



# CONSUMER GOODS AD\_HOC INSIGHTS



DOMAIN: CONSUMER GOODS  
FUNCTION: EXECUTIVE MANAGEMENT



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# CONTENT

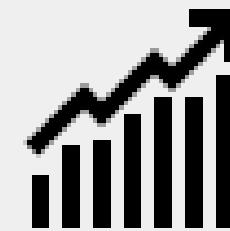


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- 04** QUERIES ,INSIGHTS & VISUALISATIONS
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# OBJECTIVES



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

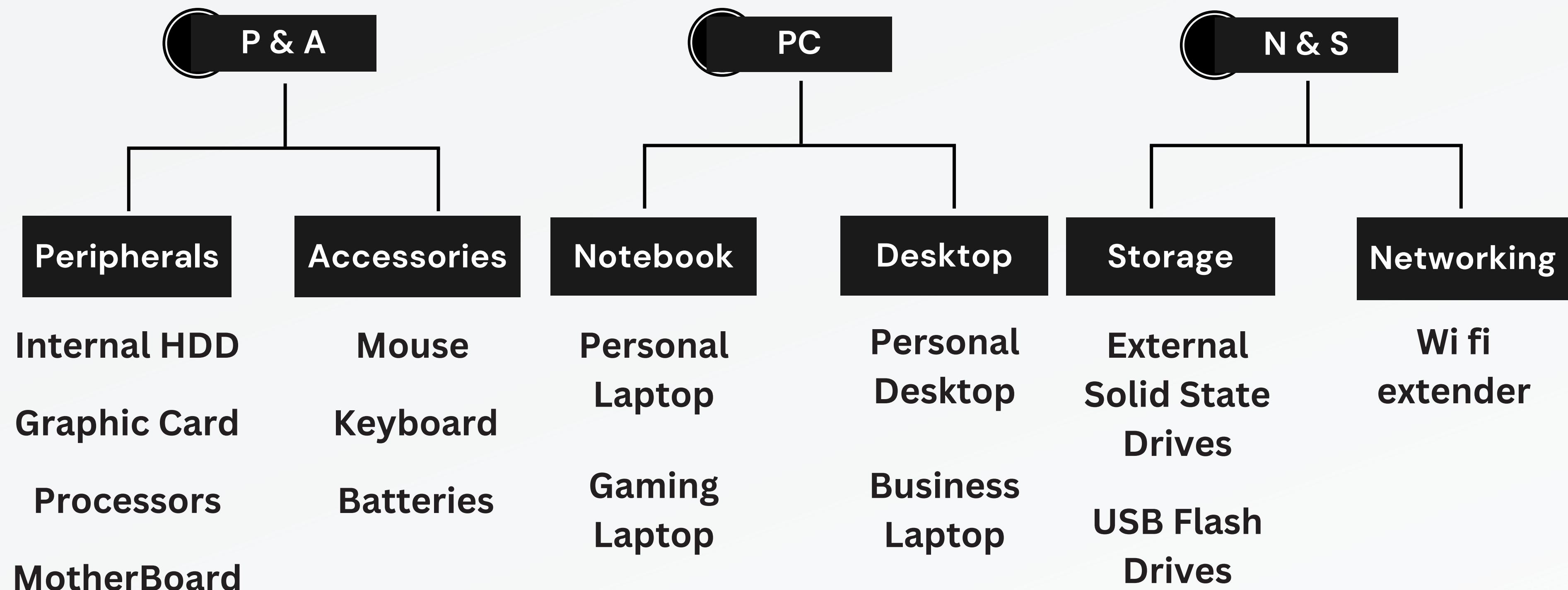


However, the management noticed that they do not get enough insights to make quick and smart data-informed decisions. They want to expand their data analytics team by adding several junior data analysts.

