# Atliq Hardwares

# Consumer Goods Ad-hoc Insights

Presented by Taranpreet Singh

**1** Background/Context

**2** Getting familiar with Atliq's Business – Their Markets and Product lines

**3** Getting familiar with the input data

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

# AGENDA

# 1

# BACKGROUND/CONTEXT

## Our Company
Atliq Hardwares (imaginary company) - One of the leading computer hardware producers in India.

## Background
The management observed a gap in data-driven insights, hindering their ability to make rapid and intelligent decisions.

## Problem
There are 10 ad-hoc requests for which the company needs insights.

## Approach
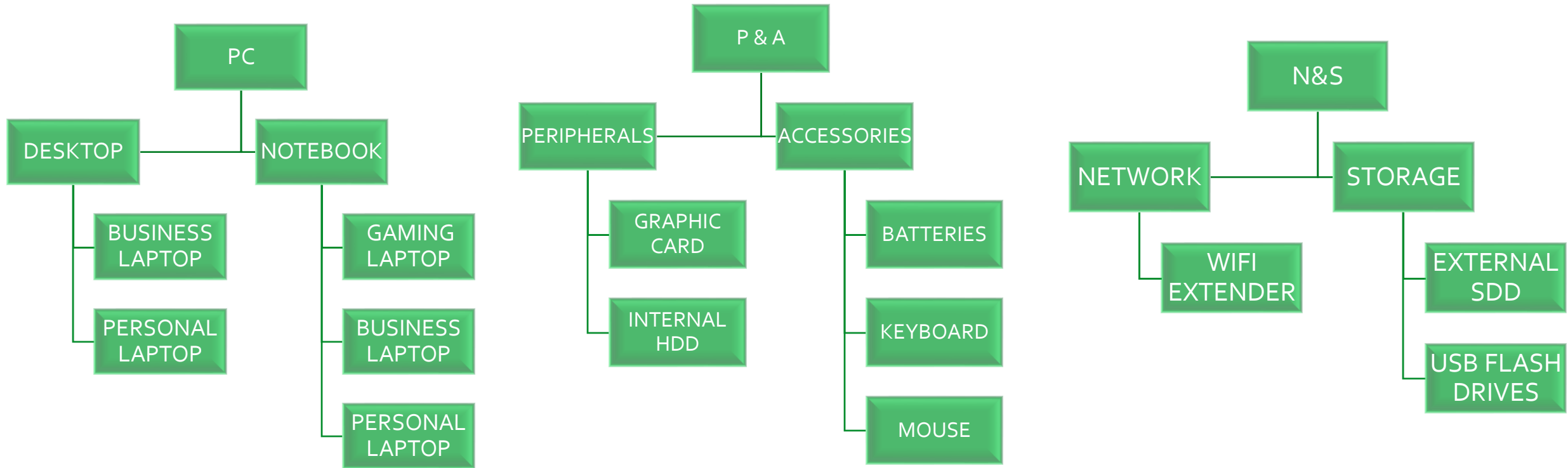Extract actionable insights by running SQL queries, transforming data into visualizations, and presenting them to the top-level management.

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# Getting familiar with Atliq's Business –Their Markets and Product lines

## AtliQ Hardware Market

# Atliq's Product lines

# Getting familiar with the input data



**dim_customer**
- customer_code INT
- customer VARCHAR(150)
- platform VARCHAR(45)
- channel VARCHAR(45)
- market VARCHAR(45)
- sub_zone VARCHAR(45)
- region VARCHAR(45)

**dim_product**
- product_code VARCHAR(45)
- division VARCHAR(45)
- segment VARCHAR(45)
- category VARCHAR(45)
- product VARCHAR(200)
- variant VARCHAR(45)

**fact_gross_price**
- product_code VARCHAR(45)
- fiscal_year YEAR
- gross_price DECIMAL(15,4)

**fact_manufacturing_cost**
- product_code VARCHAR(45)
- cost_year YEAR
- manufacturing_cost DECIMAL(15,4)

**fact_pre_invoice_deductions**
- customer_code INT
- fiscal_year YEAR
- pre_invoice_discount_pct DECIMAL(5,4)

**fact_sales_monthly**
- date DATE
- product_code VARCHAR(45)
- customer_code INT
- sold_quantity INT
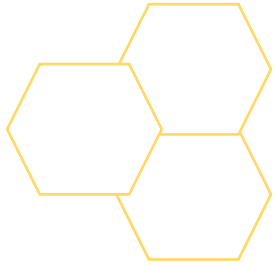- fiscal_year YEAR

Sales data for the fiscal years 2020 and 2021, combined with supplementary tables containing customer and product specifics, form the input data.

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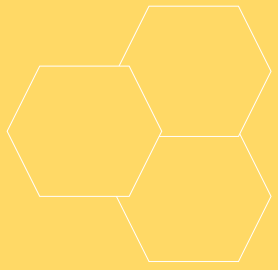
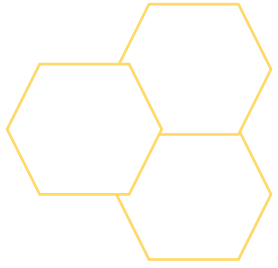# Ad-hoc requests, queried results, Insights and visualization

