



**Atliq Hardware**

# **CONSUMER GOODS AD-HOC INSIGHTS**

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# AGENDA

**1** Getting familiar with Atliq's Business –  
Their Background , Markets and  
Product lines

**2** Understanding the input data

**3** Ad-hoc requests along with the  
queried results, visualizations and  
Insights



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# BACKGROUND

## Company Overview:

Atliq Hardwares, a prominent computer hardware producer in India,

## Context:

The management has identified a gap in their ability to quickly and effectively make data-driven decisions due to insufficient insights.

## Challenge:

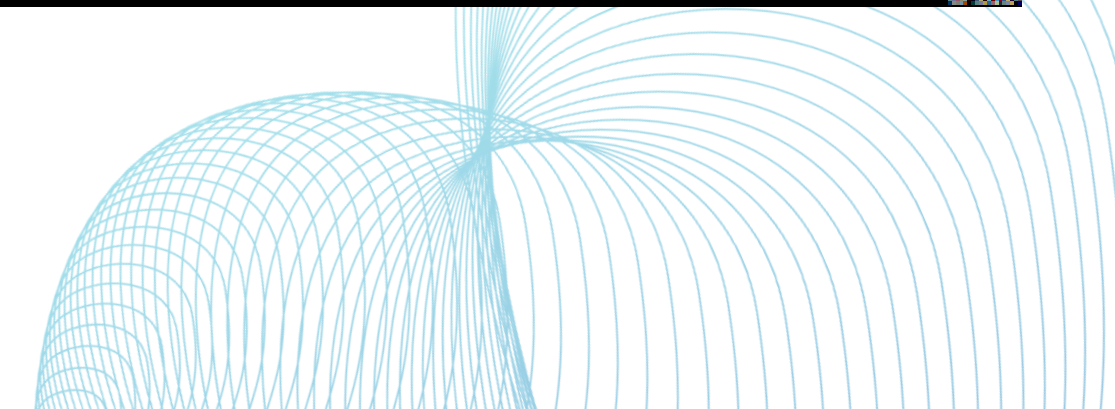
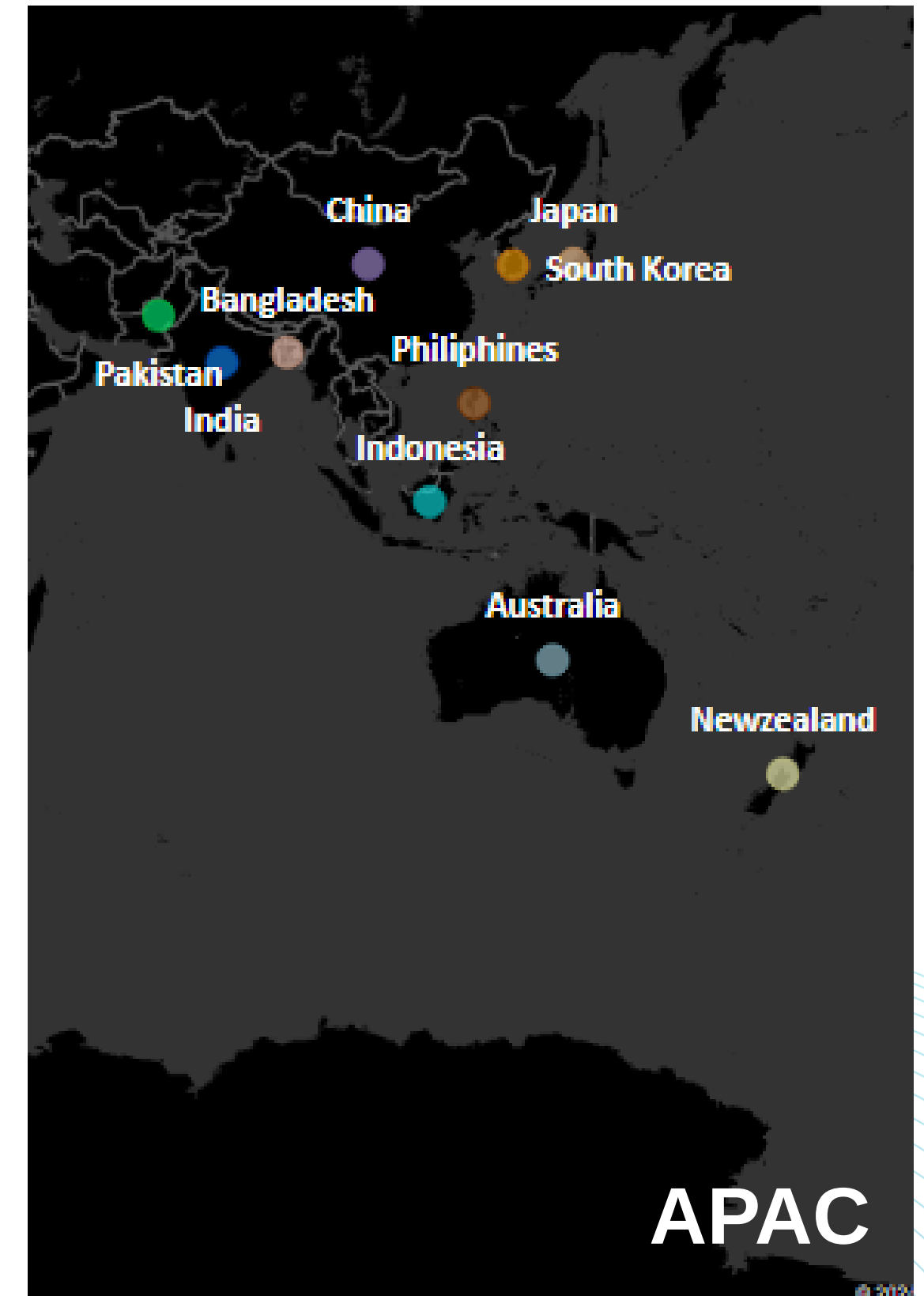
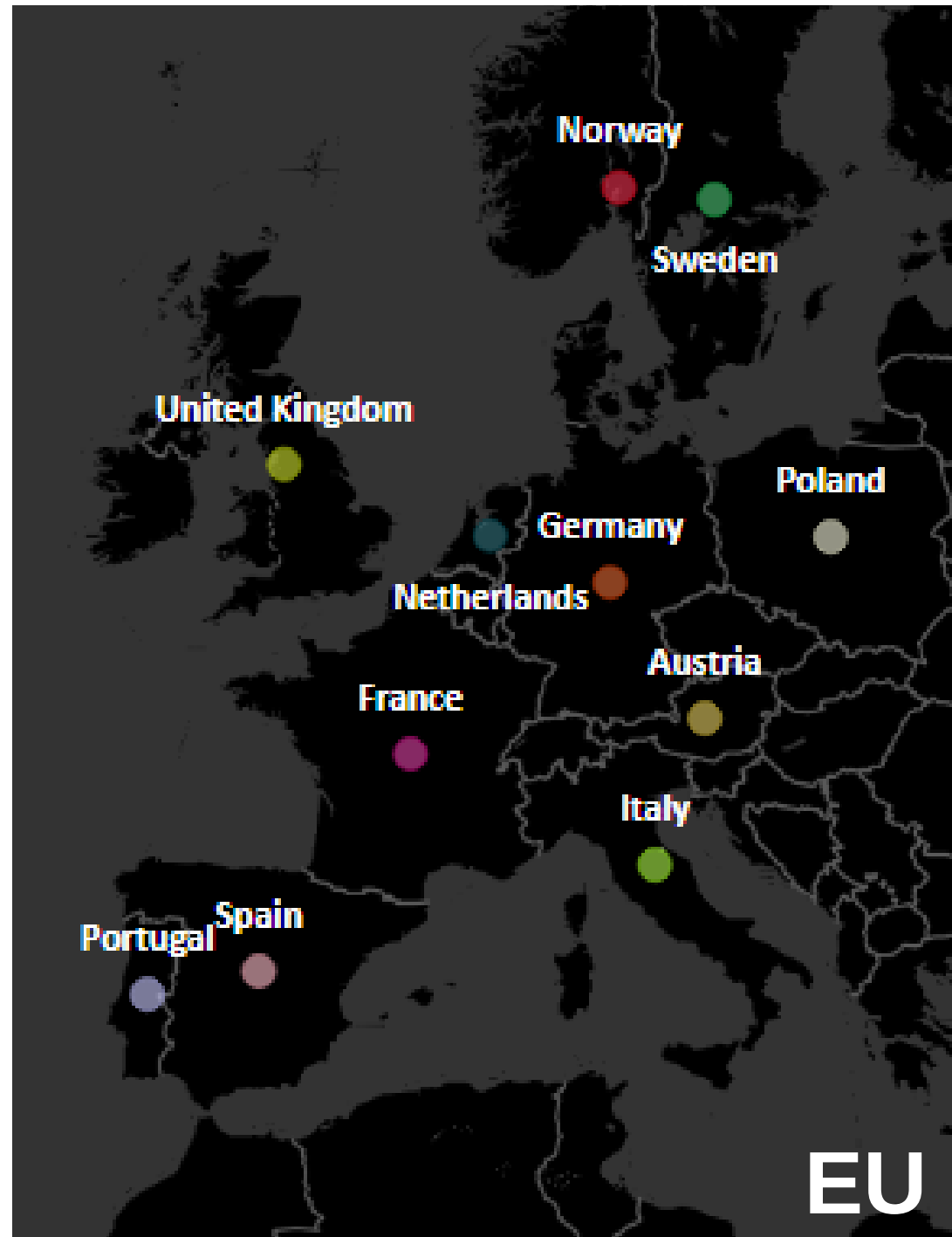
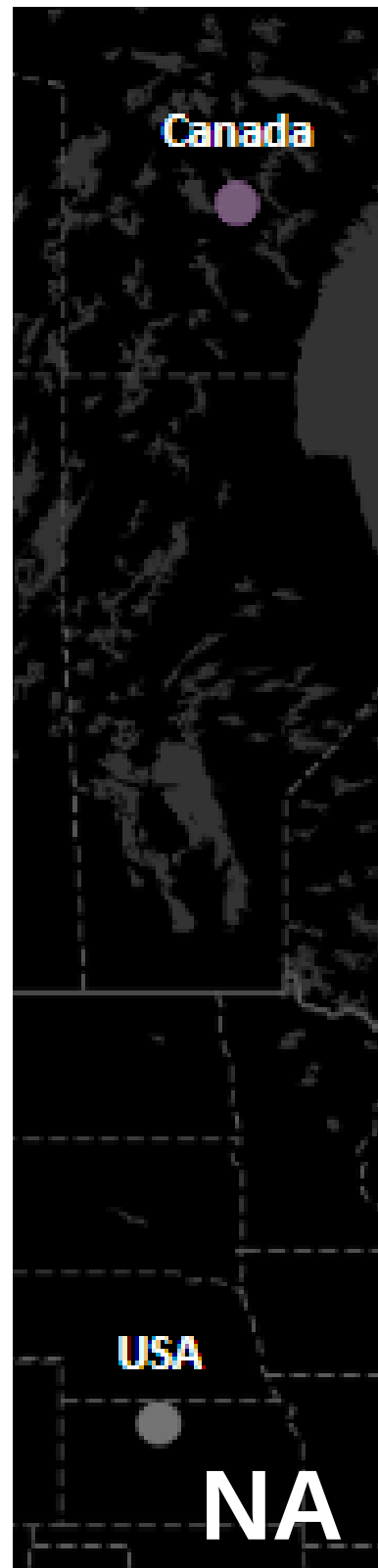
The company faces 10 ad-hoc requests requiring detailed insights.