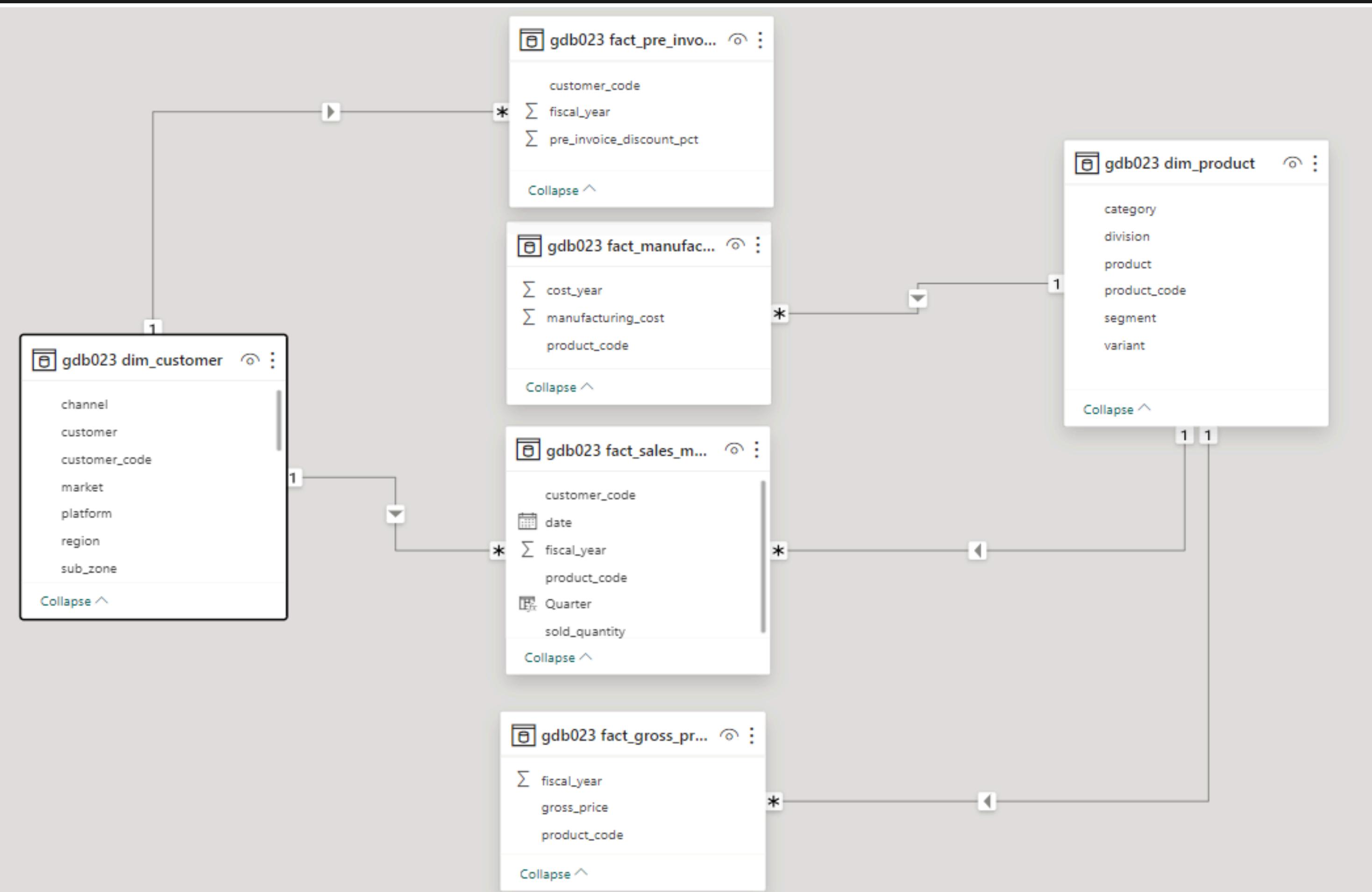


Tony Sharma, their data analytics director wanted to hire someone who is good at both tech and soft skills. Hence, he decided to conduct a SQL challenge which will help him understand both the skills.

# ATLIQ HARDWARES PRODUCTS



# ENTITY RELATIONSHIP DIAGRAM(ERD)



## Request

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

*Output*

market

Australia

Bangladesh

India

Indonesia

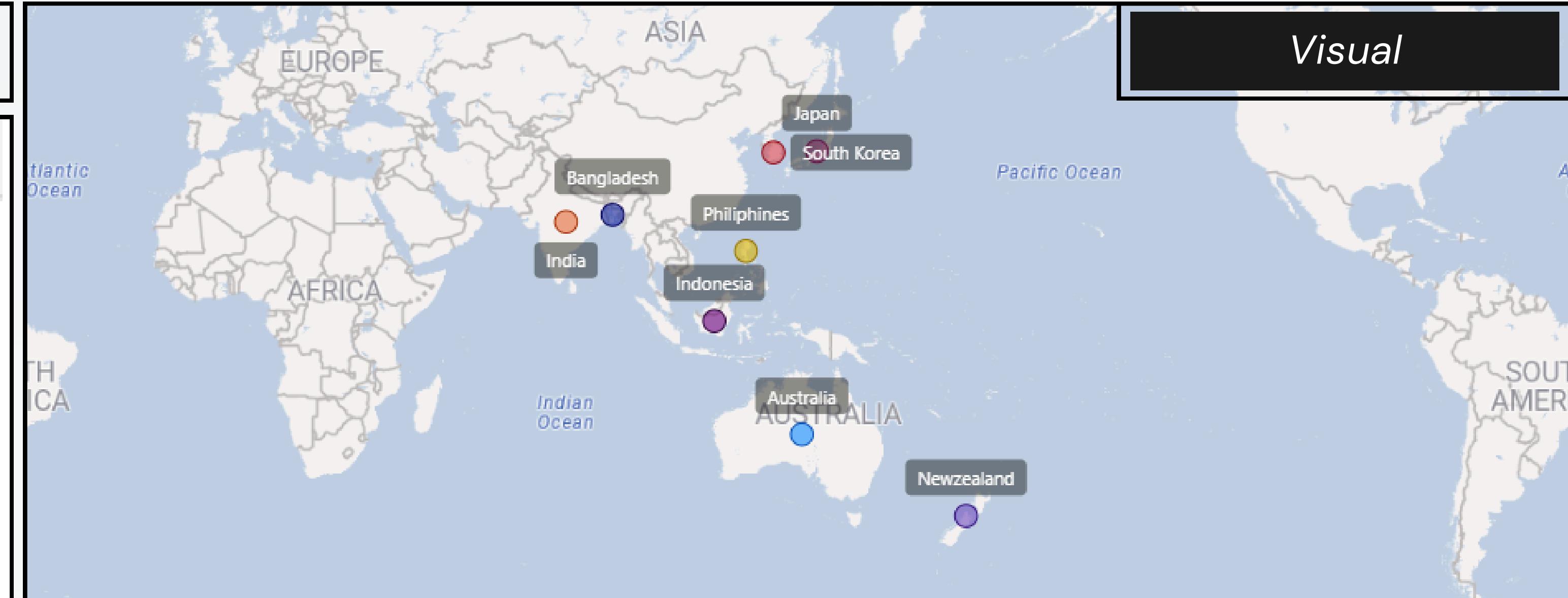
Japan

Newzealand

Philippines

South Korea

*Visual*



*Insights*

The customer "Atliq Exclusive" operates its business in the **APAC** region across **8 different markets**.