# REQUEST 1:

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

| 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.
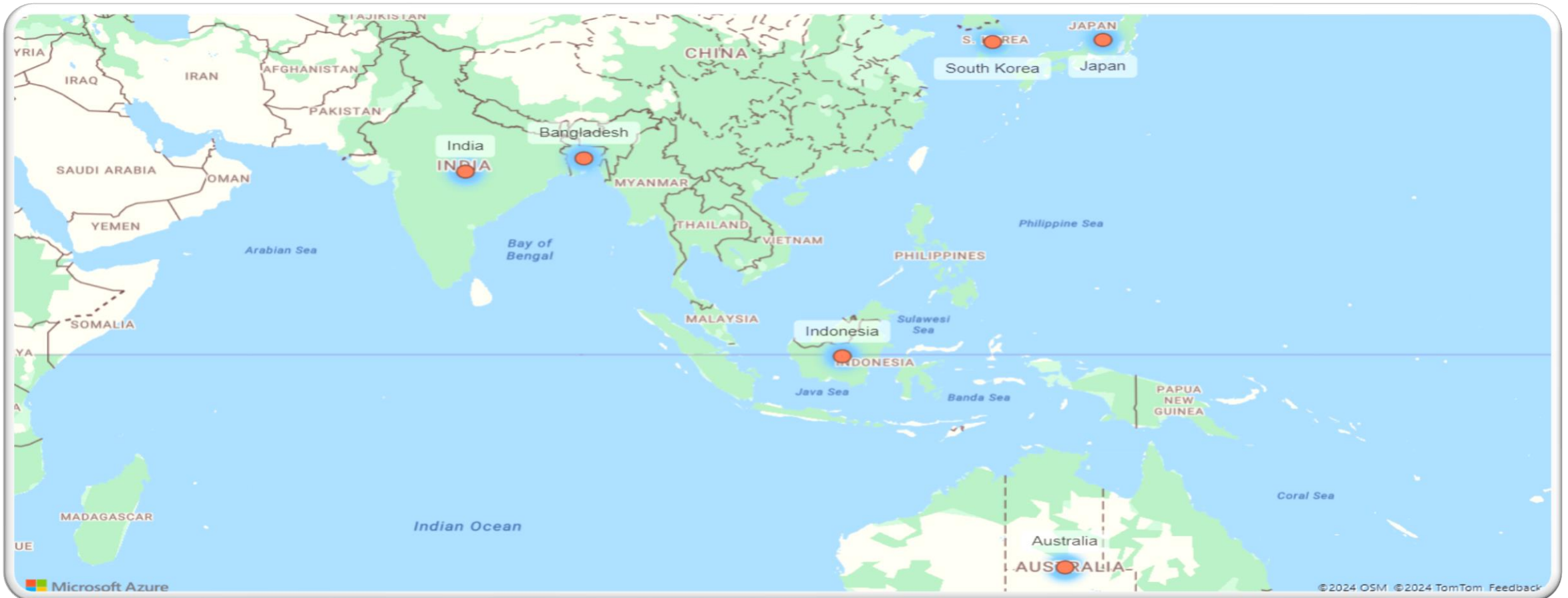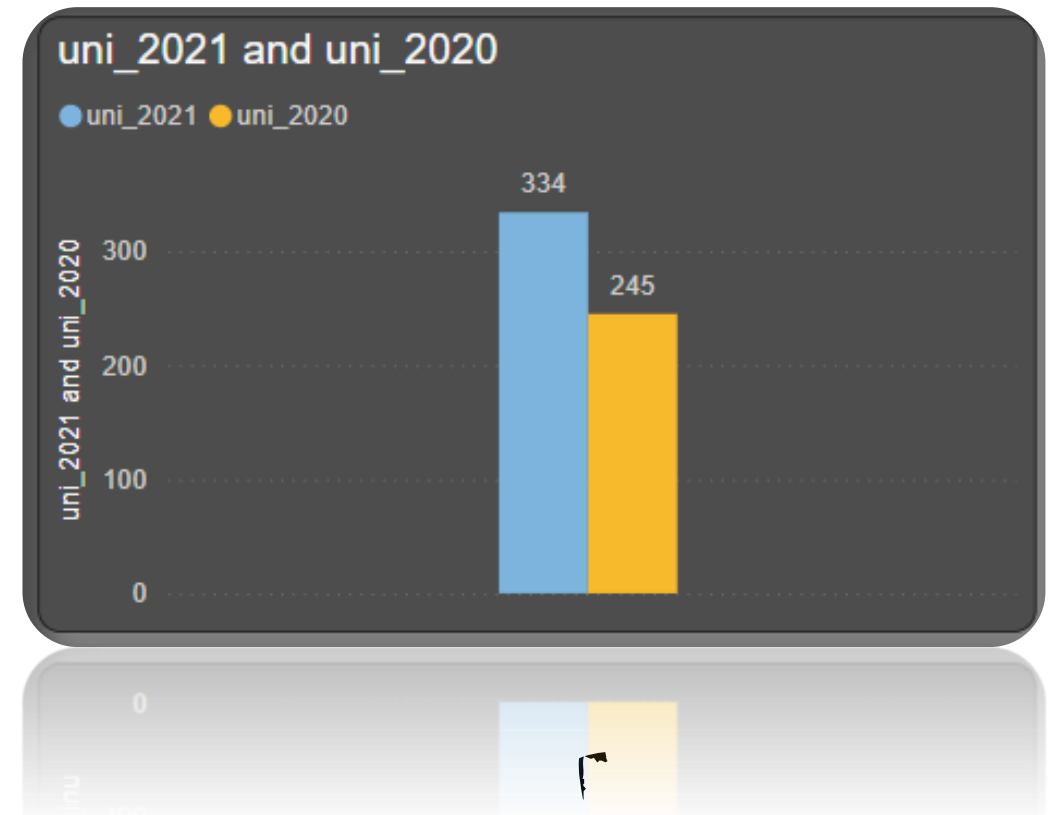
# REQUEST 2:

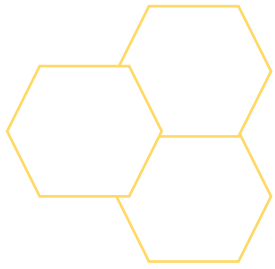What is the percentage of unique product increase         in 2021 vs. 2020? The final output contains these fields:

unique_products_2020
unique_products_2021
percentage_chg

| uni_2020 | uni_2021 | percentage_chg |
|----------|----------|----------------|
| 245      | 334      | 36.3265        |

**36%↑**

We've shown continuous progress in product development and market introduction. In FY 2020, we offered 245 products, and by FY 2021, this number grew by 36%, reaching a total of 334 products.