## Strategy:

1. **Run SQL Queries:** Develop and execute SQL queries to extract the necessary data to address each request.
2. **Visualize Data:** Transform the query results into clear and informative visualizations.
3. **Present Insights:** Compile the visualizations into a comprehensive presentation to deliver actionable insights to top-level management.



# ATLIQ'S MARKET



# PRODUCT LINE

## PERSONAL COMPUTER (PC)

### DESKTOP

BUSINESS  
LAPTOP

PERSONAL  
LAPTOP

### NOTEBOOK

GAMING  
LAPTOP

BUSINESS  
LAPTOP

PERSONAL  
LAPTOP

## PERIPHERALS AND ACCESSORIES (P&A)

### PERIPHERALS

GRAPHIC  
CARD

INTERNAL  
HDD

MOTHER  
BOARD

PROCESSOR

### ACCESSORIES

BATTERIES

KEYBOARD

MOUSE

## NETWORK AND STORAGE (N&S)

### NETWORKING

WIFI  
EXTENDER

### STORAGE

EXTERNAL  
SSD

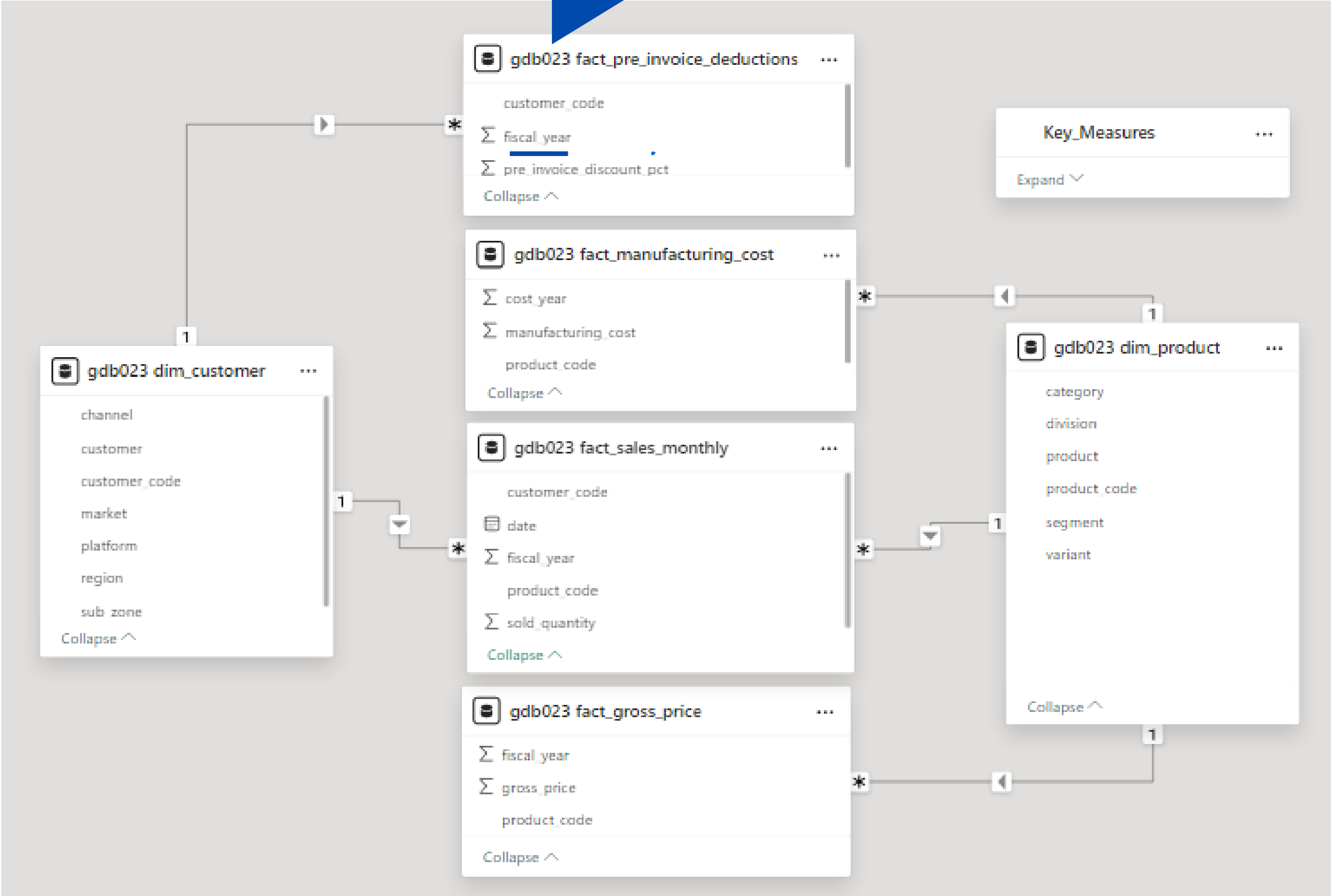
USB FLASH  
DRIVES

2

# UNDERSTANDING THE INPUT DATA

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

SEPTEMBER 2019 - AUGUST 2020 FY 2020  
SEPTEMBER 2020 - AUGUST 2021 FY 2021





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# AD -HOC REQUESTS, QUERIED RESULTS, INSIGHTS AND VISUALIZATION

## Codebasics SQL Challenge

### Requests:

1. Provide the list of markets in which customer "Atliq Exclusive" operates its business in the APAC region.
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
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
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
5. Get the products that have the highest and lowest manufacturing costs. The final output should contain these fields,  
product\_code  
product  
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
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
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
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
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

