



# Consumer Goods Ad-Hoc Insights

Data-Driven Analysis for Strategic  
Decision Making

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# Agenda

*Company Overview*

*Problem Statement*

*Data Overview*

*Ad-hoc Requests,  
Outputs and Insights*

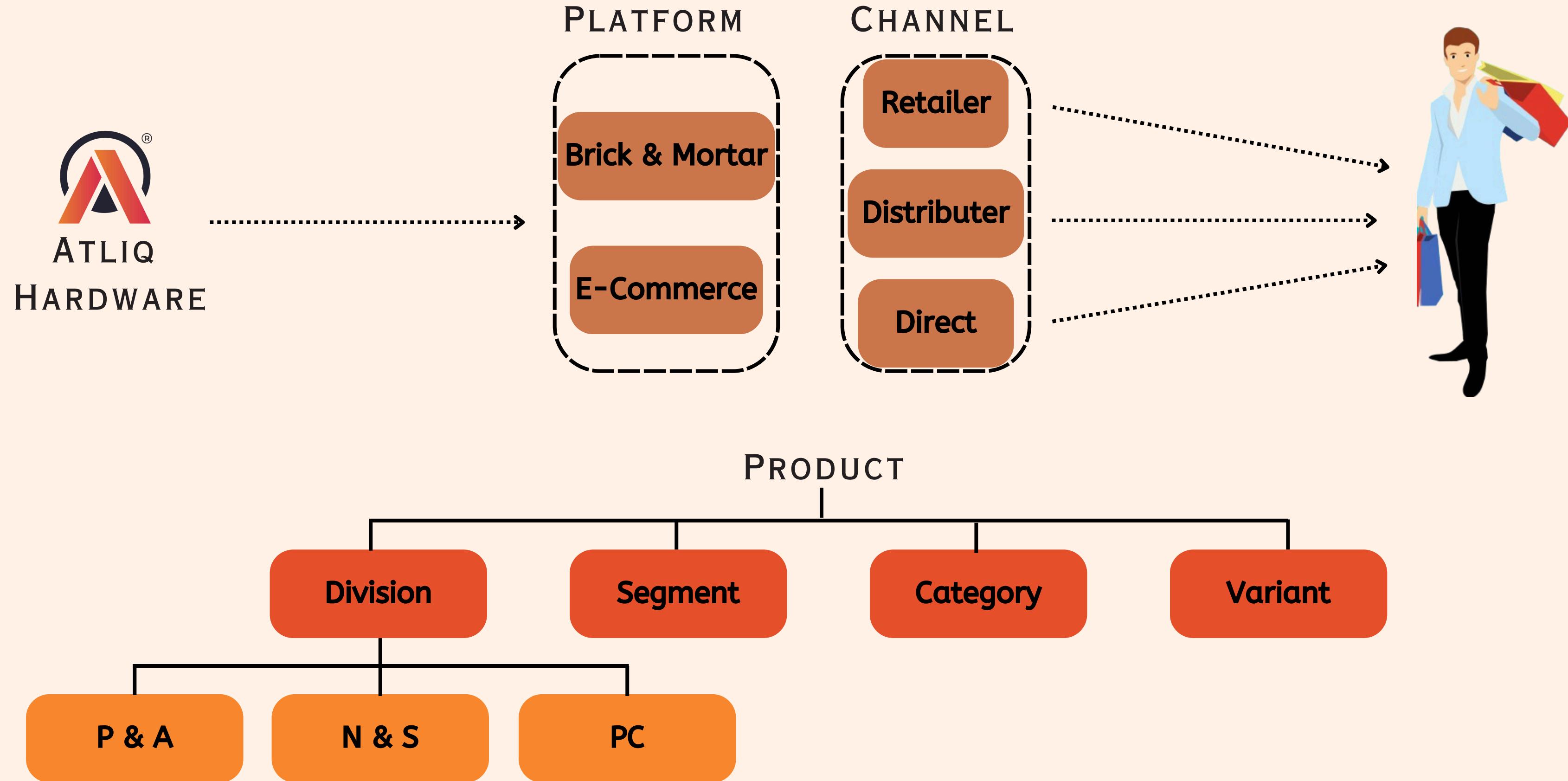


# Company Overview

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

# Business Model





# Problem Statement



**Lack of actionable insights:**  
Management struggles to obtain timely, data-driven insights for quick and informed decision-making.