**uni_2021 and uni_2020**

● uni_2021  ● uni_2020

334

245
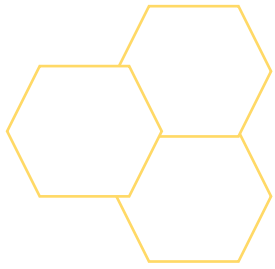
300

200

100

0

# 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 | 116 |
| Accessories | 104 |
| Peripherals | 79 |
| Desktop | 22 |
| Storage | 17 |
| Networking | 9 |

Based on this data visualization, it is clear that the Notebook, Accessories, and Peripherals segments have a higher number of products. On the other hand, Networking and Storage have fewer products in these segments. Therefore, this company primarily focuses on and develops products in these segments, likely due to higher demand for products in the Notebook and Accessories categories.
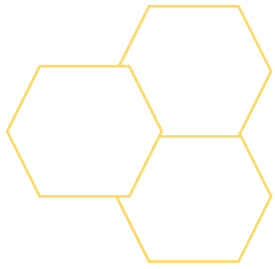


Sum of product_count by segment
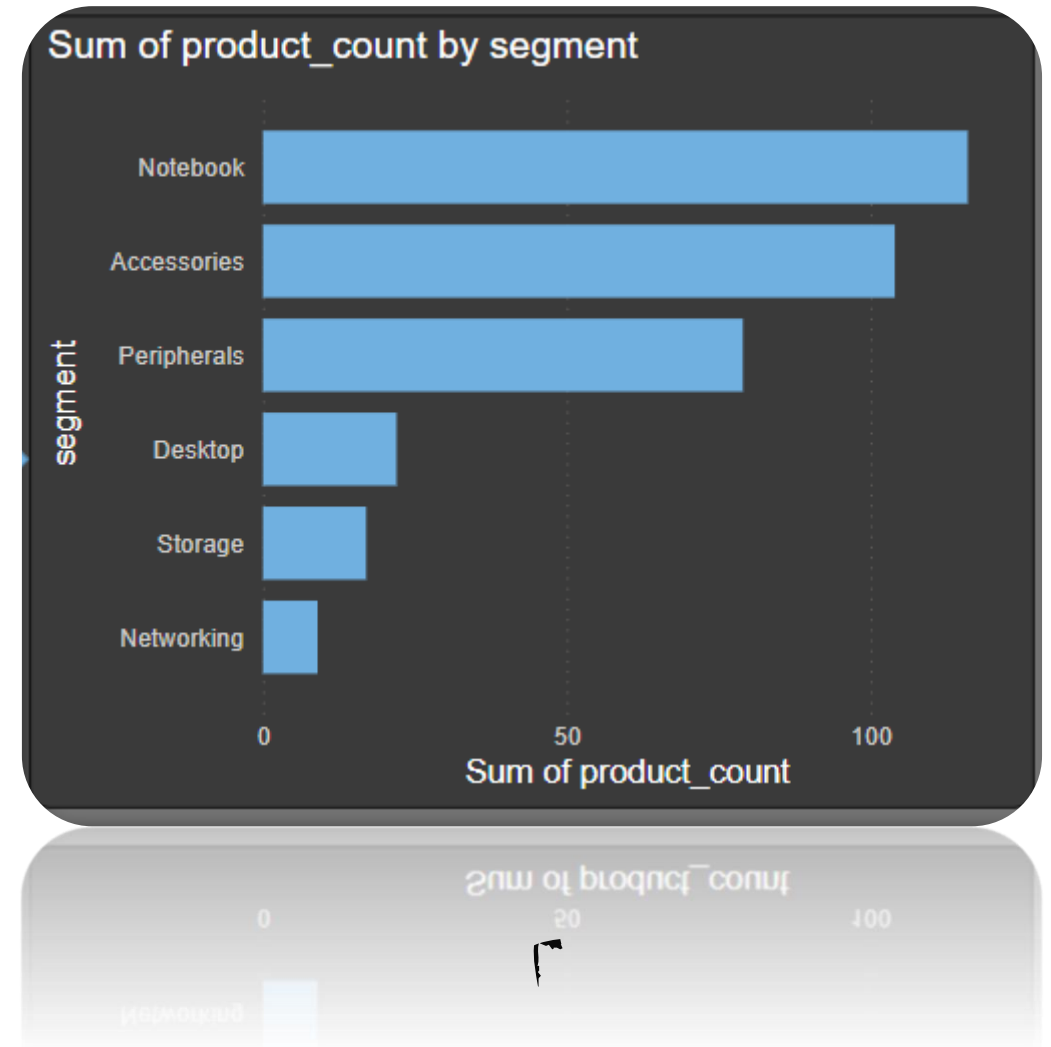
# REQUEST 4:

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

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

IN FY-2021 , AtliQ more focus
Accessories segment and with last
year comparison , 34 more product is
introduce in this segment.