## Request

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**

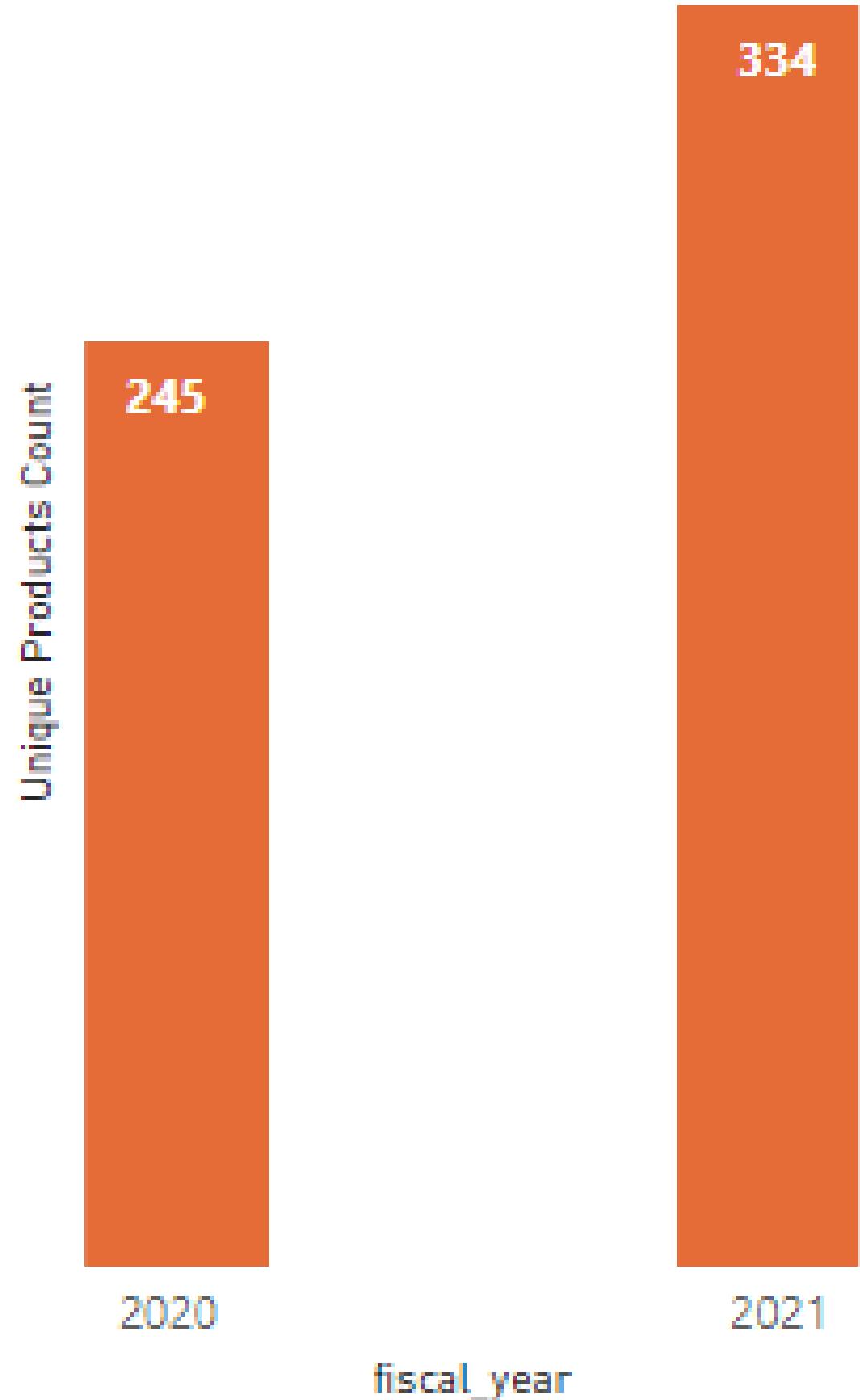
## Output

unique_products_2020	unique_products_2021	percentage_chg
245	334	36.33

## Insights

In fiscal year 2020, Atliq Hardwares had **245** unique products, which increased to **334** in 2021, reflecting a growth rate of **36.33%**.

## Visual



## Request

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,

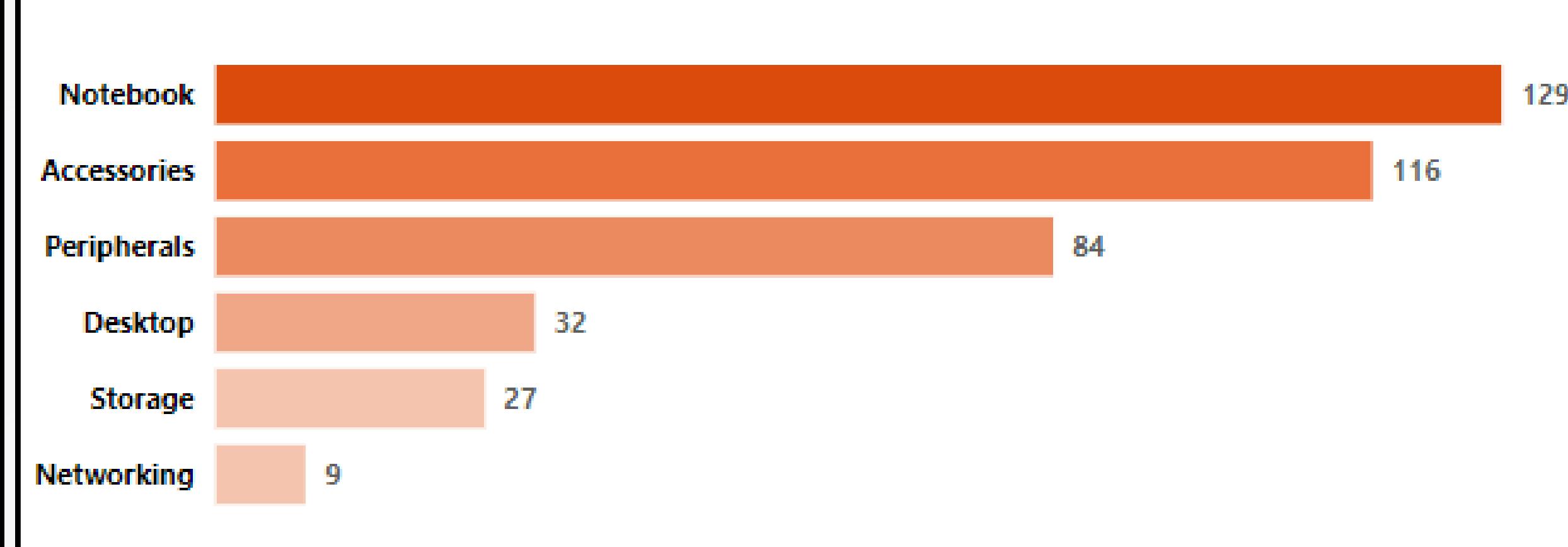
**segment**

**product\_count**

*Output*

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

*Visual*



*Insights*

At Atliq Hardwares, they offer a wide range of **notebooks**, **accessories** and **peripherals**. But they should consider expanding their offerings in **desktops**, **networking**, and **storage** categories along with focusing on increasing the sales of portable items.

