



AD HOC INSIGHTS DOMAIN: CONSUMER GOODS | FUNCTION: EXECUTIVE MANAGEMENT

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PROBLEM STATEMENT

- ❑ Atliq Hardware operates as a leading computer hardware producer in India and other global markets.
- ❑ The company lacks timely and insightful data for decision-making.
- ❑ To address this, Atliq plans to expand its data analytics team by hiring junior analysts proficient in SQL and possessing essential soft skills.
- ❑ The absence of a standardized evaluation method poses a challenge in identifying suitable candidates.
- ❑ There is a need to develop an efficient assessment framework, such as a SQL challenge, to streamline the hiring process.

TASK & RESOURCES PROVIDED

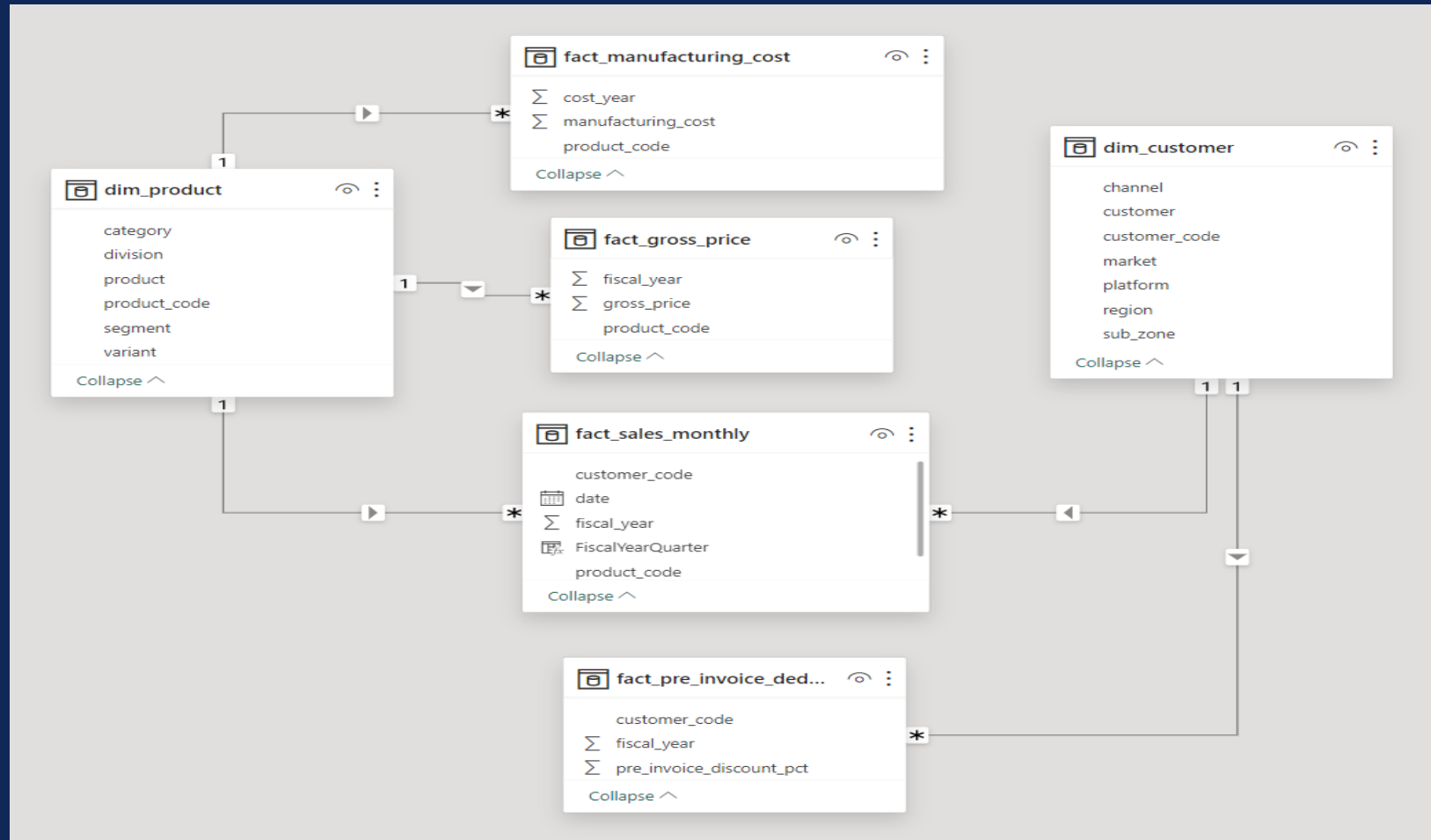
Task

- ❑ Review 'ad-hoc-requests.pdf' for 10 business requests.
- ❑ Use SQL queries to address these requests.
- ❑ Create a presentation for top-level management.
- ❑ Prioritize creativity; consider audio/video formats.