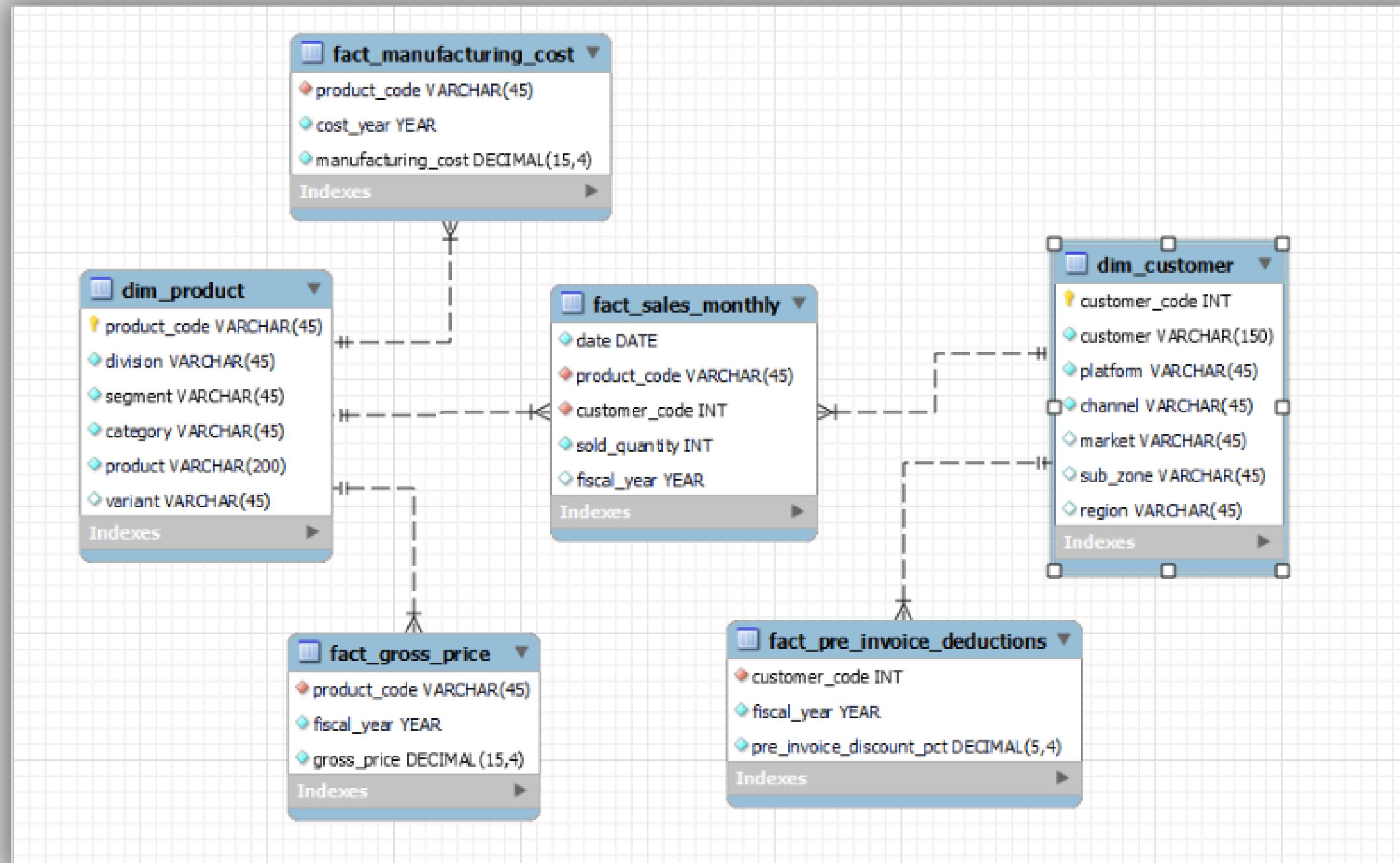
**Hiring initiative:** Tony Sharma plans to expand the data analytics team by hiring junior analysts through a SQL challenge to assess both technical and soft skills.

# Data Overview

- **Dataset**

<b>dim_customer:</b>	contains customer-related data
<b>dim_product:</b>	contains product-related data
<b>fact_gross_price:</b>	contains gross price information for each product
<b>fact_manufacturing_cost:</b>	contains the cost incurred in the production of each product
<b>fact_pre_invoice_deductions:</b>	contains pre-invoice deductions information for each product
<b>fact_sales_monthly:</b>	contains monthly sales data for each product.

# • Data Model



# Ad-hoc Requests: Outputs and Insights

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

In the APAC region, AtliQ Exclusive has stores in 8 markets:

market
India
Indonesia
Japan
Philippines
South Korea
Australia
Newzealand
Bangladesh