## Request

Which segment had the most increase in unique products in 2021 vs 2020? The final output contains these fields,

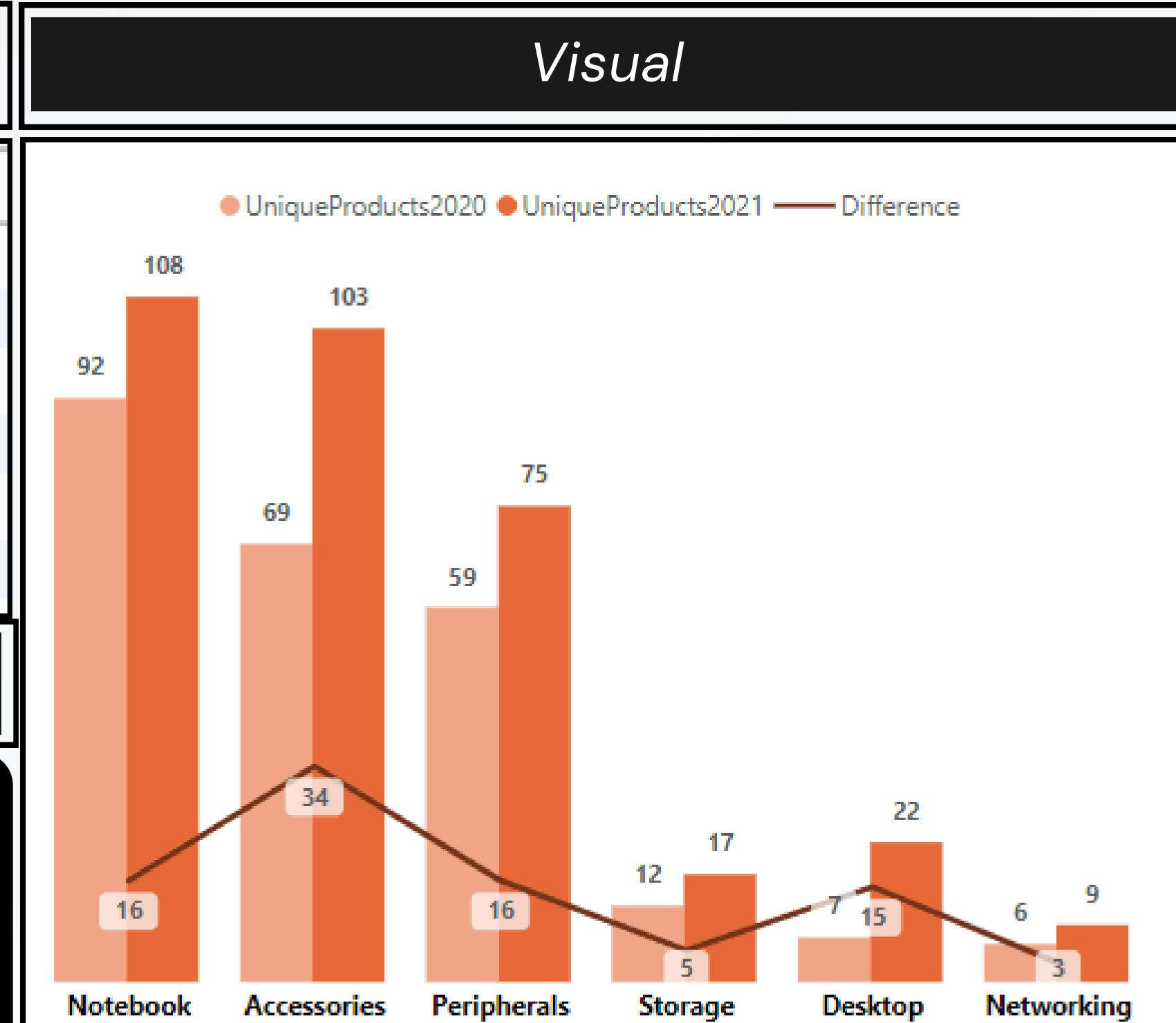
segment  
product\_count\_2021

product\_count\_2020  
difference

## Output

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

## Visual



## Insights

Altiq experienced a noteworthy **34-product increase** in its **Accessories** segment from 2020 to 2021, reflecting substantial expansion within just one year.

## Request

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

The final output should contain these fields,

**product\_code**

**product**

**manufacturing\_cost**

**Output**

**Visual**

Highest Manufacturing Cost

240.54

Lowest Manufacturing Cost

0.89

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

Product with Highest...

AQ HOME Allin1 Gen 2

Product with Lowest...

AQ Master wired x1 Ms

**Insights**

At Atliq Hardwares, **AQ HOME Allin 1 Gen 2** has the highest manufacturing cost where as **AQ MAster wiredx1 Ms** has the lowest manufacturing cost

## Request

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

	<b>customer_code</b>	<b>customer</b>	<b>average_discount_percentage</b>
▶	90002009	Flipkart	0.3083
	90002006	Viveks	0.3038
	90002003	Ezone	0.3028
	90002002	Croma	0.3025
	90002016	Amazon	0.2933

