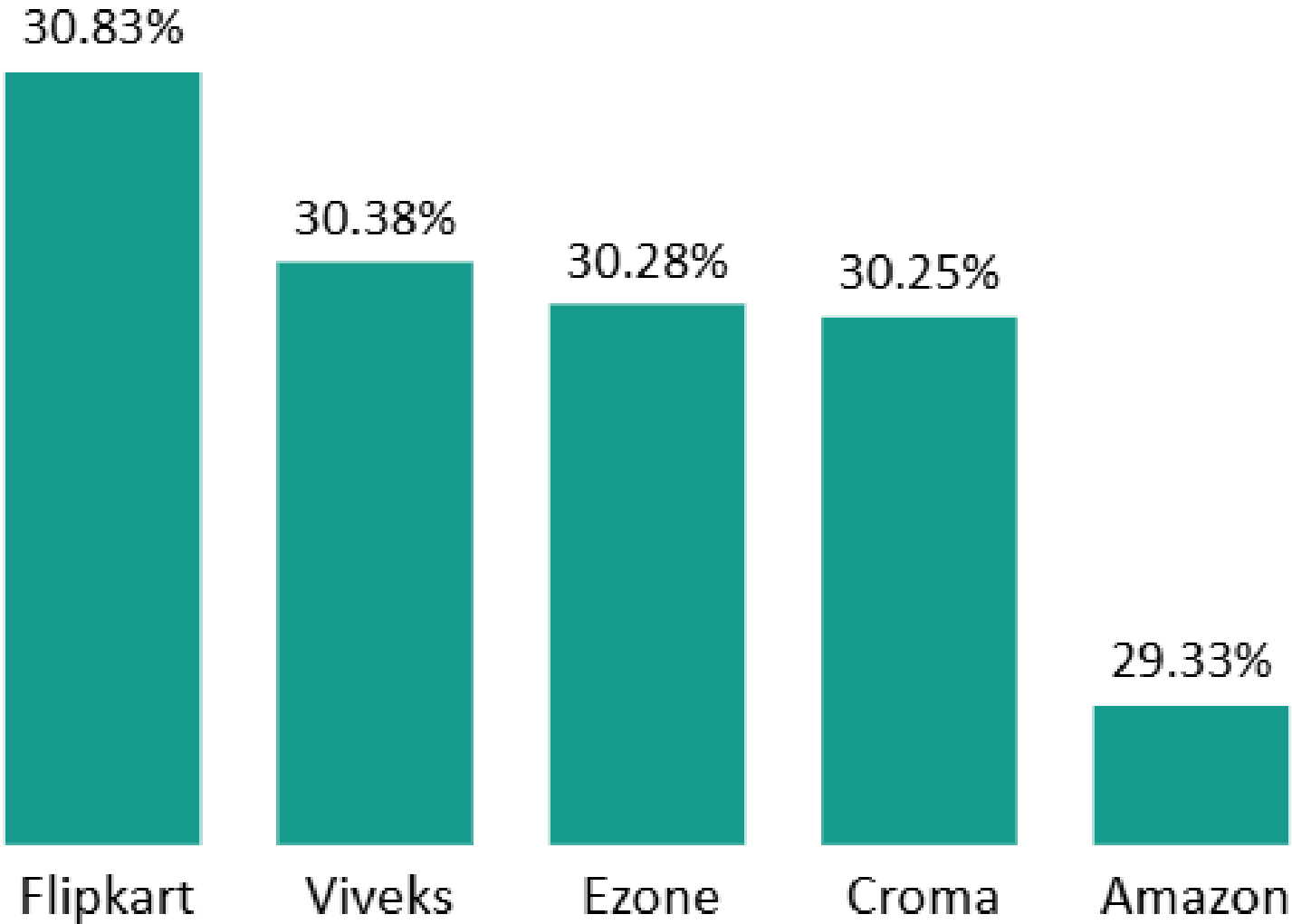
Insights:

- 1. **Personal Desktop:** AQ Home Allin1 Gen2 (Variant:Plus3) has the **highest** manufacturing cost.
- 2. **Mouse:** AQ Master wired x1 Ms (Variant:Standard1) has the **lowest** manufacturing cost.