codebasics.io

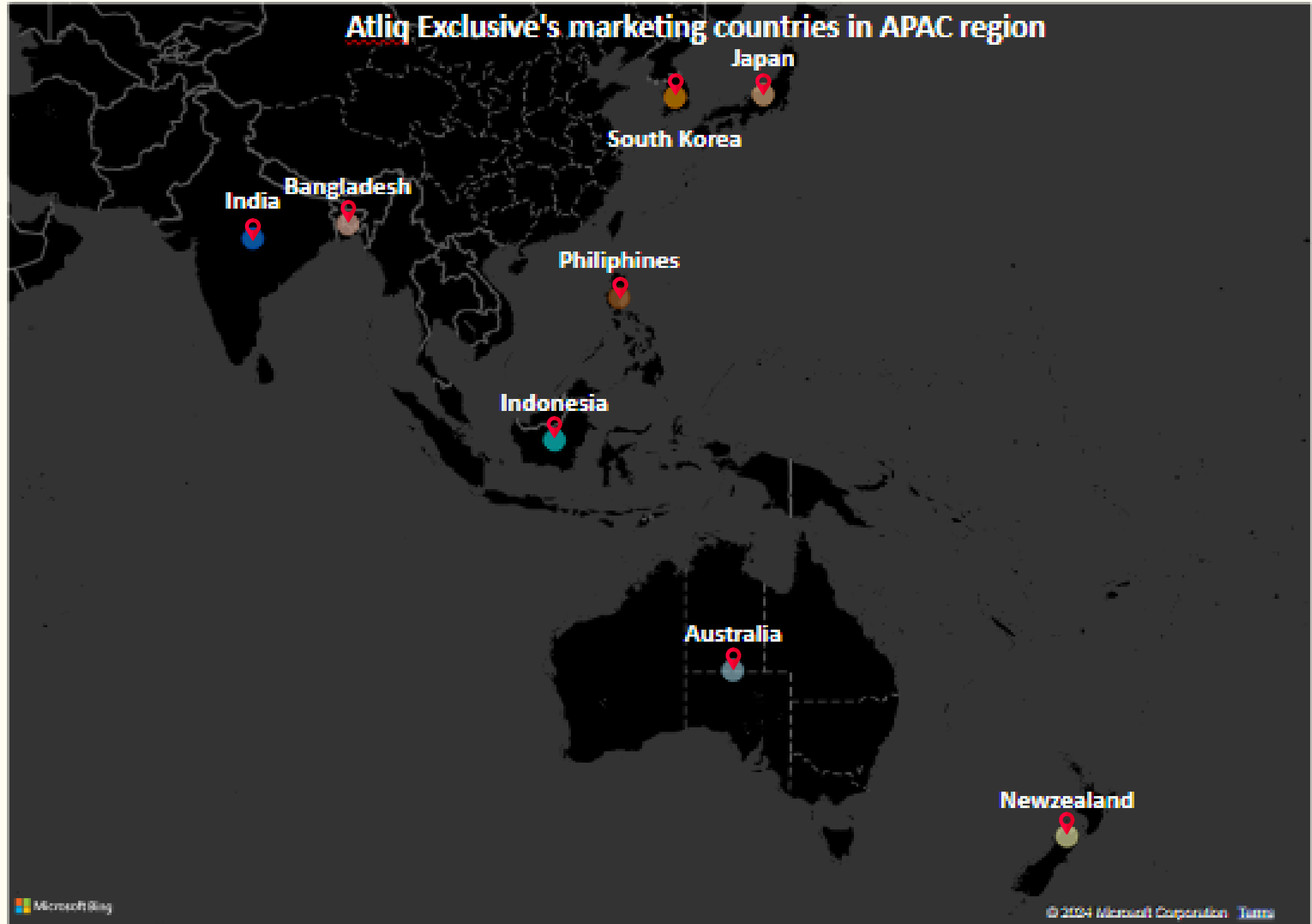
codebasics.io



# REQUEST : 1

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

market
India
Indonesia
Japan
Philippines
South Korea
Australia
Newzealand
Bangladesh



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

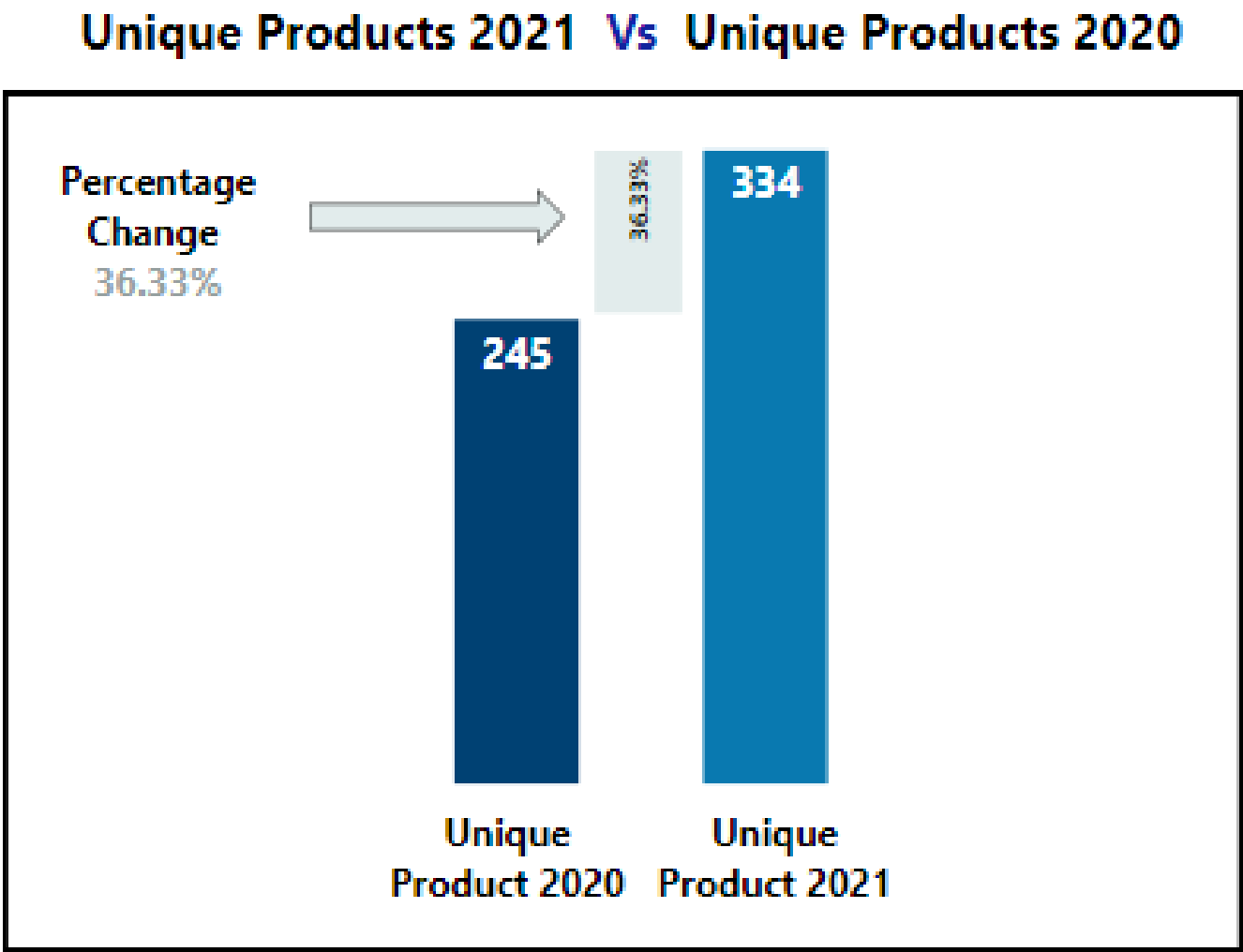


# REQUEST : 2

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

unique_products_2020	unique_products_2021	percentage_chg
245	334	36.33



Our product range expanded by 36%, from 245 in FY 2020 to 334 in FY 2021, showcasing **increase in demand and production**