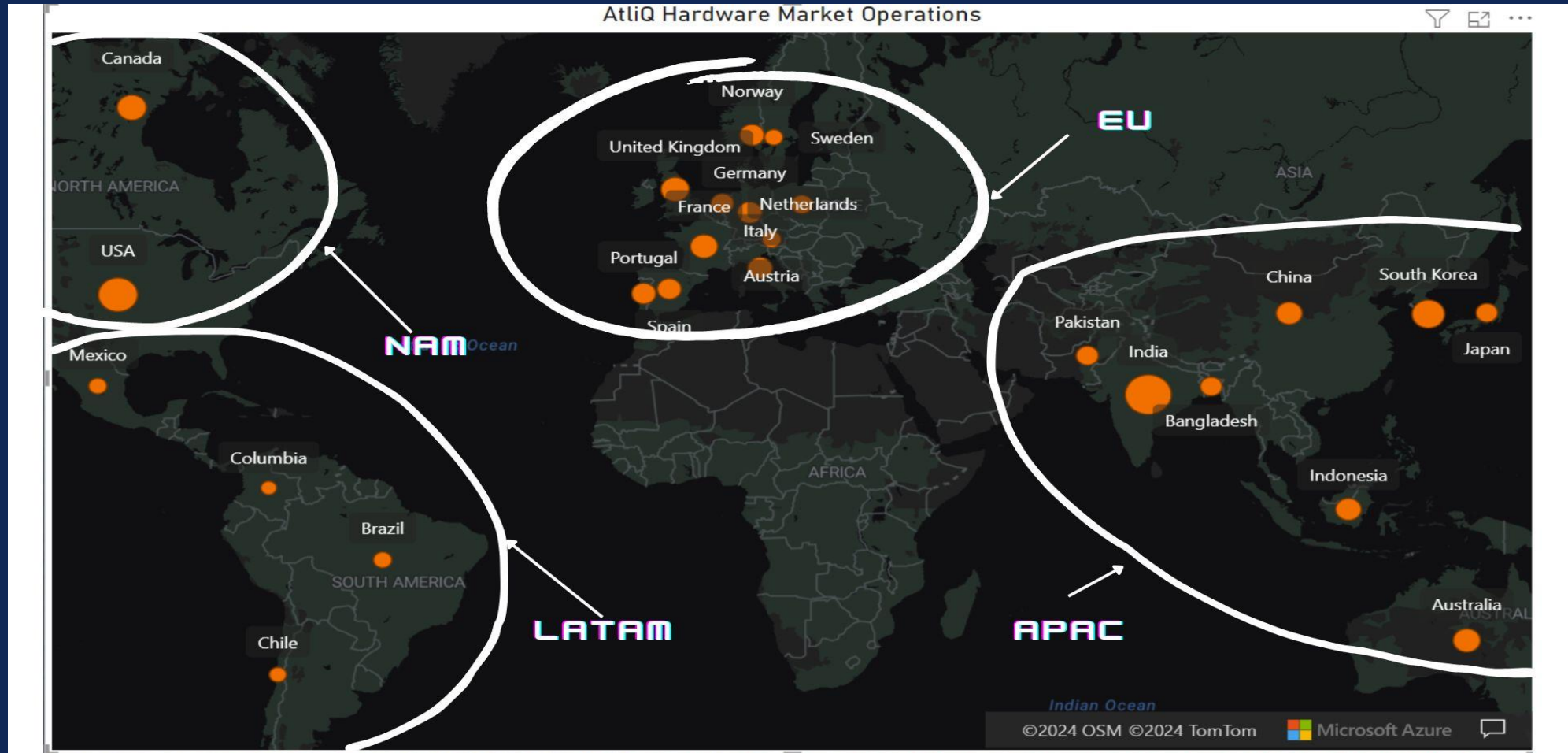
Resources

- ❑ Dataset.
- ❑ Metadata.
- ❑ Hints.
- ❑ Sample questions/presentations.