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

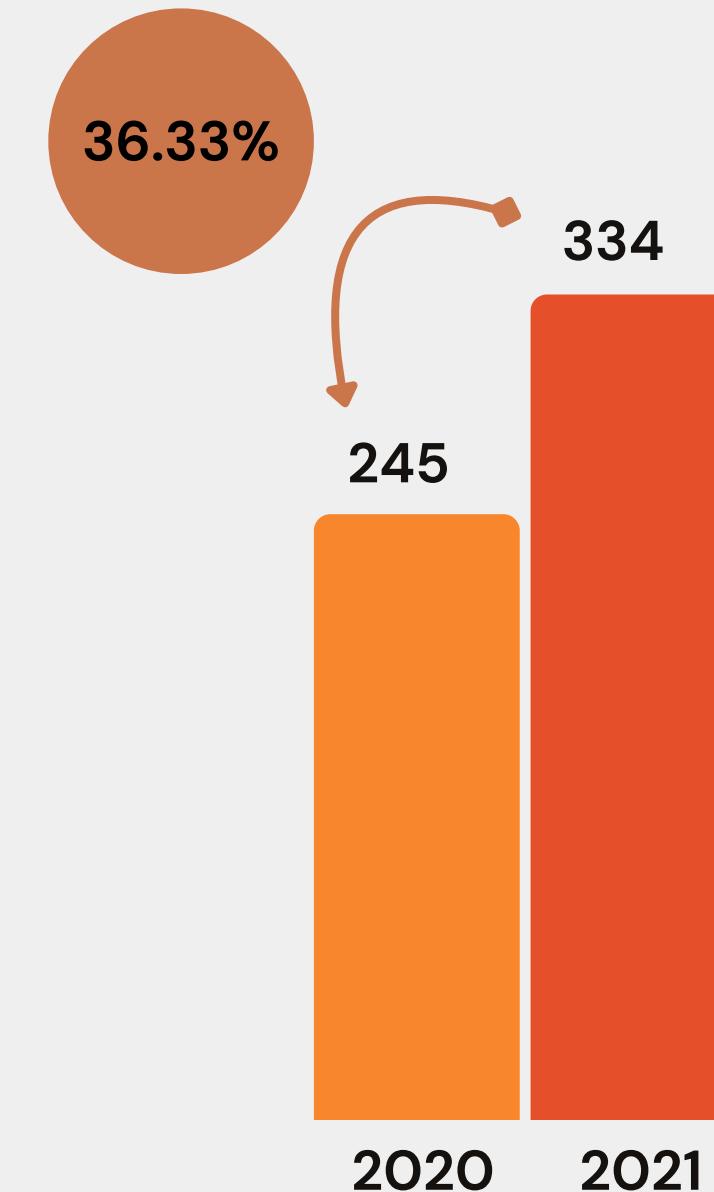
unique\_products\_2020

unique\_products\_2021

percentage\_chg

- AtliQ's product count grew by 36.33% from 245 in FY 2020 to 334 in FY 2021, indicating product expansion and potential market growth.

unique_products_2020	unique_products_2021	percentage_chg
245	334	36.33

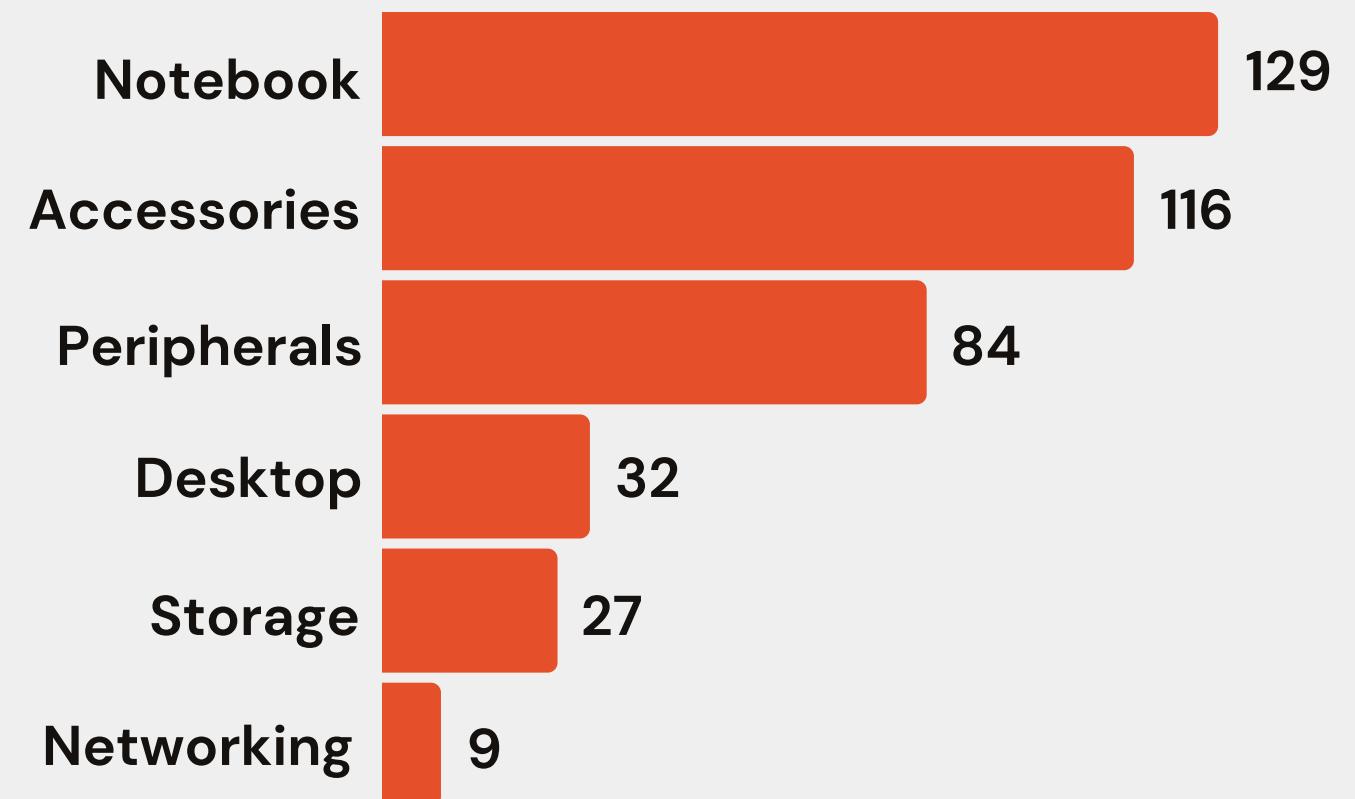


3. Provide a report with all the unique product counts for each segment and sort them in descending order of product counts. The final output contains 2 fields:

segment	product_count
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- The majority of AtliQ's products are in the Notebook (129) and Accessories (116) segments, while other categories like Peripherals, Desktops, and Networking have fewer offerings.

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

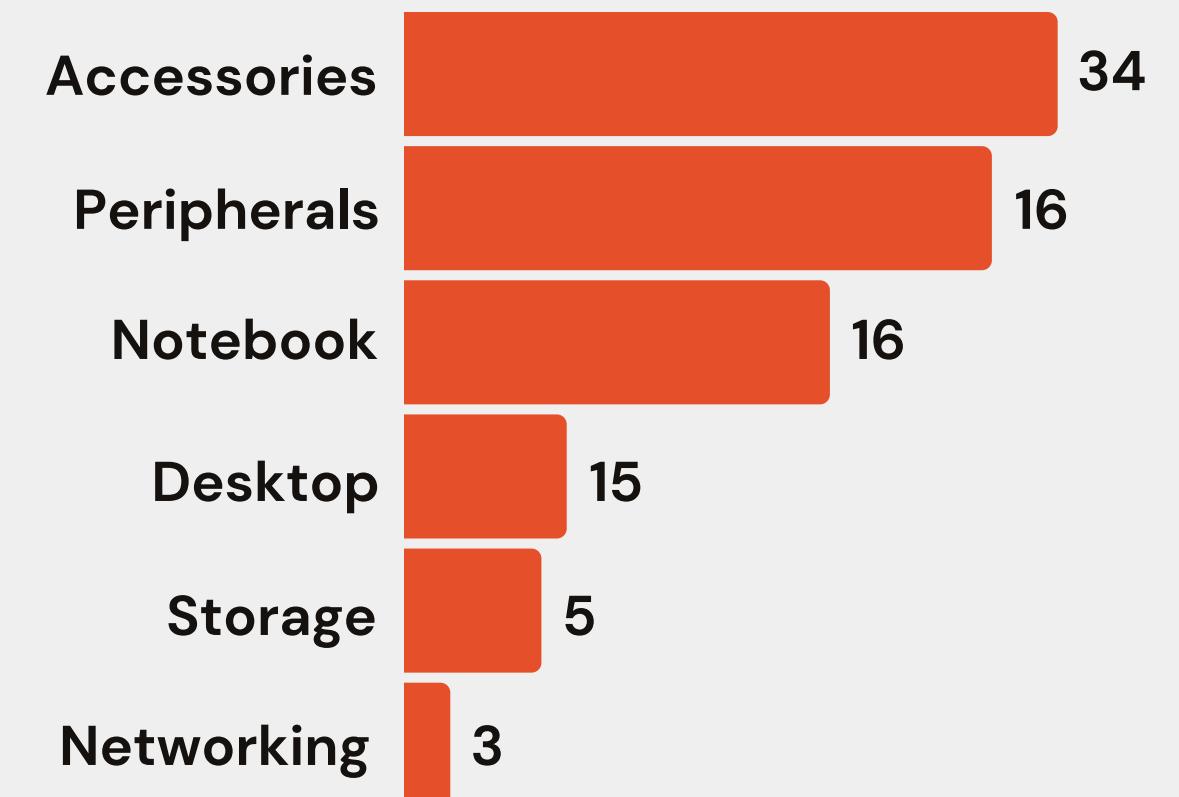


4. Follow-up: Which segment had the most increase in unique products in 2021 vs 2020? The final output contains these fields:

segment	product_count_2020	product_count_2021	difference
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- The Accessories segment led the growth in 2021, with an addition of 34 unique products. Both Peripherals and Notebooks also increased by 16 products each.

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



5. Get the products that have the highest and lowest manufacturing costs. The final output should contain these fields:

product\_code

product

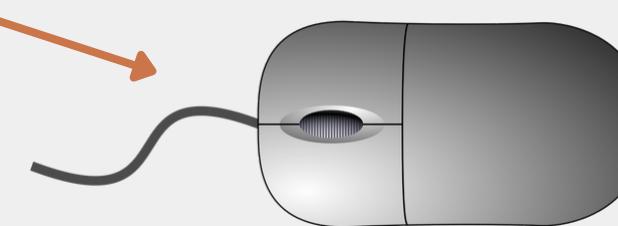
manufacturing\_cost

- AtLiQ's product lineup shows a wide cost variation, with the AQ HOME Allin1 Gen 2 (Plus 3) having the highest manufacturing cost at \$240.54, while the AQ Master Wired x1 Ms (Standard 1) stands as the most affordable to produce at just \$0.89.