# 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,

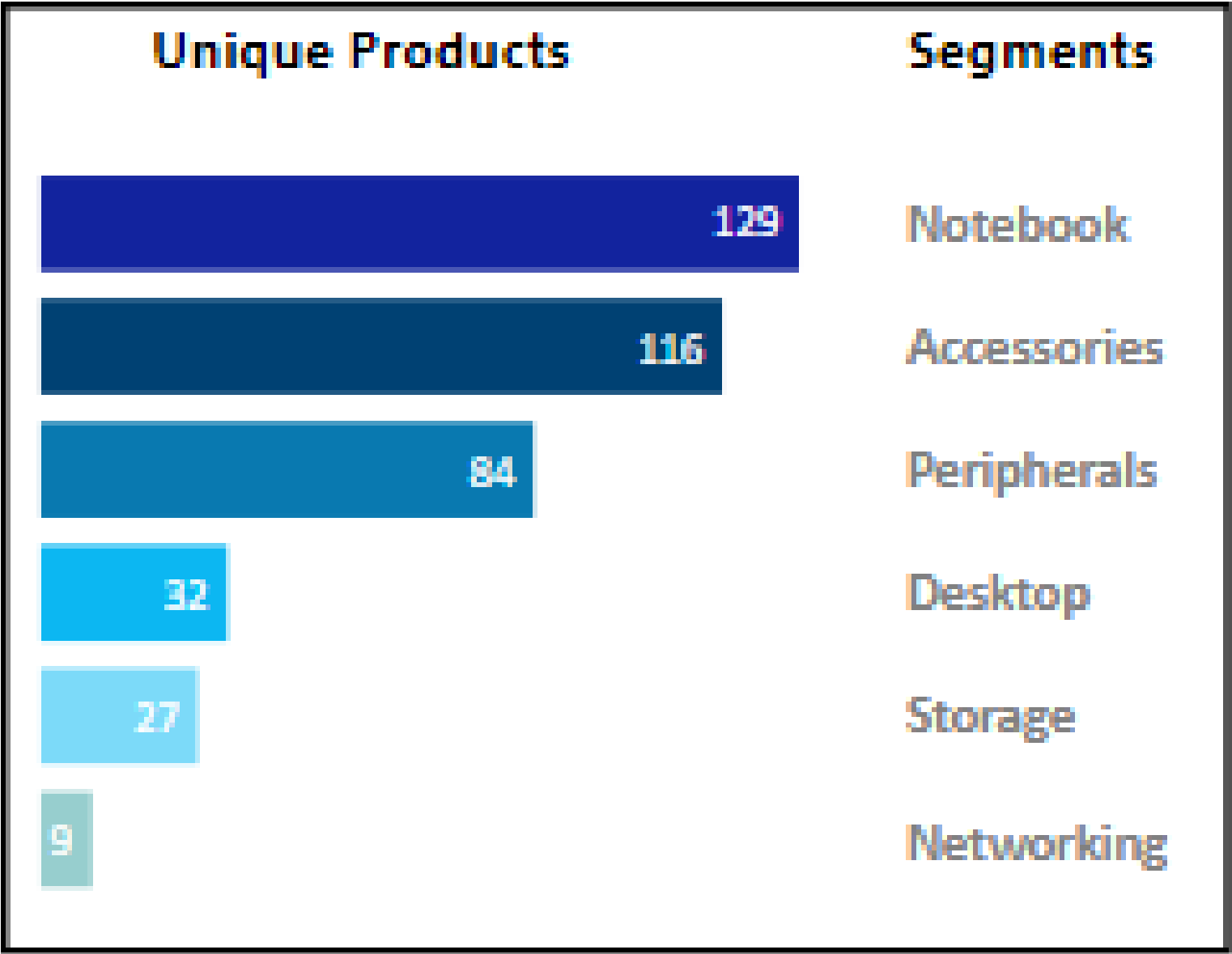
segment

product\_count

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



## Unique product counts for each segment



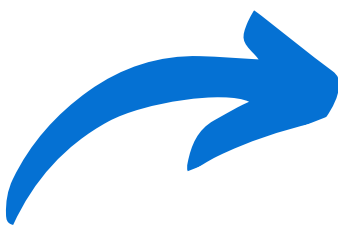
Notebooks, accessories, and peripherals are demonstrating substantial growth in manufacturing, significantly outpacing desktops, storage, and networking. These categories now account for 83% of our total manufactured products.

# REQUEST : 4

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

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



Unique product difference per segment from 2020 to 2021

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 ▲

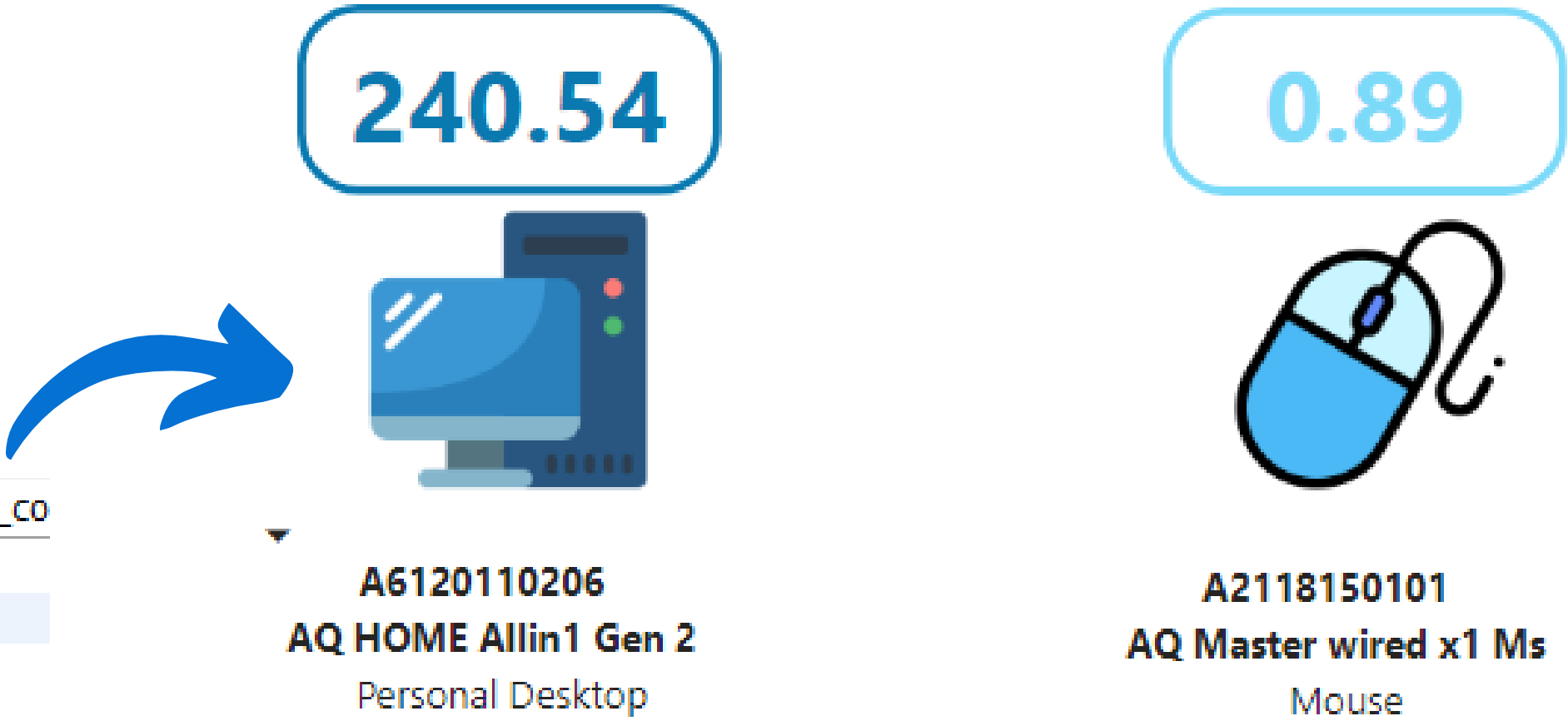
Accessories have had the highest production growth, while storage and networking are growing at a slower pace compared to other segments.