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



**Top 5 Indian** customers with highest average discount percentage for **FY 2021**

**Insights:**

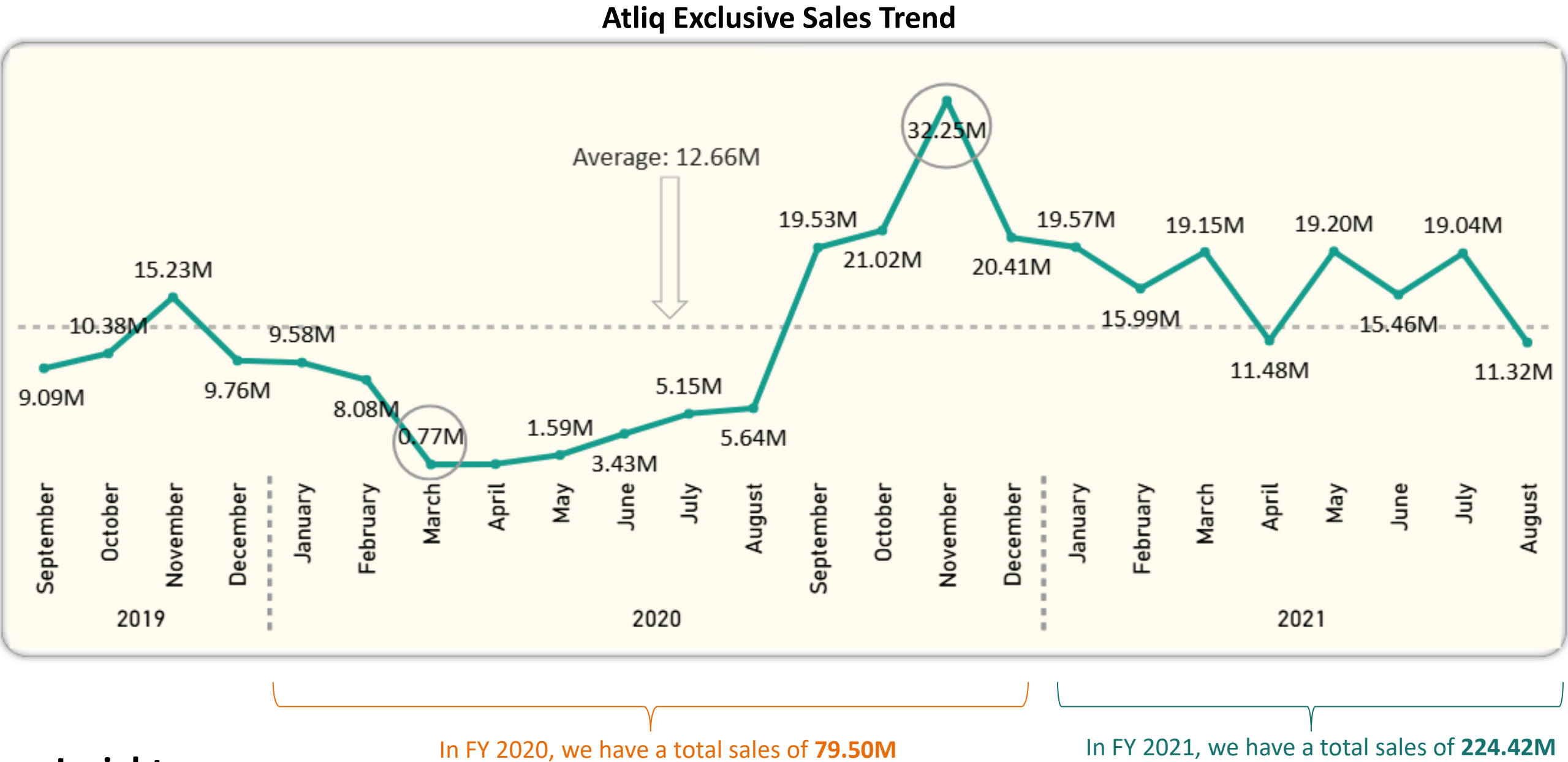
- 1. The **largest** average pre-invoice discount was given to **Flipkart**.
- 2. The **least** average pre-invoice discount was given to **Amazon**.