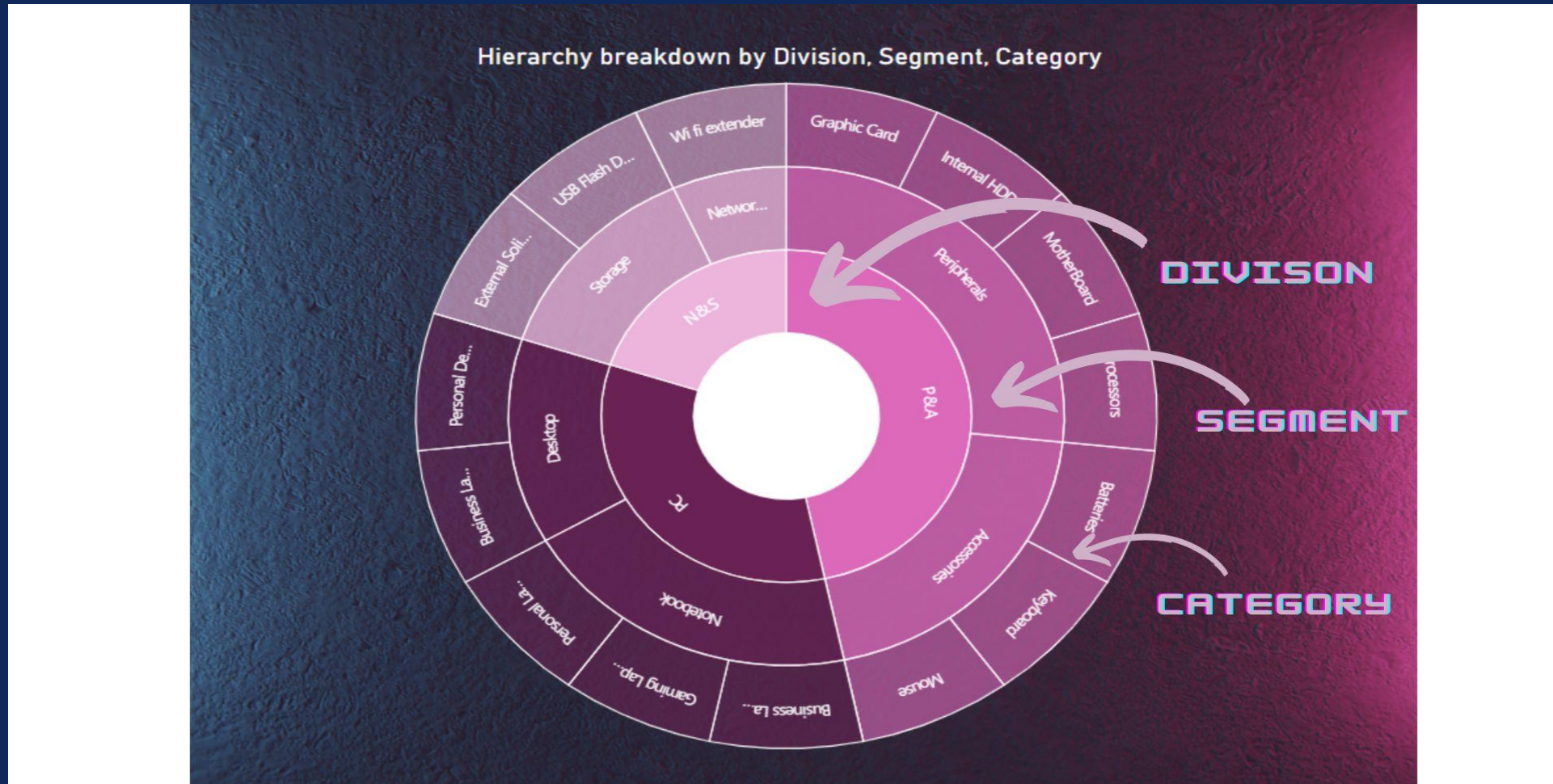
DATA MODEL



GLOBAL MARKET



PRODUCT DIVISION



AD HOC REQ 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
India

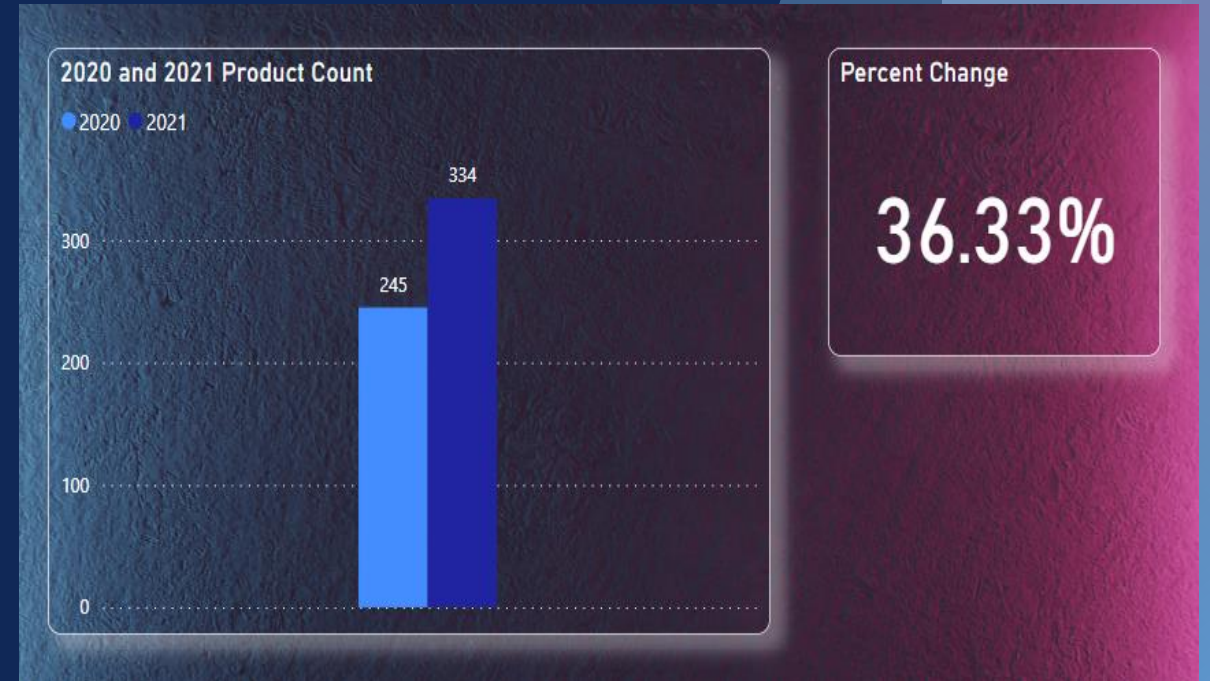


AD HOC REQ 2

What is the percentage of unique product increase in 2021 vs. 2020?

	unique_products_2020	unique_products_2021	PercentageChange
▶	245	334	36.00

- ❑ Demand as well as production has increased.
- ❑ Indicated growth rate.



AD HOC REQ 3

Provide a report with all the unique product counts for each segment and sort them in descending order of product counts.