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



\$240.54



\$0.89

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:

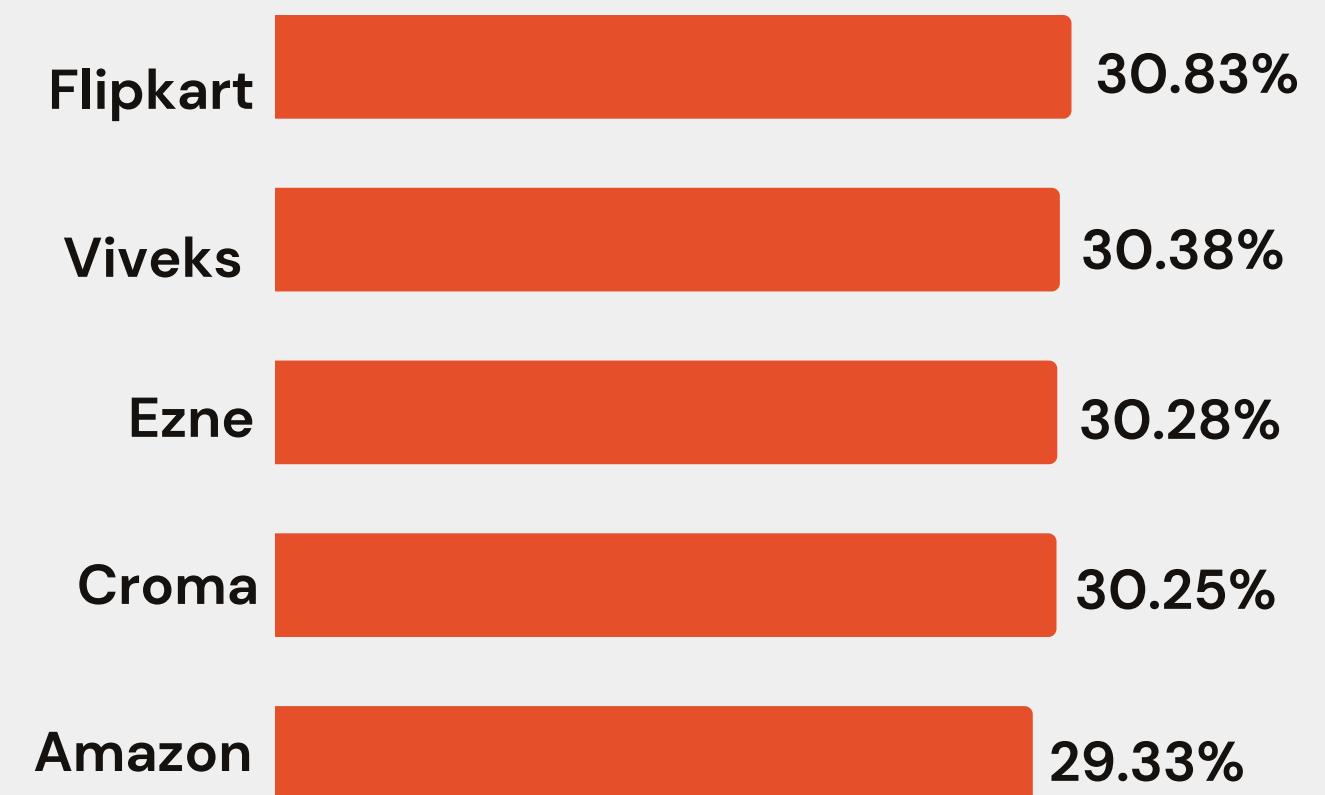
customer\_code

customer

average\_discount\_percentage

- In FY 2021, Flipkart received the highest average pre-invoice discount at 30.83% in the Indian market, followed closely by Viveks, Ezone, Croma, and Amazon, all with average discounts around 30%.