### Visual

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

### Insights

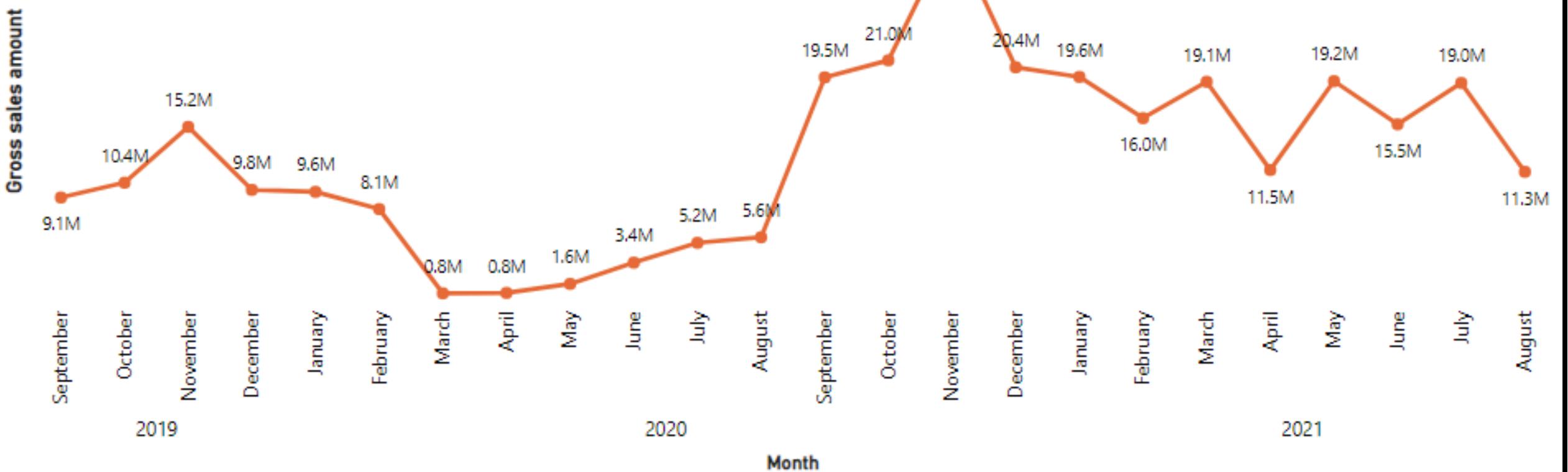
Atliq Hardware offers varying discount percentages to its customers, with **Flipkart** having the highest average discount percentage of **30.83%**, closely followed by **Viveks , Ezone,Croma and amazon.**

# Request

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
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## Visual



## Insights

**Atliq Exclusive** saw lowest sales during **March FY 2020** which is during Covid-19 and got highest sales during **November FY 2021**

# Output

month	fiscal_year	Gross_sales_Amount
September	2020	9092670.34
October	2020	10378637.60
November	2020	15231894.97
December	2020	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	2021	19530271.30
October	2021	21016218.21
November	2021	32247289.79
December	2021	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

## Visual



## Insights

It can be observed that not only AltIQ Exclusive, but also everyone else experienced **low sales from March to August** due to COVID-19. However, they saw a significant increase in demand, resulting in decent sales afterward.

## Request

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**

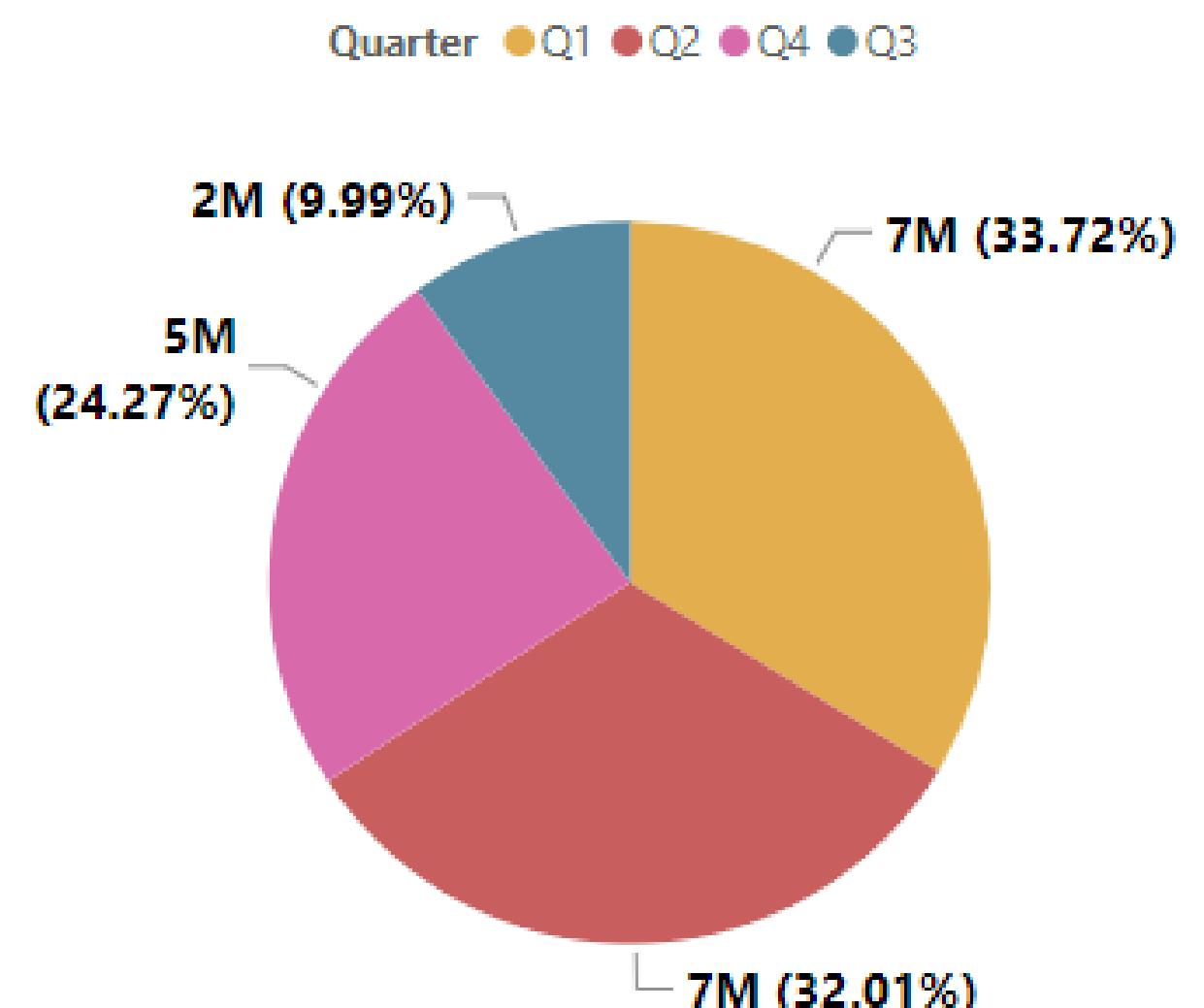
*Output*

	quarter	total_sold_quantity
▶	Q1	7005619
	Q2	6649642
	Q4	5042541
	Q3	2075087

*Insights*

- Q1 got the **maximum total\_sold\_quantity** which is **7M**.
- The emergence of **COVID-19** led to a significant decline in sales, dropping from **6.6 million units** in **Q2** to **2 million units** in **Q3**
- However, the increasing demand for remote work and online activities drove sales to rebound, reaching **5 million units** in **Q4**.