product_count_2021, product_count_2020 and difference by segment
● product_count_2021  ● product_count_2020  ● difference
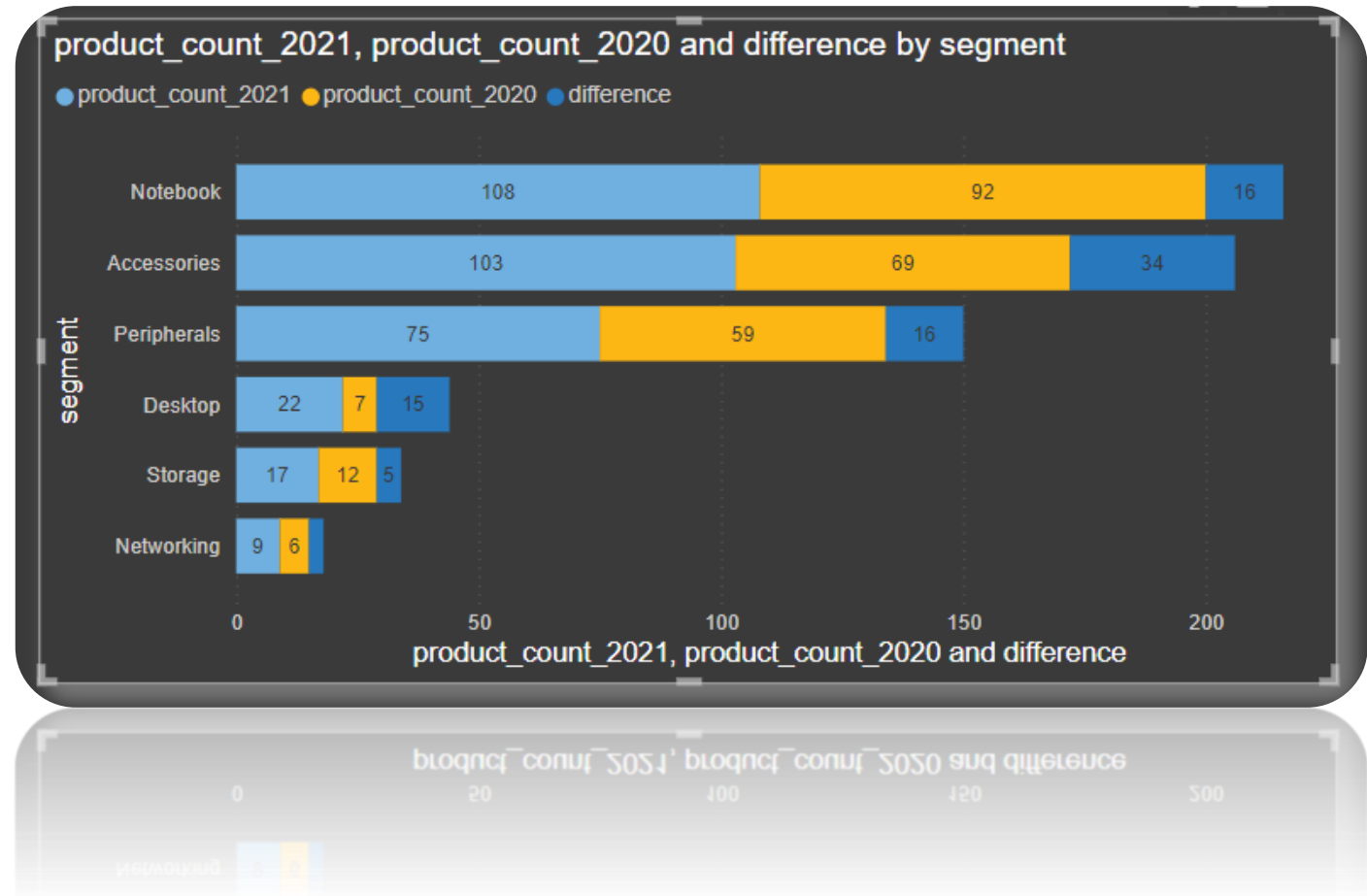
# REQUEST 5:

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

product_code product
manufacturing_cost

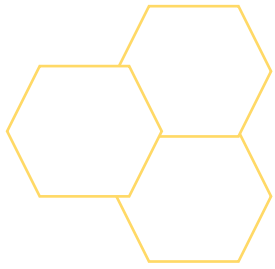| product_code | product | manufacturing_cost |
|---|---|---|
| A2118150101 | AQ Master wired x1 Ms | 0.8920 |
| A6120110206 | AQ HOME Allin1 Gen 2 | 240.5364 |

# 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 | 0.30830000 |
| 90002006 | Viveks | 0.30380000 |
| 90002003 | Ezone | 0.30280000 |
| 90002002 | Croma | 0.30250000 |
| 90002016 | Amazon | 0.29330000 |

In 2021, we provided almost equal pre-invoice discount percentages to our top 5 customers, with Flipkart receiving the highest discount in the Indian market at 30.83%.