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	Year	Gross_Sales_Amount
▶	September	2019	9092670.34
	October	2019	10378637.60
	November	2019	15231894.97
	December	2019	9755795.06
	January	2020	9584951.94
	February	2020	8083995.55
	March	2020	766976.45
	April	2020	800071.95
	May	2020	1586964.48
	June	2020	3429736.57
	July	2020	5151815.40
	August	2020	5638281.83
	September	2020	19530271.30
	October	2020	21016218.21
	November	2020	32247289.79
	December	2020	20409063.18
	January	2021	19570701.71
	February	2021	15986603.89
	March	2021	19149624.92
	April	2021	11483530.30
	May	2021	19204309.41
	June	2021	15457579.66
	July	2021	19044968.82
	August	2021	11324548.34



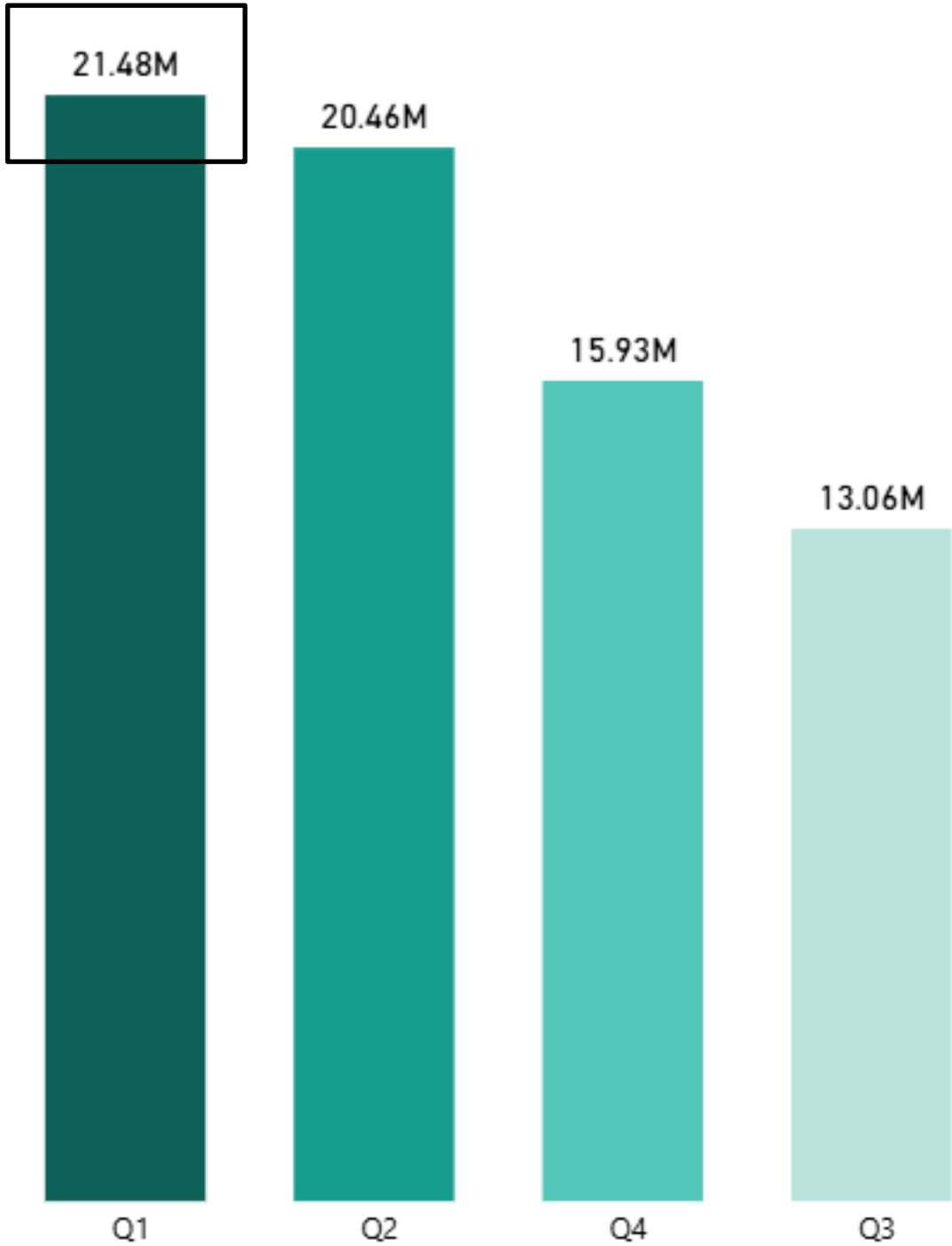
Insights:

- 1. November 2020 marked the highest sales.
- 2. March 2020 marked the lowest gross sales.
- 3. Lower sales between March and August are because of COVID-19
- 4. Sales increased quickly after August and reached the highest level since the last two years in November.