*Visual*



## Request

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

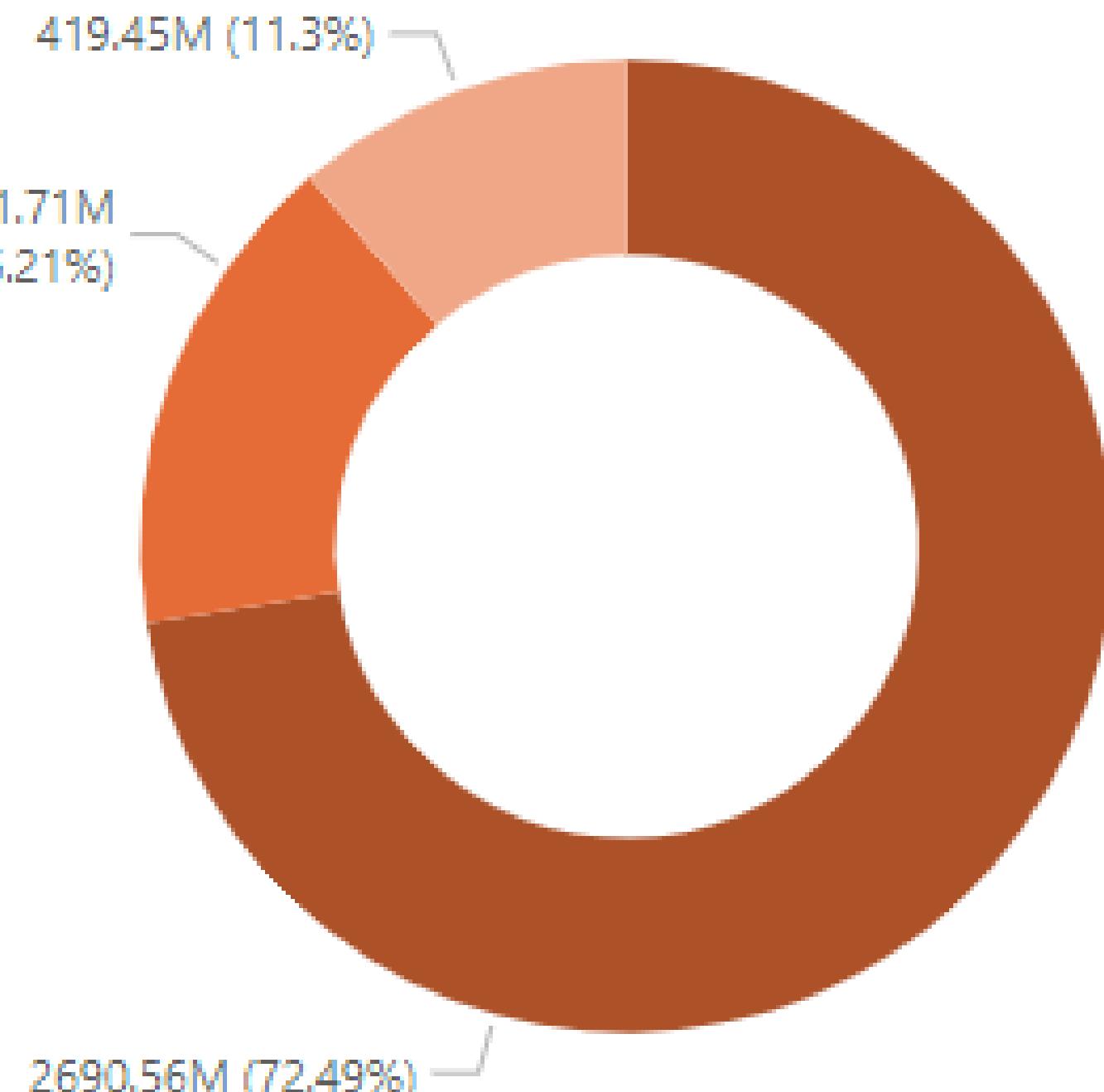
	channel	gross_sales_mln	percentage
▶	Retailer	19241.70	73.22
	Direct	4066.87	15.47
	Distributor	2971.76	11.31

## Insights

In **2021**, sales from **retailers** accounted for a large portion, approximately **73%** of total sales. Meanwhile, sales through direct channels and distributors were about similar.