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



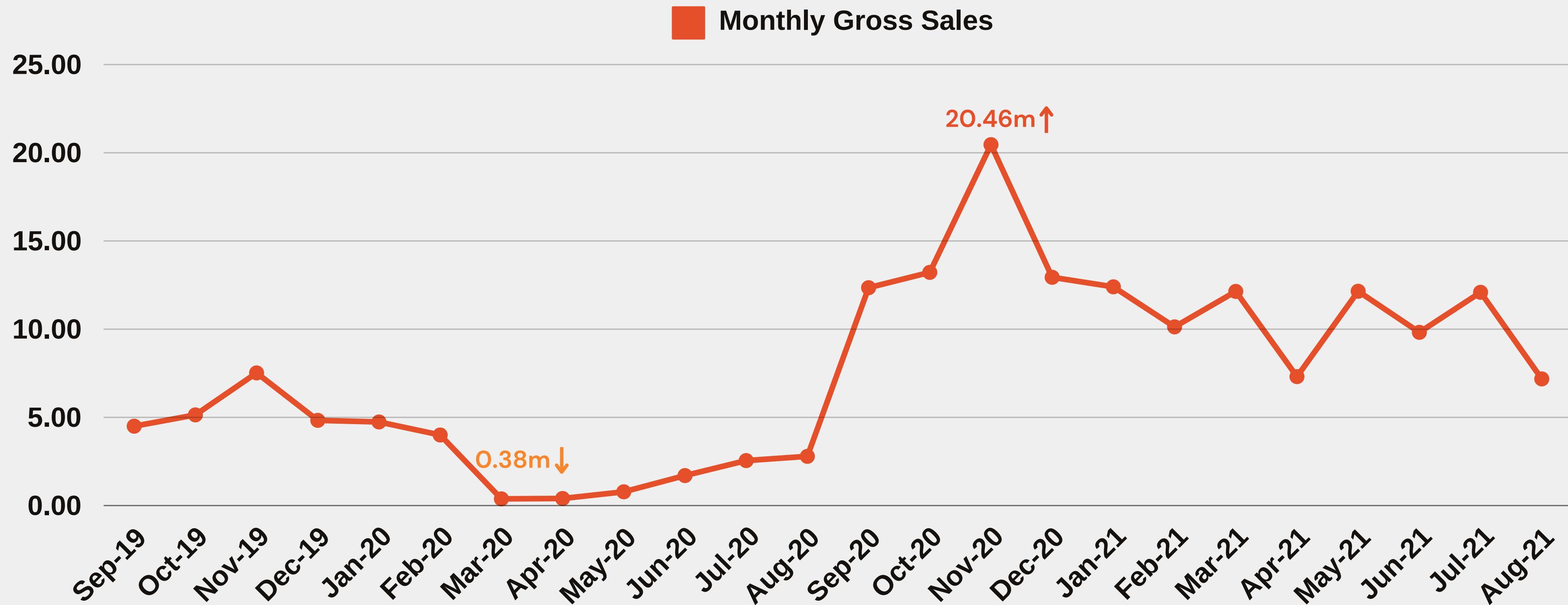
7. Get the complete report of the Gross sales amount for the customer “Atliq Exclusive” for each month. This analysis helps to get an idea of low and high-performing months and take strategic decisions. The final report contains these columns:

Month	Year	Gross sales Amount
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Month	Year	gross_sales_amount
September	2019	4.50
October	2019	5.14
November	2019	7.52
December	2019	4.83
January	2020	4.74
February	2020	4.00
March	2020	0.38
April	2020	0.40
May	2020	0.78
June	2020	1.70
July	2020	2.55
August	2020	2.79
September	2020	12.35
October	2020	13.22
November	2020	20.46
December	2020	12.94
January	2021	12.40
February	2021	10.13
March	2021	12.14
April	2021	7.31
May	2021	12.15
June	2021	9.82
July	2021	12.09
August	2021	7.18

- **March 2020:** Gross sales for AtliQ Exclusive hit a low of **\$0.38 million**, likely due to COVID-19 disruptions.

- **November 2020:** Sales rebounded to a peak of **\$20.46 million**, marking a strong recovery and providing insights for future planning.