# 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

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



Product code & Product

The Mouse: AQ Master Wired x1 Ms (Variant: Standard1) has the lowest manufacturing cost, while the Personal Desktop: AQ Home All-in-1 Gen2 (Variant: Plus3) has the **highest**.

# 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

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



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

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

Flipkart received the largest average pre-invoice discount, while Amazon received the smallest.

# 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:

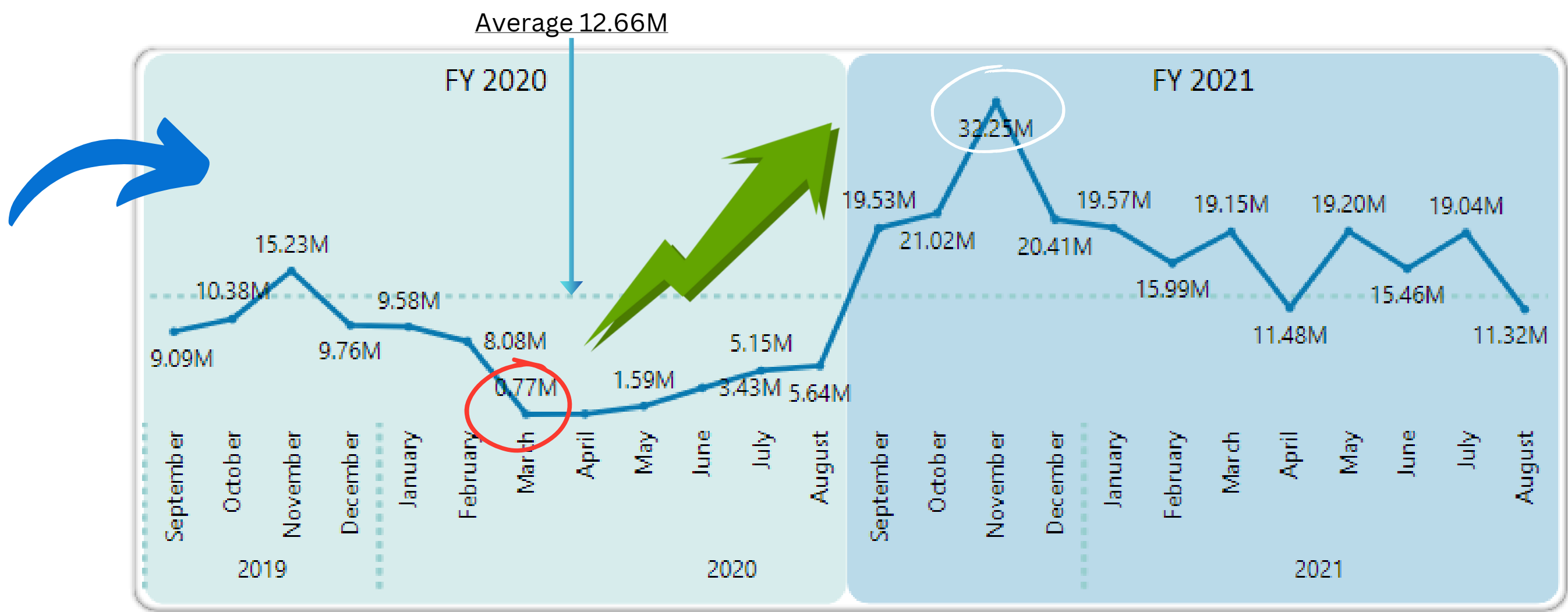
months	year	gross_sales
September	2019	9.09M
October	2019	10.38M
November	2019	15.23M
December	2019	9.76M
January	2020	9.58M
February	2020	8.08M
March	2020	0.77M
April	2020	0.80M
May	2020	1.59M
June	2020	3.43M
July	2020	5.15M
August	2020	5.64M
September	2020	19.53M
October	2020	21.02M
November	2020	32.25M
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

FY 2020

79.5 M

FY 2021

224.4 M



Gross sales amount report for **Atliq Exclusive** by month

For Atliq Exclusive, **November 2020** saw the **peak in sales**, whereas **March 2020** recorded the lowest figures. The reduction in sales from March through August is clearly linked to the **COVID-19 pandemic** and **Global Chip Shortage** which arised due to disruptions in supply chain and logistic . Notably, **sales rebounded strongly after August**, reaching their **highest level in two years by November**.