## Visual

● Retailer ● Direct ● Distributor



## Request

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,

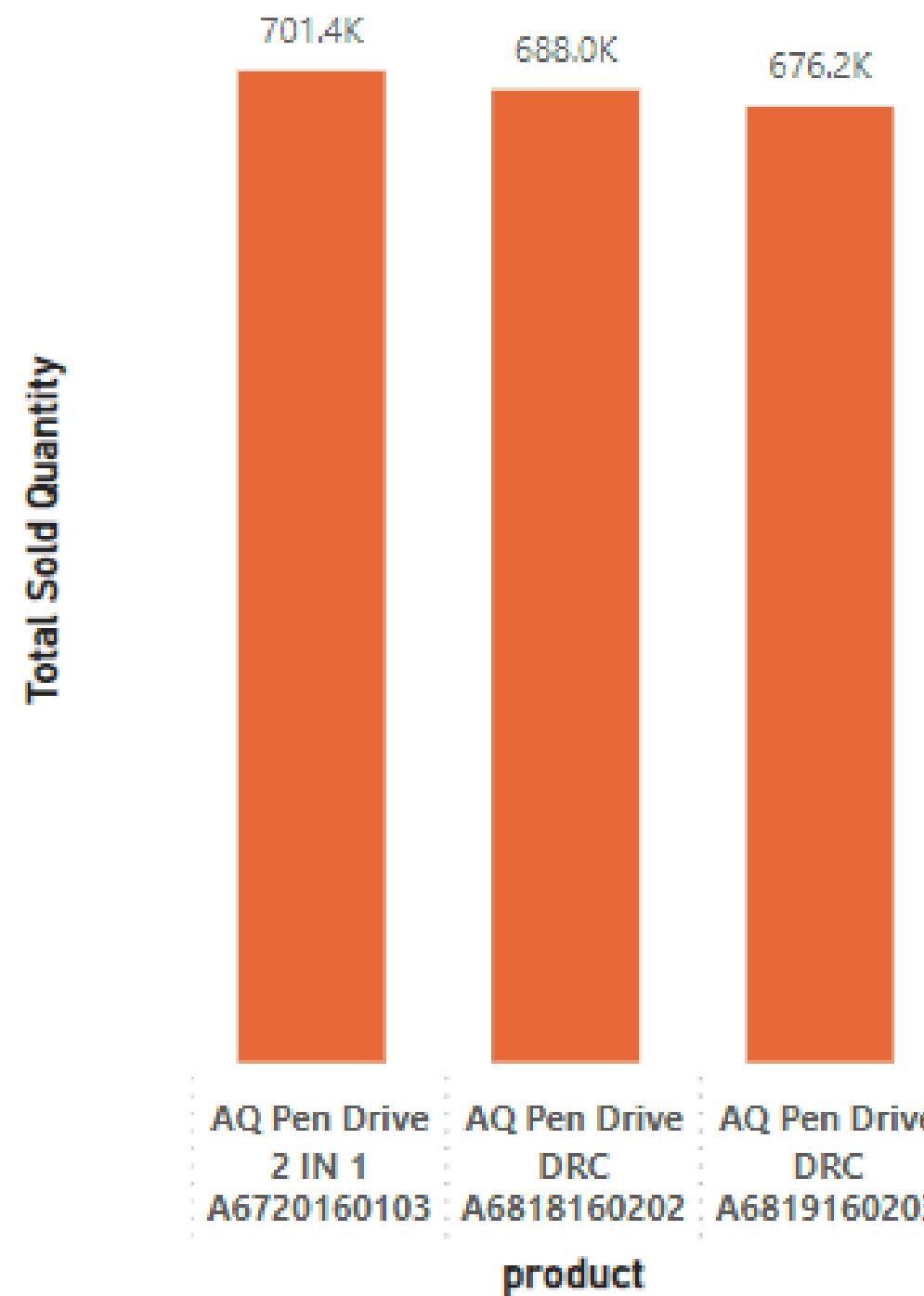
division	product_code	product
total_sold_quantity	rank_order	

## Output

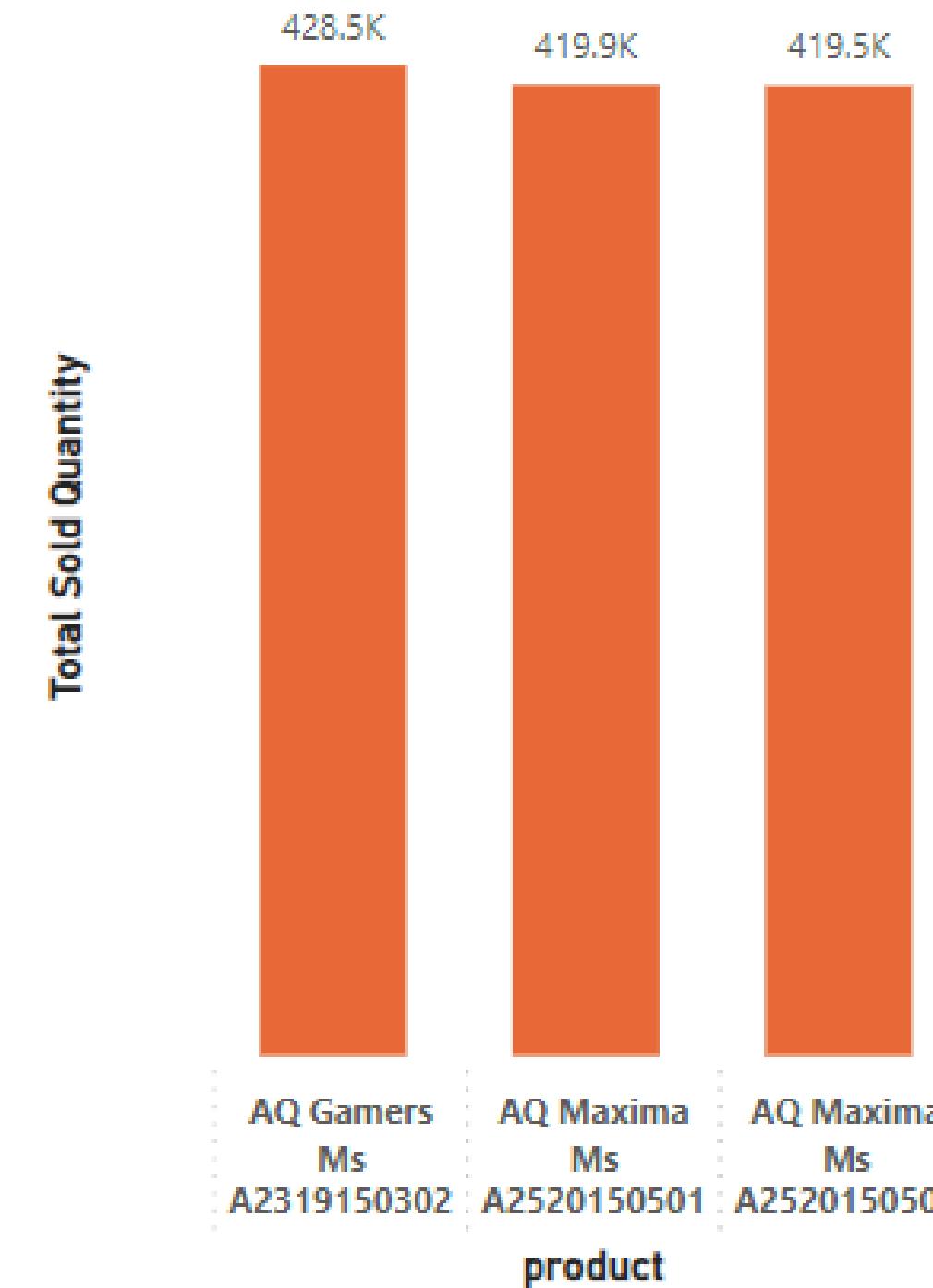
	division	product_code	product	total_sold_quantity	rank_order
▶	N & S	A6720160103	AQ Pen Drive 2 IN 1	701373	1
	N & S	A6818160202	AQ Pen Drive DRC	688003	2
	N & S	A6819160203	AQ Pen Drive DRC	676245	3
	P & A	A2319150302	AQ Gamers Ms	428498	1
	P & A	A2520150501	AQ Maxima Ms	419865	2
	P & A	A2520150504	AQ Maxima Ms	419471	3
	PC	A4218110202	AQ Digit	17434	1
	PC	A4319110306	AQ Velocity	17280	2
	PC	A4218110208	AQ Digit	17275	3