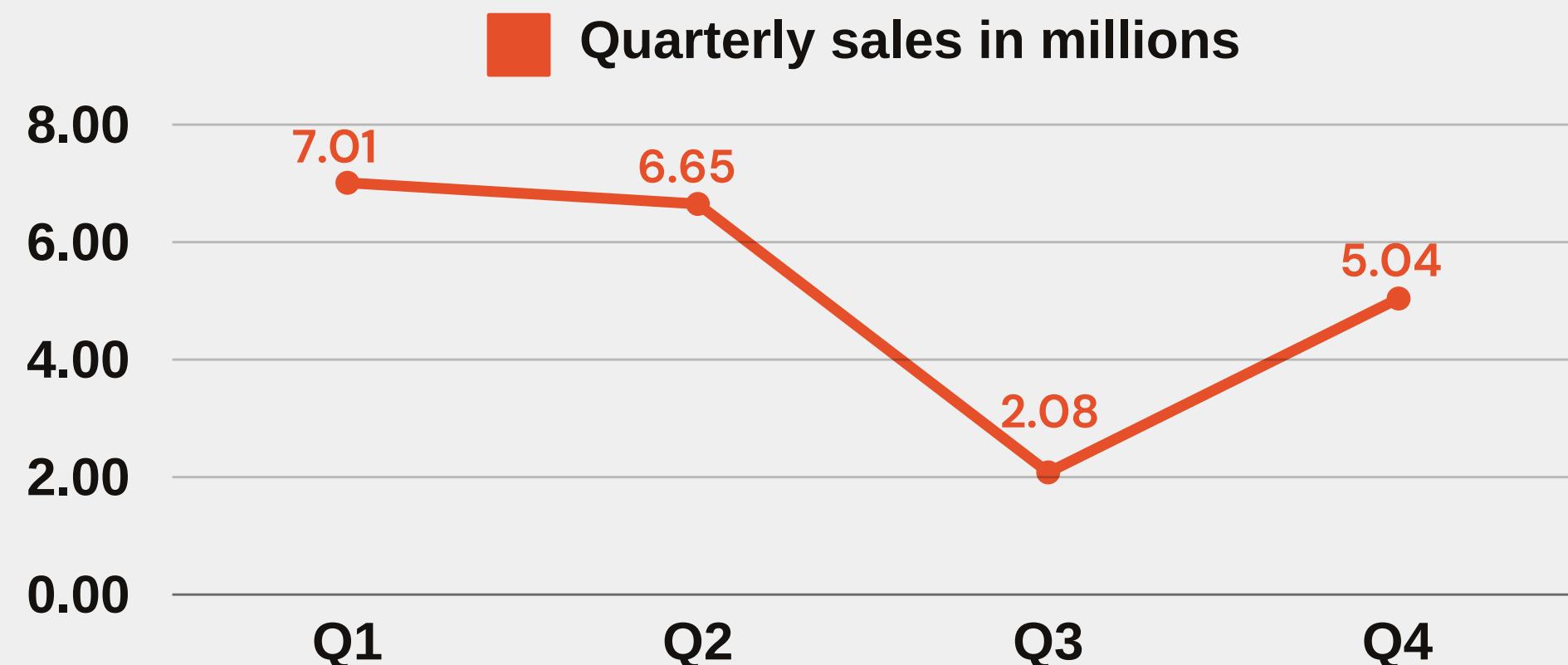


8. In which quarter of 2020, got the maximum total\_sold\_quantity? The final output contains these fields sorted by the total\_sold\_quantity:

Quarter	total_sold_quantity
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- The analysis shows the impact of COVID-19 on AtliQ's sales in 2020. The average total sold quantity for Q3 (2020-2021) was just 2.08 units, reflecting a significant decline. In comparison, Q1 averaged 7.01 units, indicating stronger sales. However, a recovery trend emerged in the following quarters as performance improved.

Quarter	total_sold_quantity
Q1	7.01
Q2	6.65
Q4	5.04
Q3	2.08

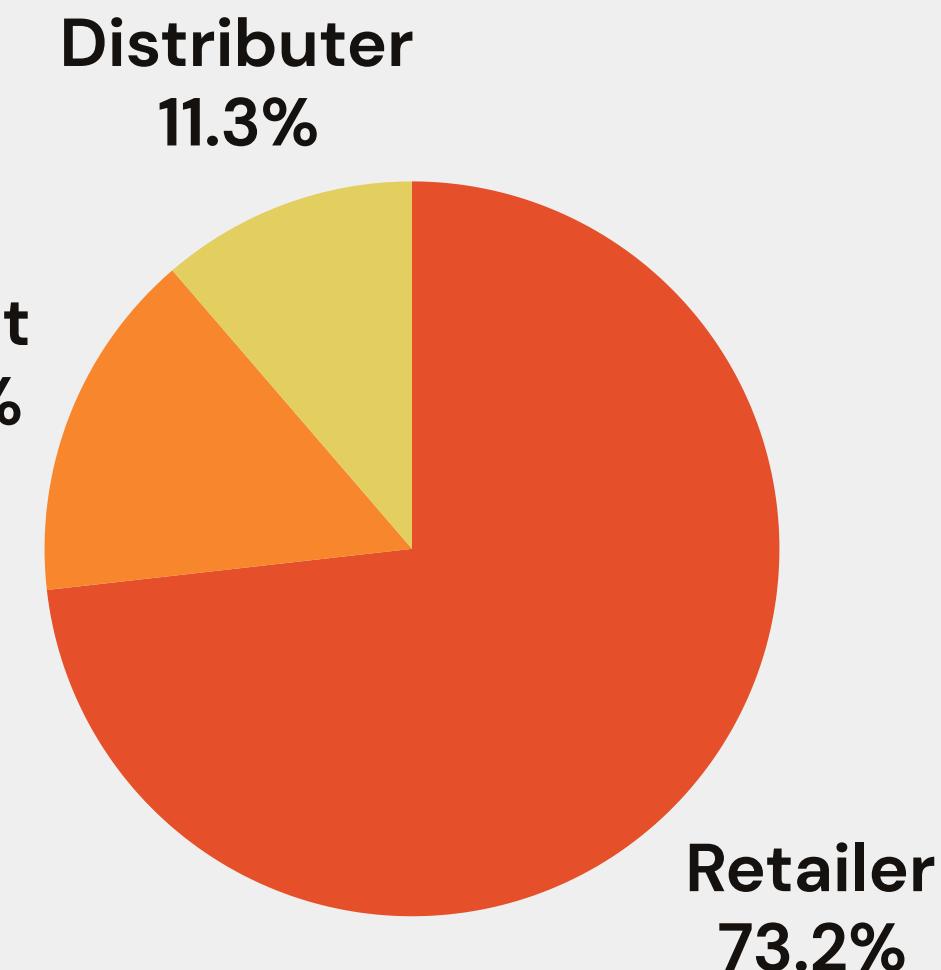


9. Which channel helped to bring more gross sales in the fiscal year 2021 and the percentage of contribution? The final output contains these fields:

channel	gross_sales_mln	percentage
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- In fiscal year 2021, the Retailer channel contributed the most to gross sales, generating \$1924.17 million, which accounted for 73.22% of total sales. The Direct and Distributor channels followed with 15.48% and 11.31%, respectively.