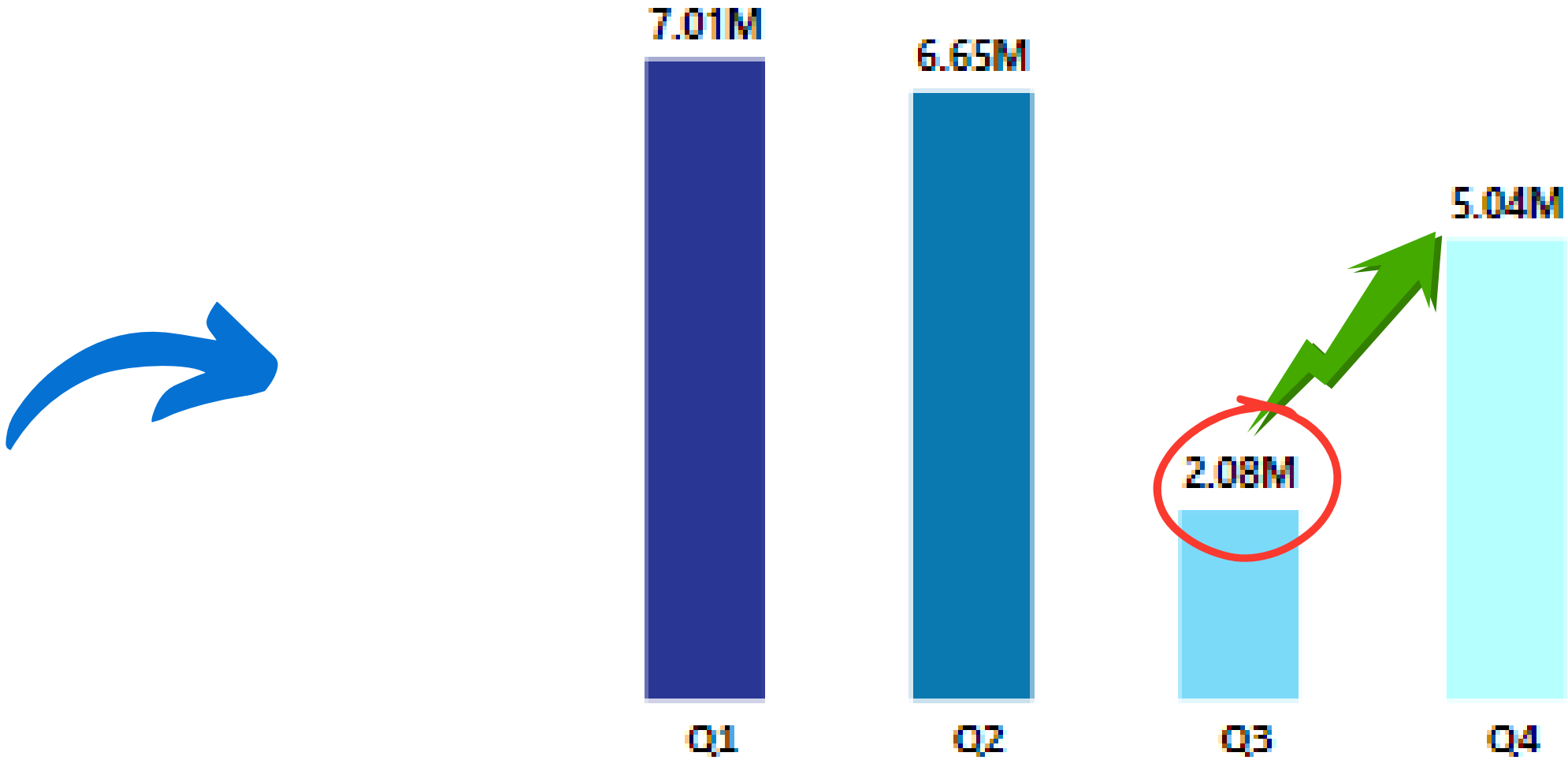
# REQUEST : 8

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

total\_sold\_quantity

quarters	total_quantity_sold
Q1	7.01 M
Q2	6.65 M
Q4	5.04 M
Q3	2.08 M

Total sold quantity in FY 2020 by Quarter



This further supports our earlier analysis of COVID-19's effect on sales. In Q3 of FY 2020—comprising March, April, and May, when the pandemic was most severe—sales volumes fell to 2.1 million. Despite the pandemic's persistence, we began to recover quickly. This early rebound in Q4 is likely due to the increased demand for hardware like desktops and notebooks, as students transitioned to online learning, leading to a significant rise in the need for computer accessories.

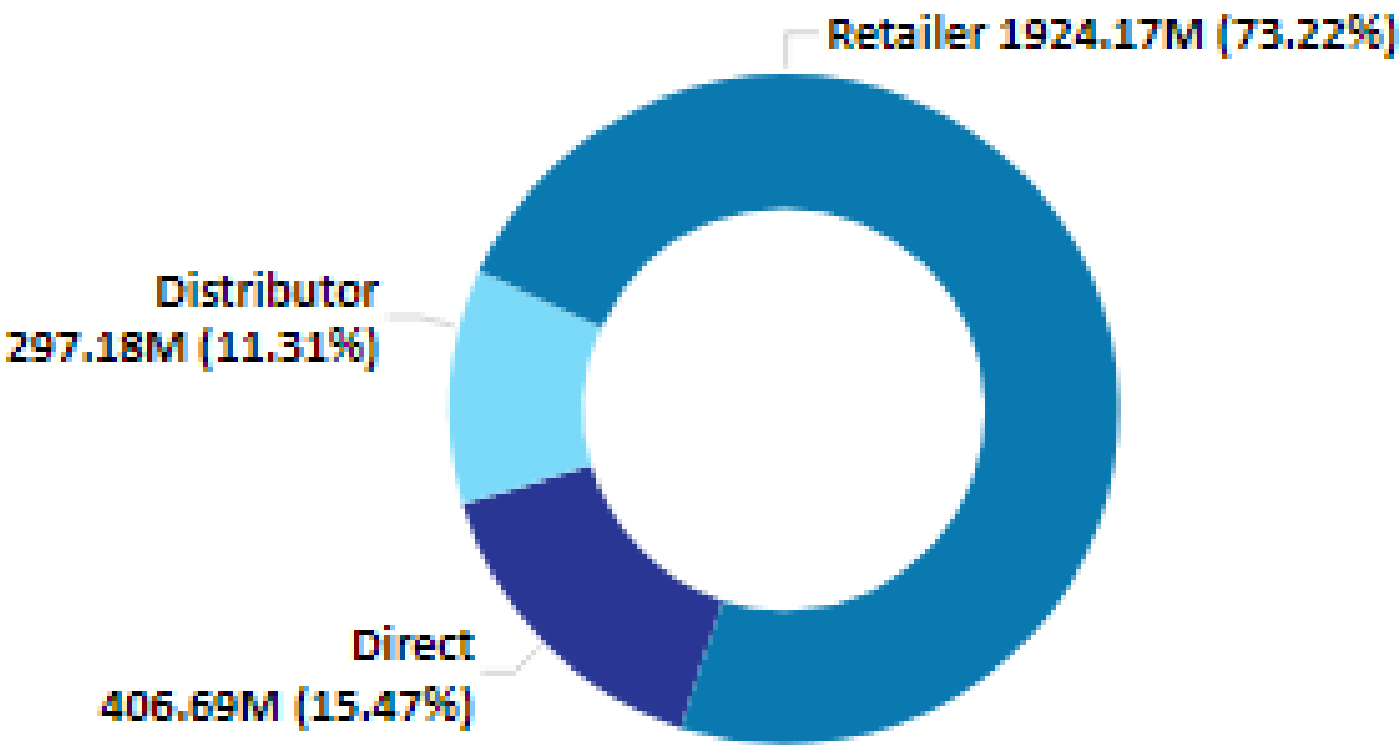
# REQUEST : 9

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

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



Gross sales and contribution percentages by Channels for FY 2021



The **Retailer** channel contributed the most to the company's sales, accounting for **73.22% of total sales**.  
In contrast, the **Distributor** channel contributed the least, with a percentage of 11.31%.