Sum of average_discount_percentage by customer

# 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

| 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 |

In FY 2019, the Gross Sale is increase in the month of November by 7.52$ Million
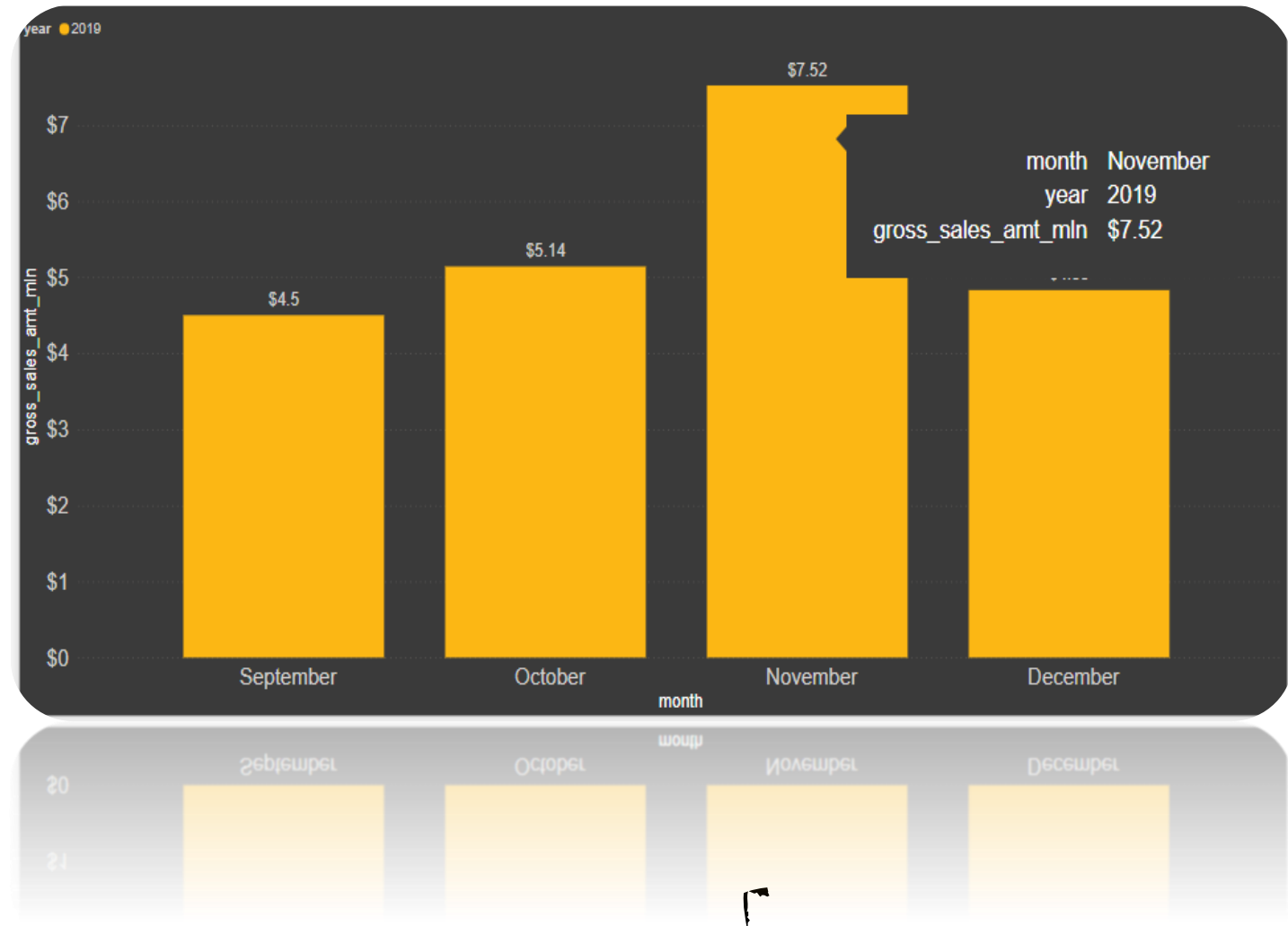
In FY 2020, Gross Sales surged to $20.462 million in November, up from $13.22 million in October. However, the following month saw a sharp decline, and sales only began to grow steadily afterward. By December, Gross