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		
	QUARTER	Total_sold_quantity_mln
▶	Q1	7.01 M
	Q2	6.65 M
	Q4	5.04 M
	Q3	2.08 M

Quarter 1 has the maximum total sold quantity



Insights:

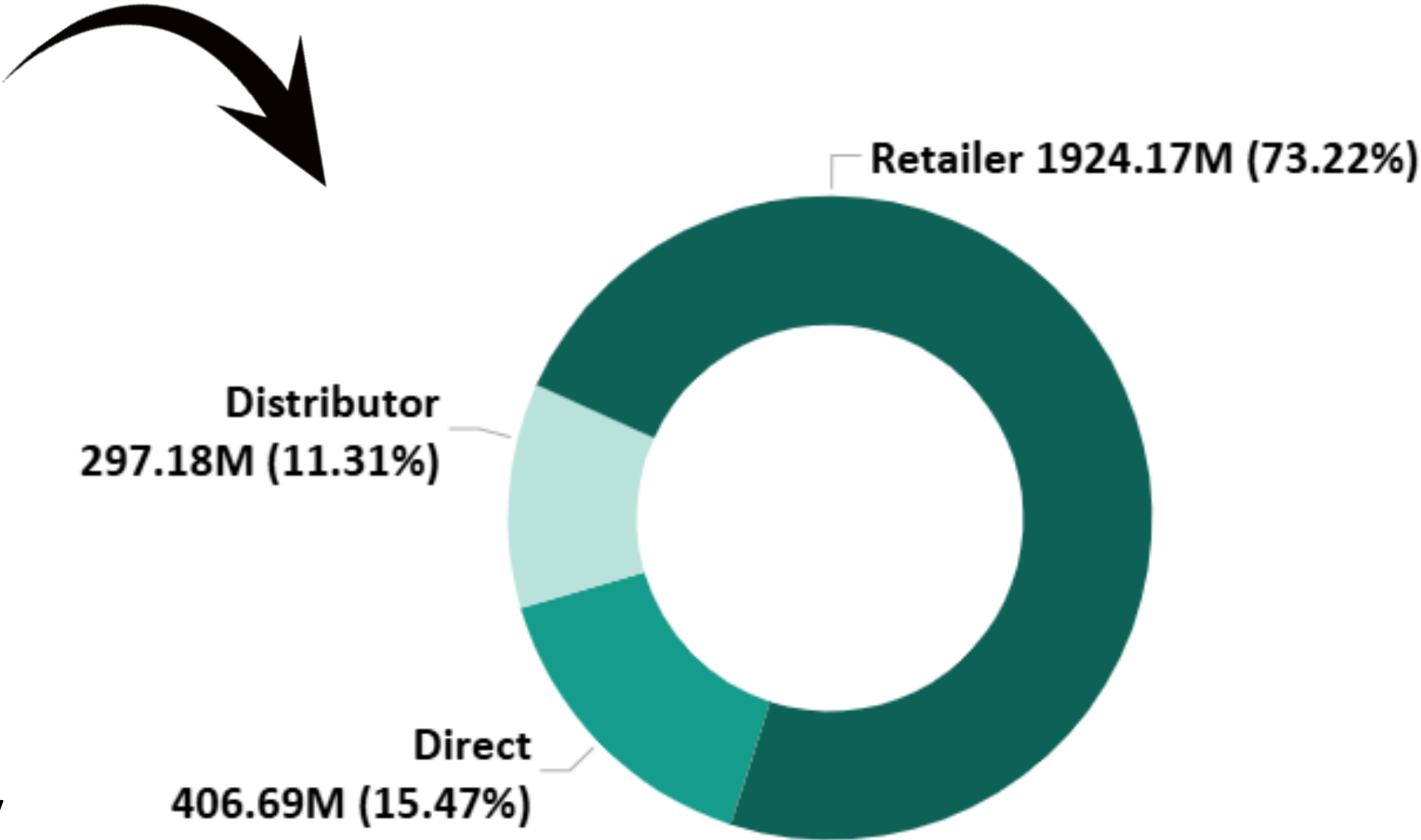
- 1. **Quarter 1** of FY2020 saw the most units sold overall, while **Quarter3** had the fewest
- 2. The sold quantity decreased to **2.1 million** in **quarter 3** of FY 2020,
- 3. Quarter1 accounts for approximately **34%** of the total sold quantity for FY2020.

Total sold quantity in **FY 2020** by **Quarter**

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	1924.17 M	73.22
	Direct	406.69 M	15.48
	Distributor	297.18 M	11.31



**Insights:**

- 1. Channel: "**Retailer** " helped bring maximum sales to the company with **73.22%** as the contribution percentage.
- 2. Channel: "**Distributor** " makes the least contribution at a percentage of **11.31%**.
- 3. Only a very **small percentage** of our sales happened through **direct** and **distributor** channels.