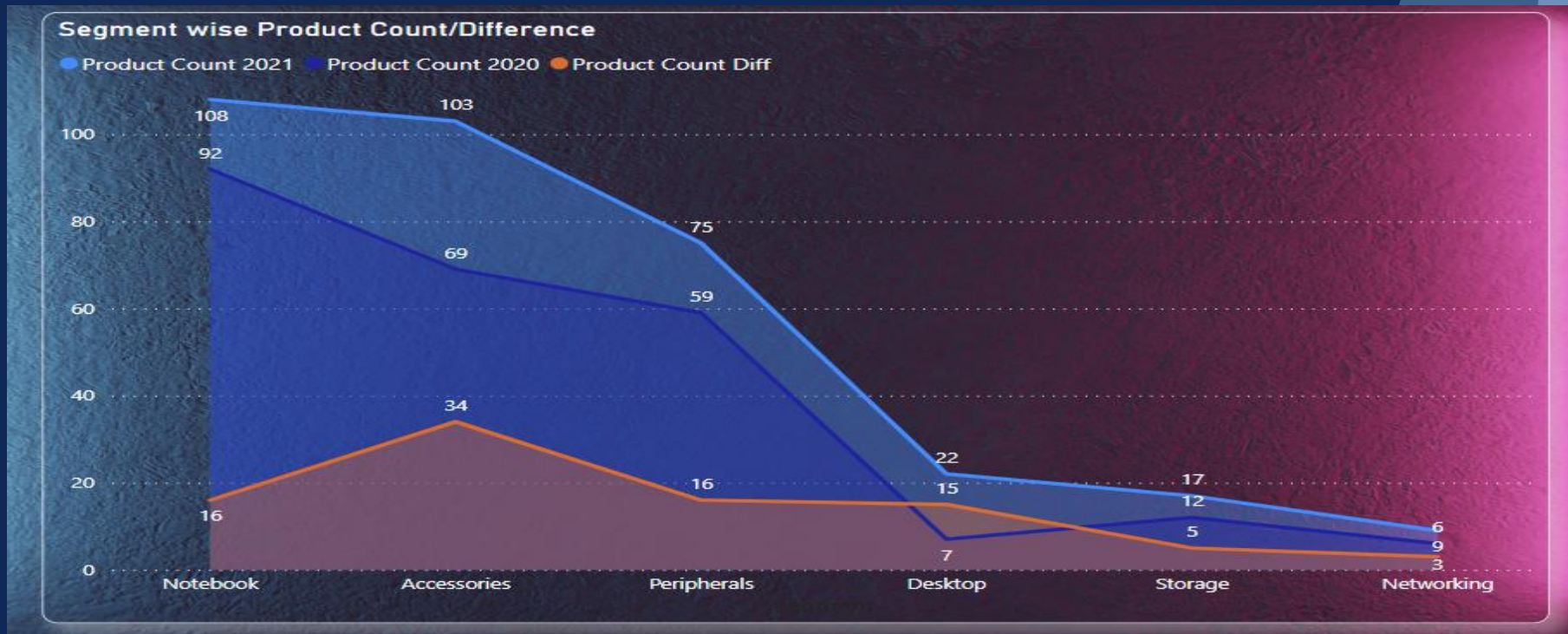
	segment	product_count_2021	product_count_2020	difference
▶	Accessories	103	69	34
	Notebook	108	92	16
	Peripherals	75	59	16
	Desktop	22	7	15
	Storage	17	12	5
	Networking	9	6	3



- ❑ Accessories, Notebooks, and Peripherals have a significant number of products compared to desktops, storage, and networking.
- ❑ The top three segments account for 83% of all products.

AD HOC REQ 4 (FOLLOW UP)

Follow-up: Which segment had the most increase in unique products in 2021 vs 2020?



- ❑ During the transition from 2020 to 2021, the accessories segment saw the largest increase in new products, rising from 69 to 103. Meanwhile, the Networking segment experienced a mere 3-product increase.
- ❑ Despite the highest surge occurring in Accessories, the Notebook segment maintained the highest number of products for both the years.