Sales had reached $12.94 million, yet AtliQ remained unprofitable, largely due to the impact of COVID-19 that year.
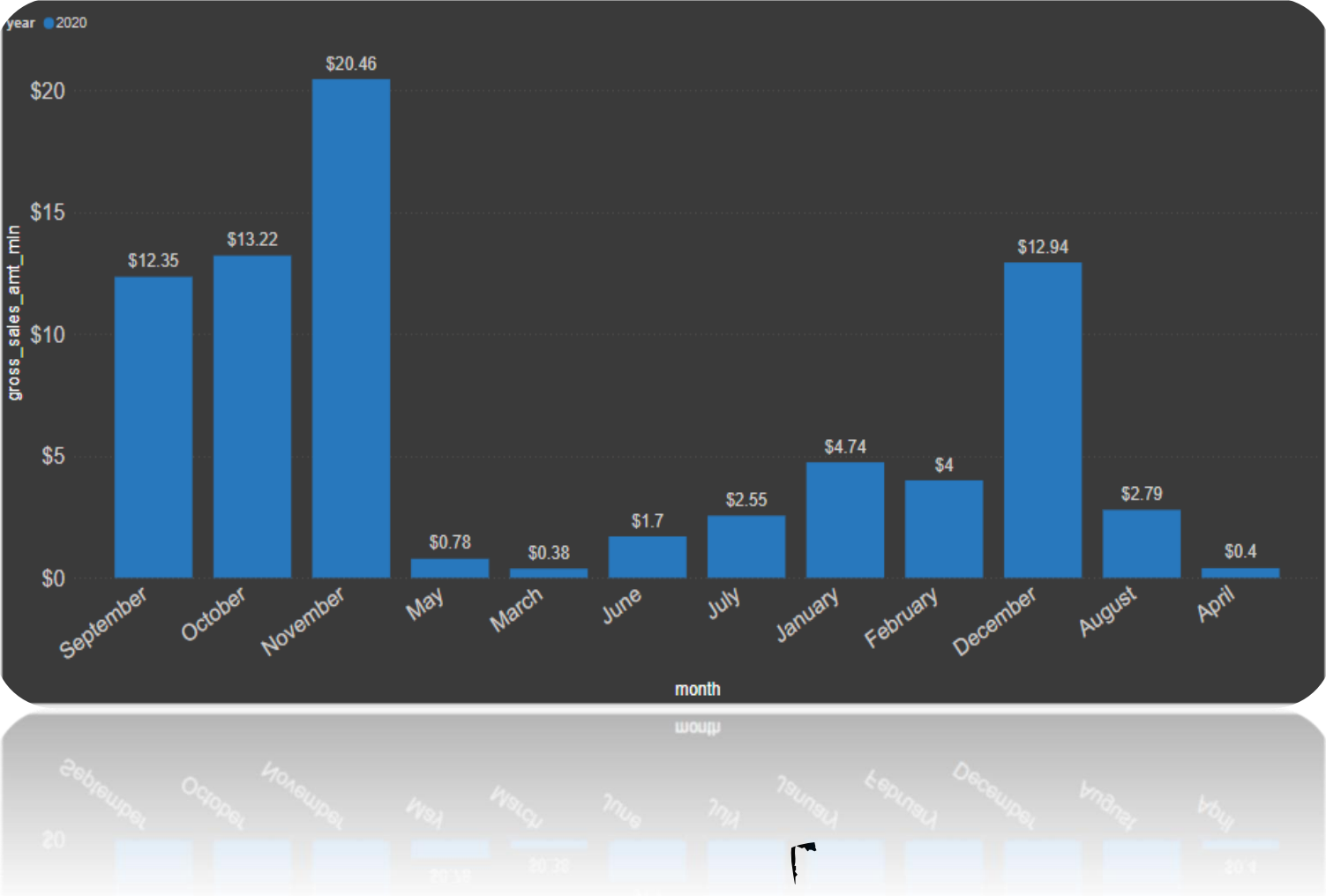
In FY 2021, Gross Sales surged to 12.15$ million and then company linearly grow , due to COVID-19 effect is decreases and gross-sale of AtliQ Company is increase.
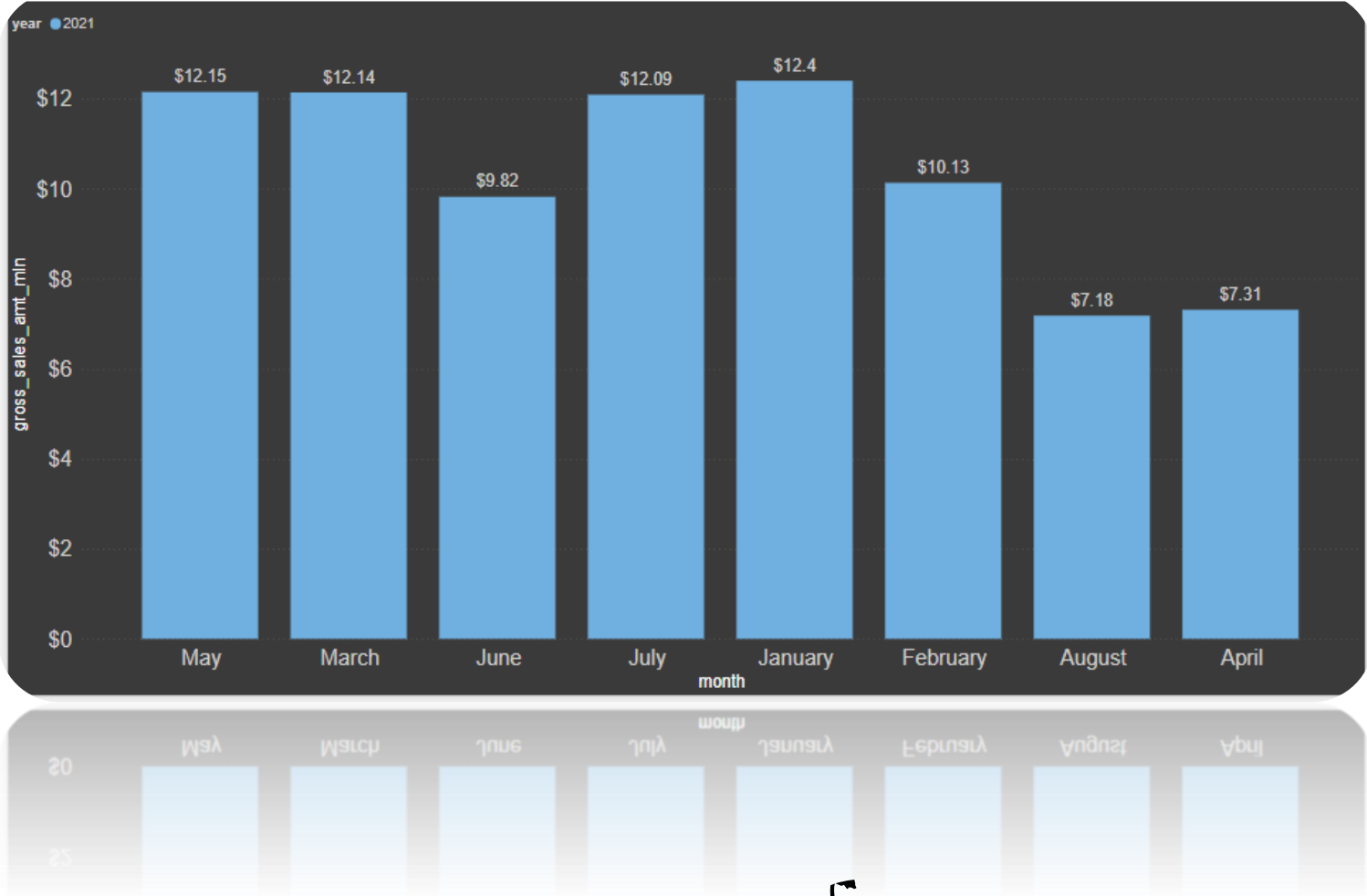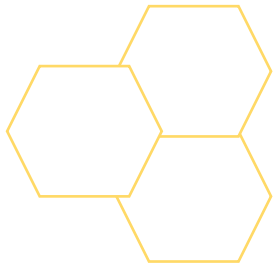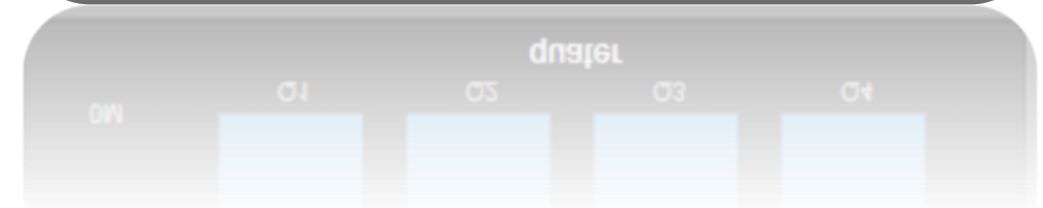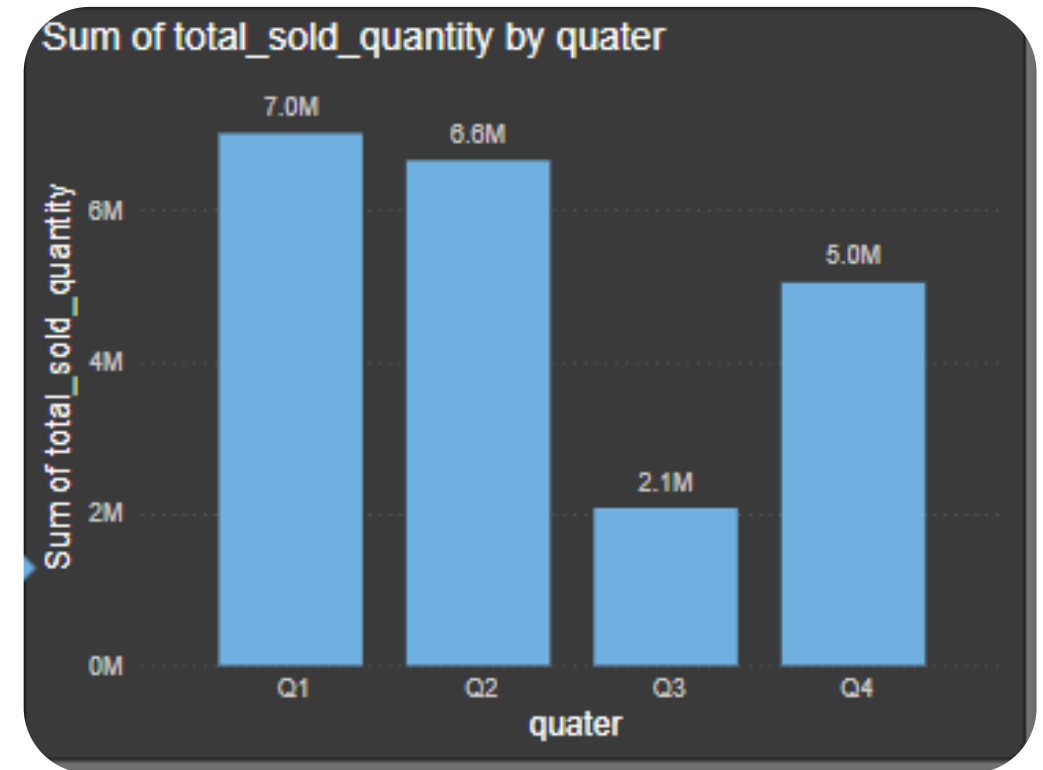
# REQUEST 8:

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

| quarter | total_sold_quanity_in_millions |
|---------|-------------------------------|
| Q1      | 7.01                          |
| Q2      | 6.65                          |
| Q4      | 5.04                          |
| Q3      | 2.08                          |

This further highlights the impact of COVID-19 on our sales. During Q3 of FY 2020, covering March, April, and May, sold quantities fell to 2.1 million as the pandemic reached its peak. However, we saw an early recovery in Q4, likely driven by the surge in demand for desktops, notebooks, and computer accessories as students transitioned to online learning. This recovery suggests that our product offerings were well-aligned with the emerging needs of the market during this challenging time.
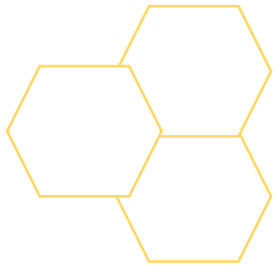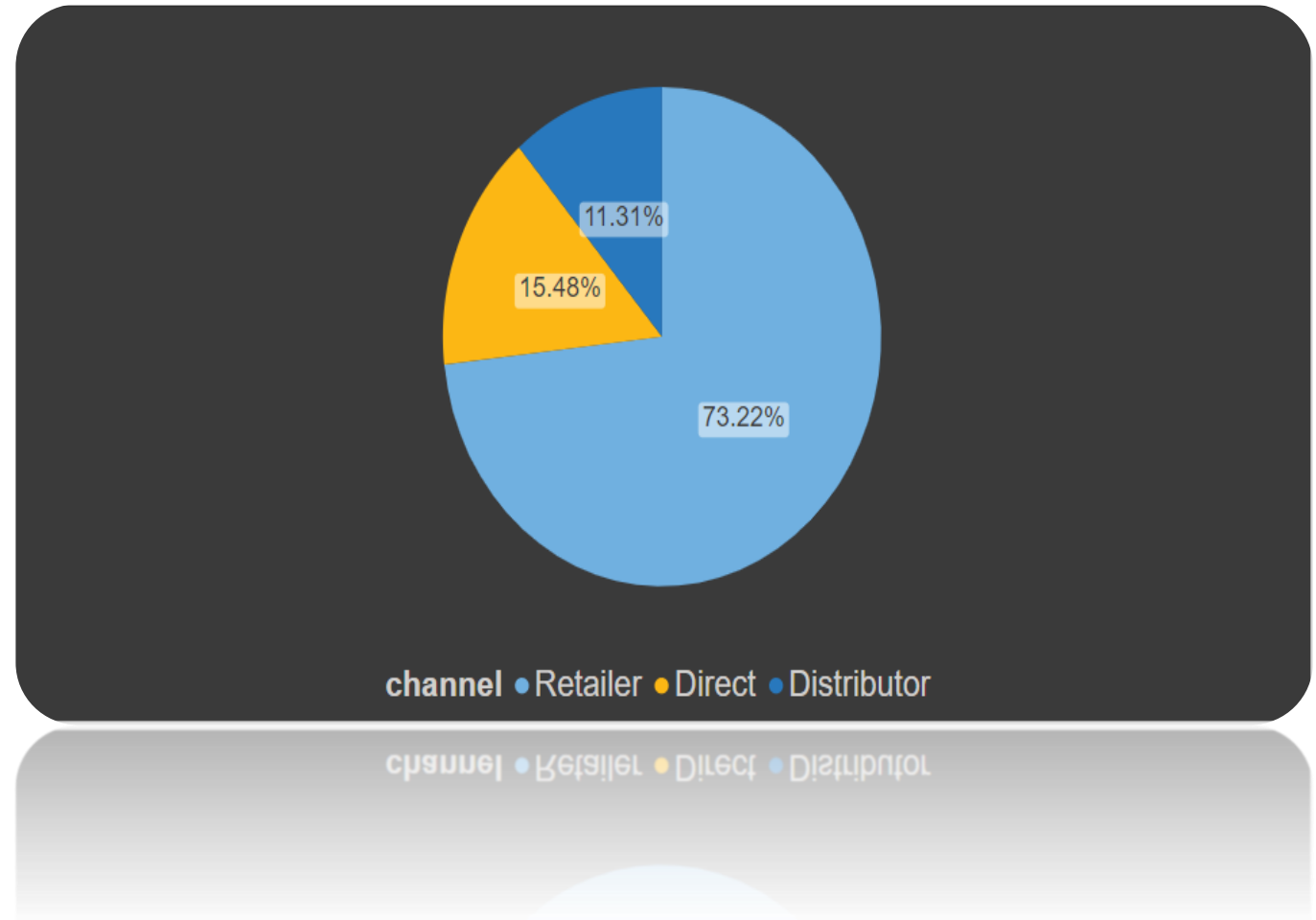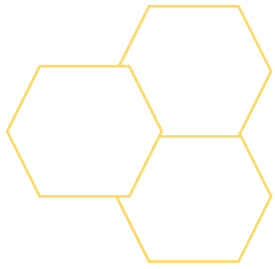
# REQUEST 9:

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 |

Most of our sales, about 75%, were made through retailers, while only a small portion came from direct and distributor channels.

# 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
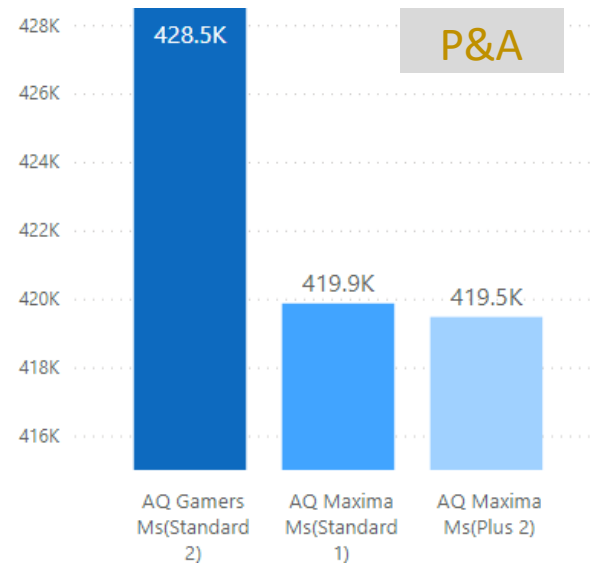Product
total_sold_quantity
rank_order

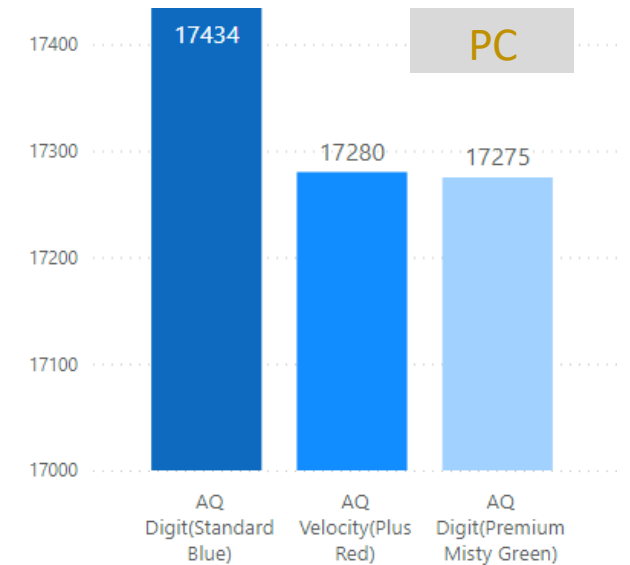| division | product_code | product | total_qty | ranking |
|---|---|---|---|---|
| N & S | A6720160103 | AQ Pen Drive 2 IN 1 | 701373 | 1 |
| N & S | A6818160202 | AQ Pen Drive DRC | 688003 | 2 |
| N & S | A6819160203 | AQ Pen Drive DRC | 676245 | 3 |
| P & A | A2319150302 | AQ Gamers Ms | 428498 | 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 |

The top 3 selling products in N&S were **pen drives,** which were around **7 lakh in quantity.**
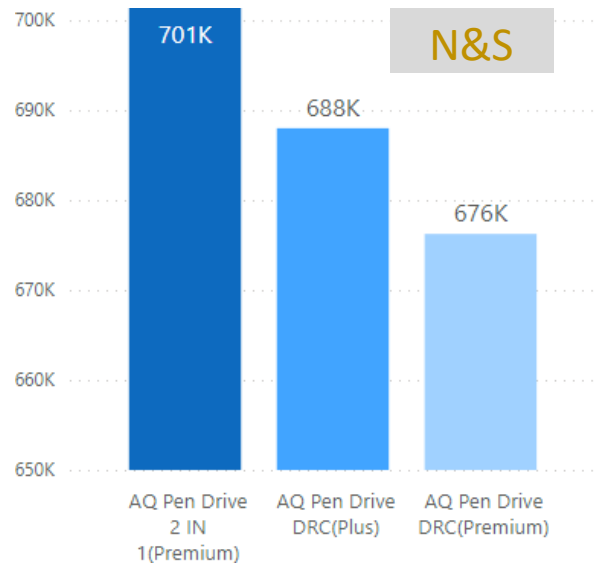
The top 3 selling products in P&A were **mouse,** which were around **4 lakh in quantity.**

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



N&S

| | 701K | 688K | 676K |
|---|---|---|---|
| | AQ Pen Drive 2 IN 1(Premium) | AQ Pen Drive DRC(Plus) | AQ Pen Drive DRC(Premium) |

P&A

| | 428.5K | 419.9K | 419.5K |
|---|---|---|---|
| | AQ Gamers Ms(Standard 2) | AQ Maxima Ms(Standard 1) | AQ Maxima Ms(Plus 2) |

PC

| | 17434 | 17280 | 17275 |
|---|---|---|---|
| | AQ Digit(Standard Blue) | AQ Velocity(Plus Red) | AQ Digit(Premium Misty Green) |

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