channel	gross_sales_mln	percentage
Retailer	1924.17	73.22
Direct	406.69	15.48
Distributor	297.18	11.31



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:

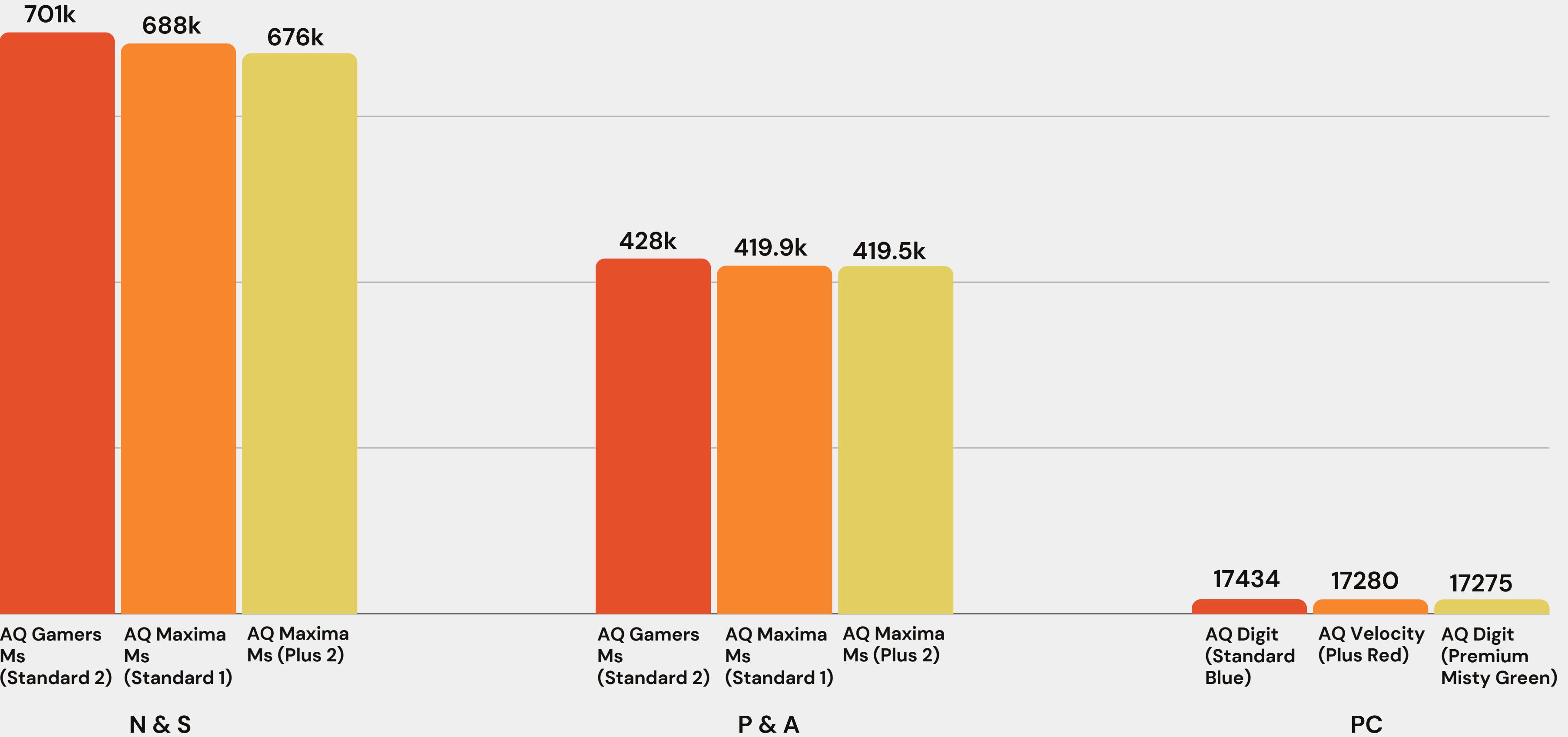
division	product_code
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- In fiscal year 2021, the top-selling products by division were led by AQ Pen Drive 2 IN 1 (Premium) in the N & S division with 701,373 units sold. In P & A, AQ Gamers Ms (Standard 2) topped the list with 428,498 units, and in PC, AQ Digit (Standard Blue) sold 17,434 units, ranking first.

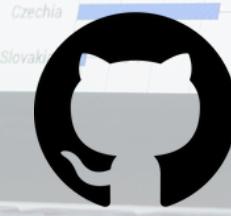
division	product_code	product_name	total_sold_quantity	rank_order
N & S	A6720160103	AQ Pen Drive 2 IN 1 (Premium)	701373	1
N & S	A6818160202	AQ Pen Drive DRC (Plus)	688003	2
N & S	A6819160203	AQ Pen Drive DRC (Premium)	676245	3
P & A	A2319150302	AQ Gamers Ms (Standard 2)	428498	1
P & A	A2520150501	AQ 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

Rank 1 Rank 2 Rank 3

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# Thank You



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