Gross sales and contribution percentages  
by **Channels** for **FY 2021**

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 .

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

Every division has a product with **different variants** that appears **twice** in the top three products by division list.

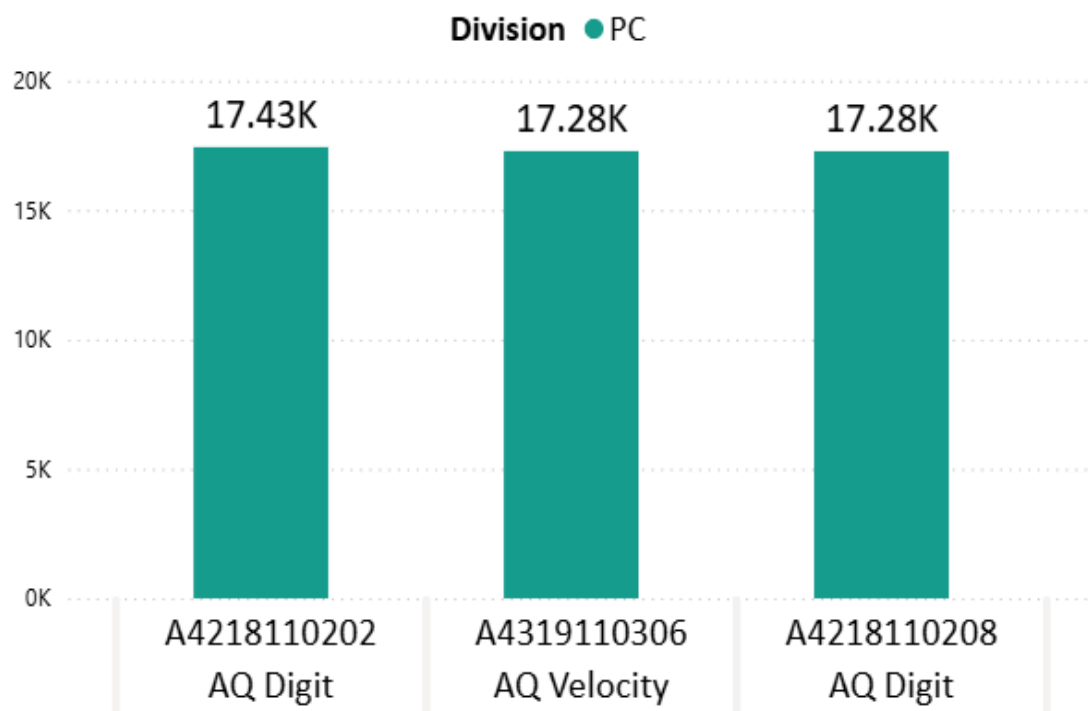
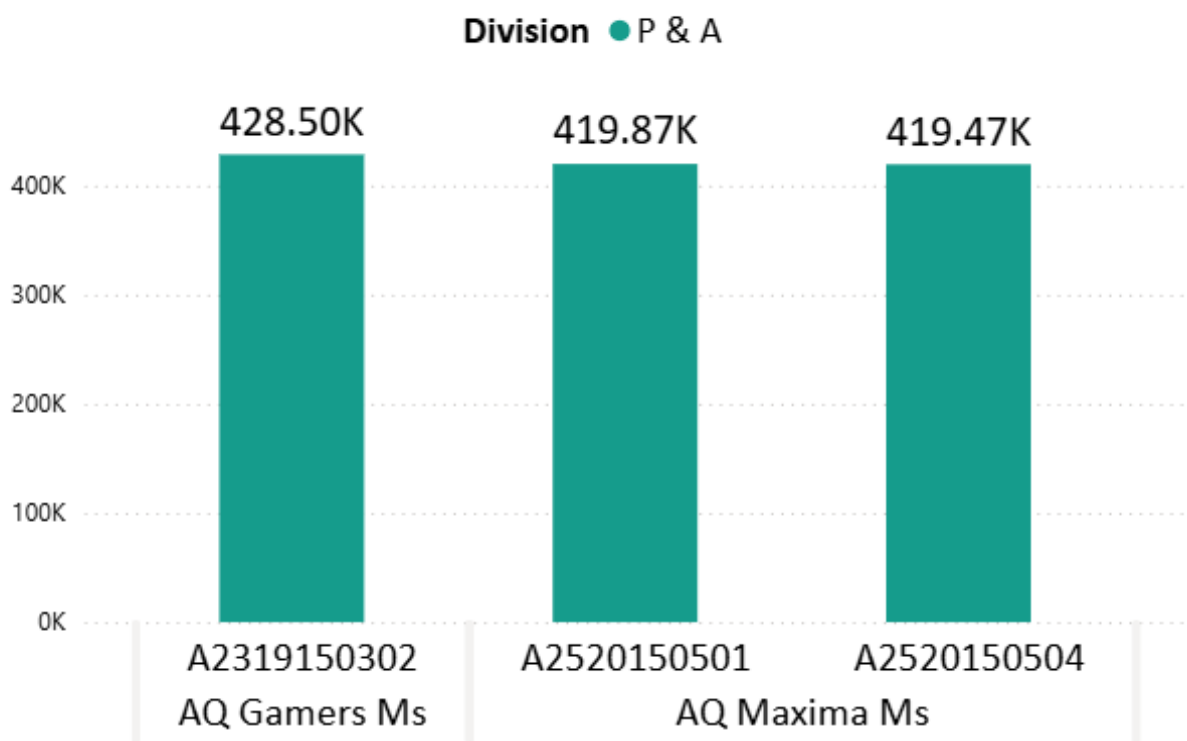
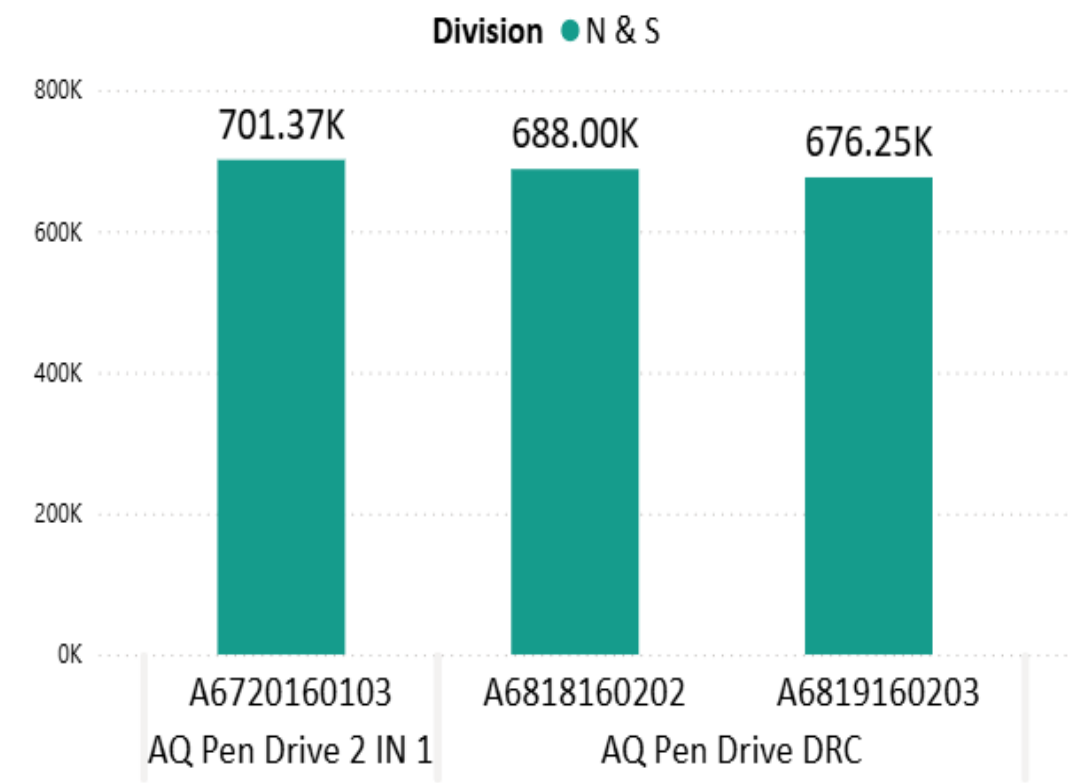


10. Get the Top 3 products in each division that have a high total\_sold\_quantity in the fiscal\_year 2021? The final output contains these fields: division, product\_code .

The **top 3** selling products in N&S were **pen drives**, which were around **7 lakh in quantity**.

The **top 3** selling products in P&A were **mouse**, which were around **4 lakh in quantity**.

The **top 3** selling products in PC were **personal laptops**, which were around **17000 in quantity**.



# THANK YOU

● FOR YOUR NICE ATTENTION

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