## Visuals

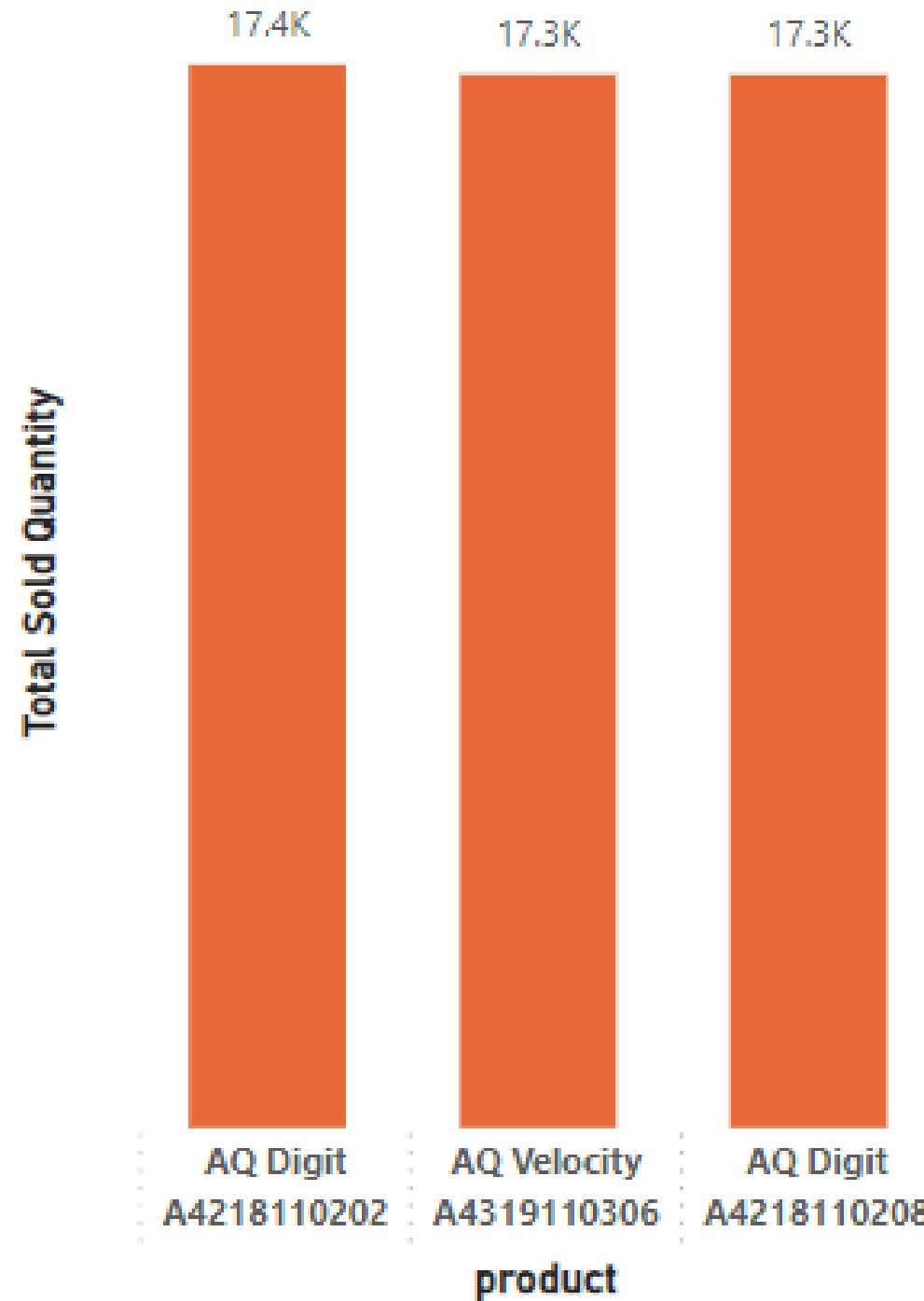
Top 3 products in N & S division by total sold quantity



Top 3 products in P & A division by total sold quantity



Top 3 products in PC division by total sold quantity



## Insights

In 2021, the top 3 selling products were pen drives, mouses and personal laptops.

# SUGGESTIONS

- Enhance connections with distributors to boost sales through this channel along with retailers.
- Conduct trainings for the sales team to improve overall sales.
- Keep an eye on seasonal trends to plan better and advanced technology and market demand which constantly changes.
- Invest in expanding the 'Accessories' section to grow sales.
- Use the 'Retailer' channel to reach more customers as retailers are the top most way to bring more sales
- Make sure to manufacture enough products according to the customer demand on time.
- Focus on expanding products rangealong with upgrading the old ones.



# THANK YOU!



Vishnu Teja Dumpala