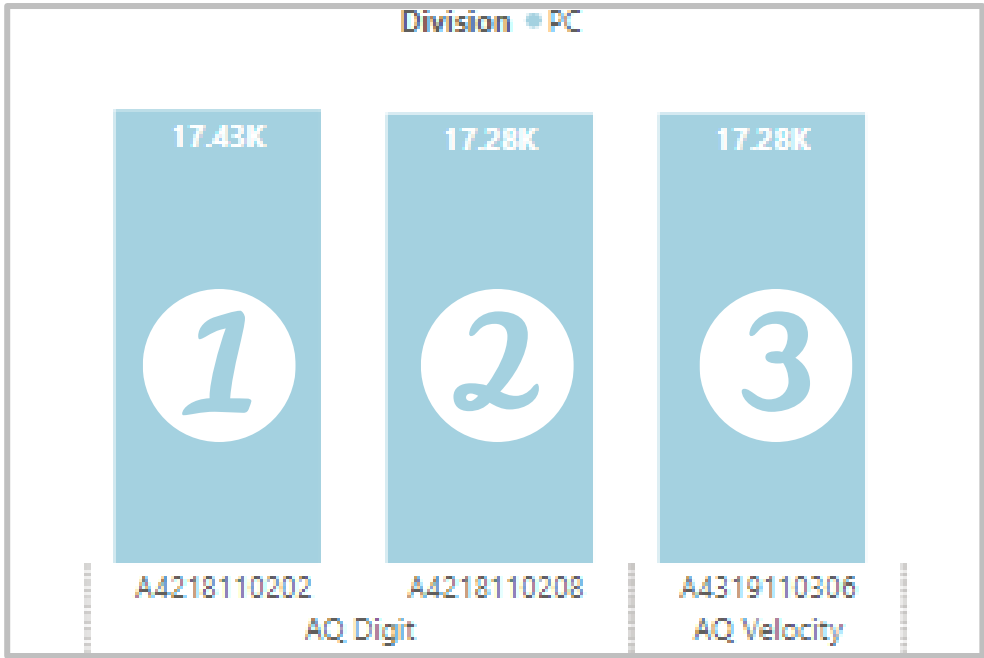
# REQUEST : 10

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,

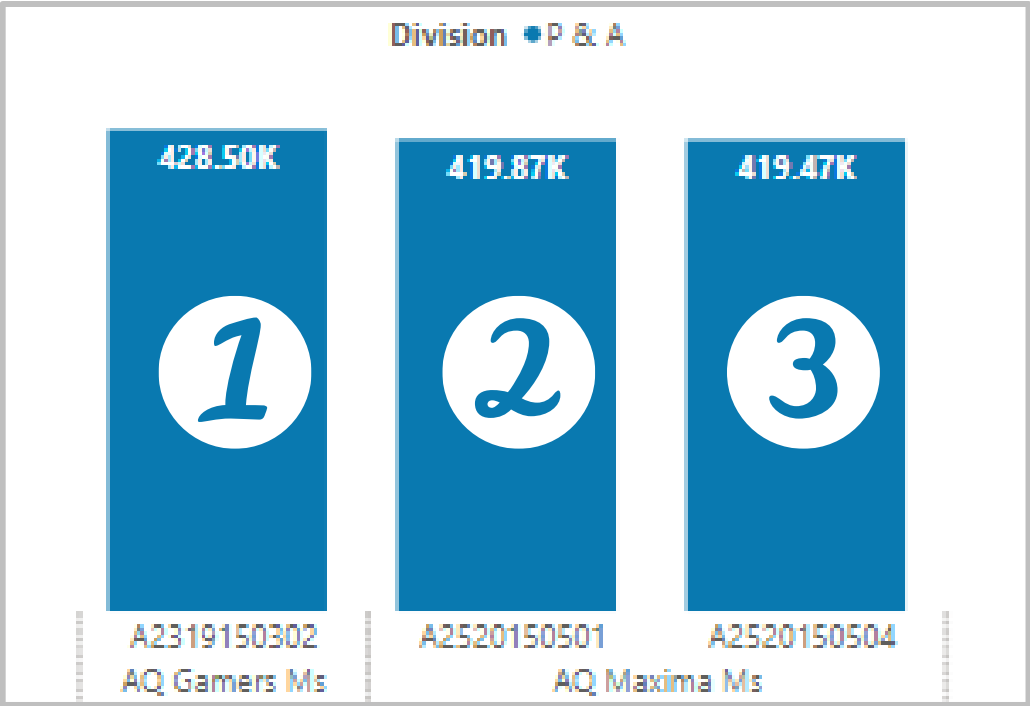
- division
- product\_code
- product
- total\_sold\_quantity
- rank\_order



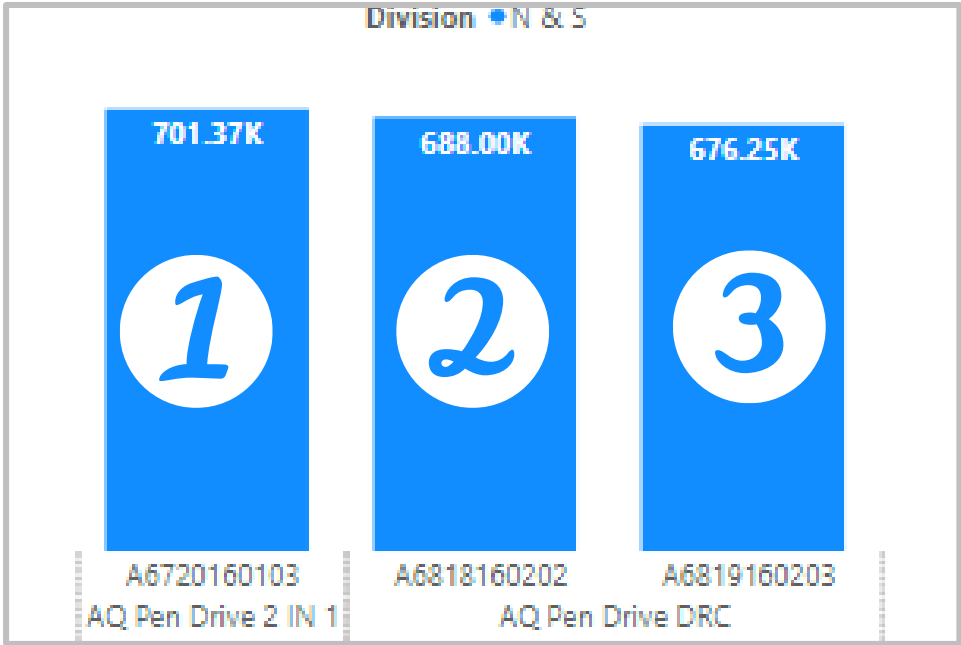
The top 3 selling products in P&A were mouse, which were around 4 lakh in quantity.



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



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



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



# THANK YOU!

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