AD HOC REQ 5

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

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

AQ HOME Allin1 Gen 2 \$240.54	AQ Master wired x1 Ms \$0.89
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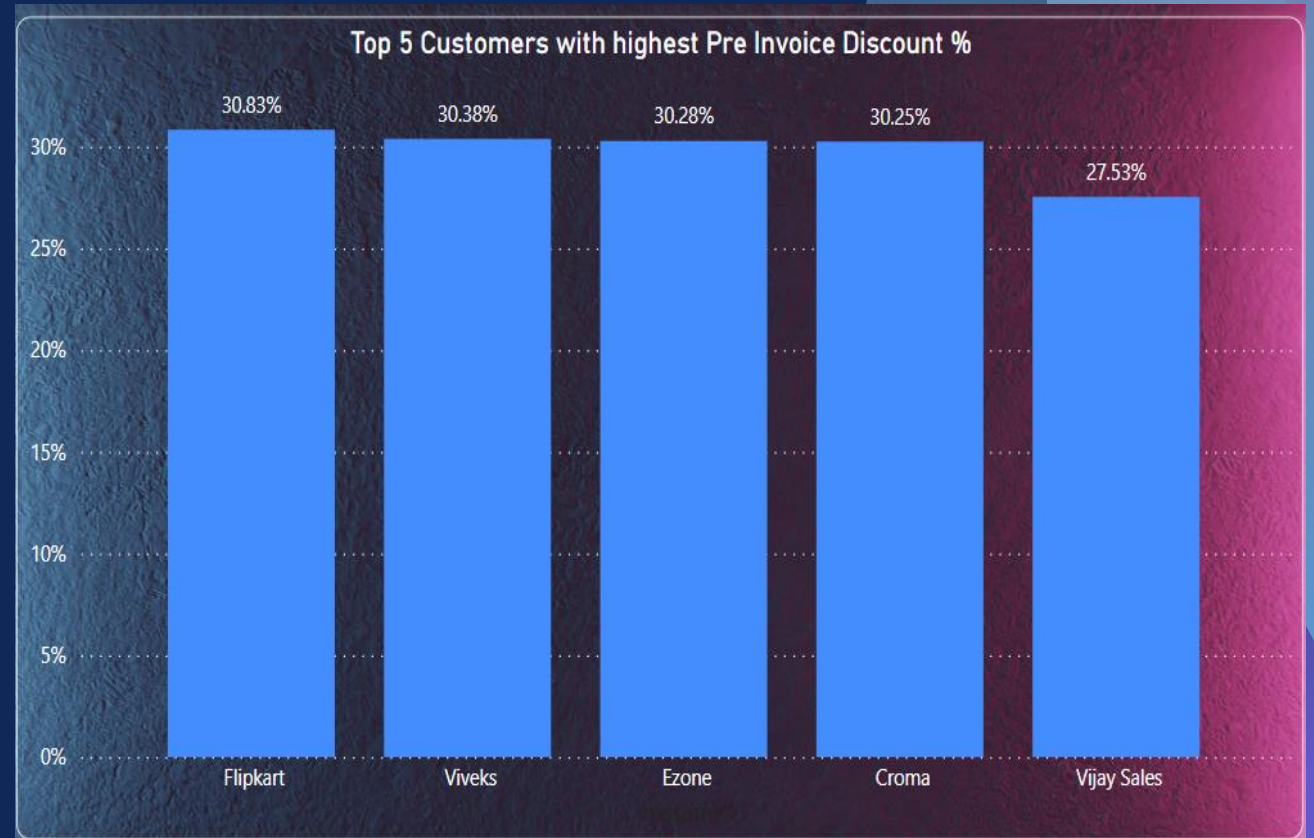
- Mouse : AQ Master wired x1 MS (Variant 1) has the lowest manufacturing cost.
- Personal Desktop : AQ HOME ALLin1 Gen 2 (Variant Plus : 3) has the highest manufacturing cost.

AD HOC REQ 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.

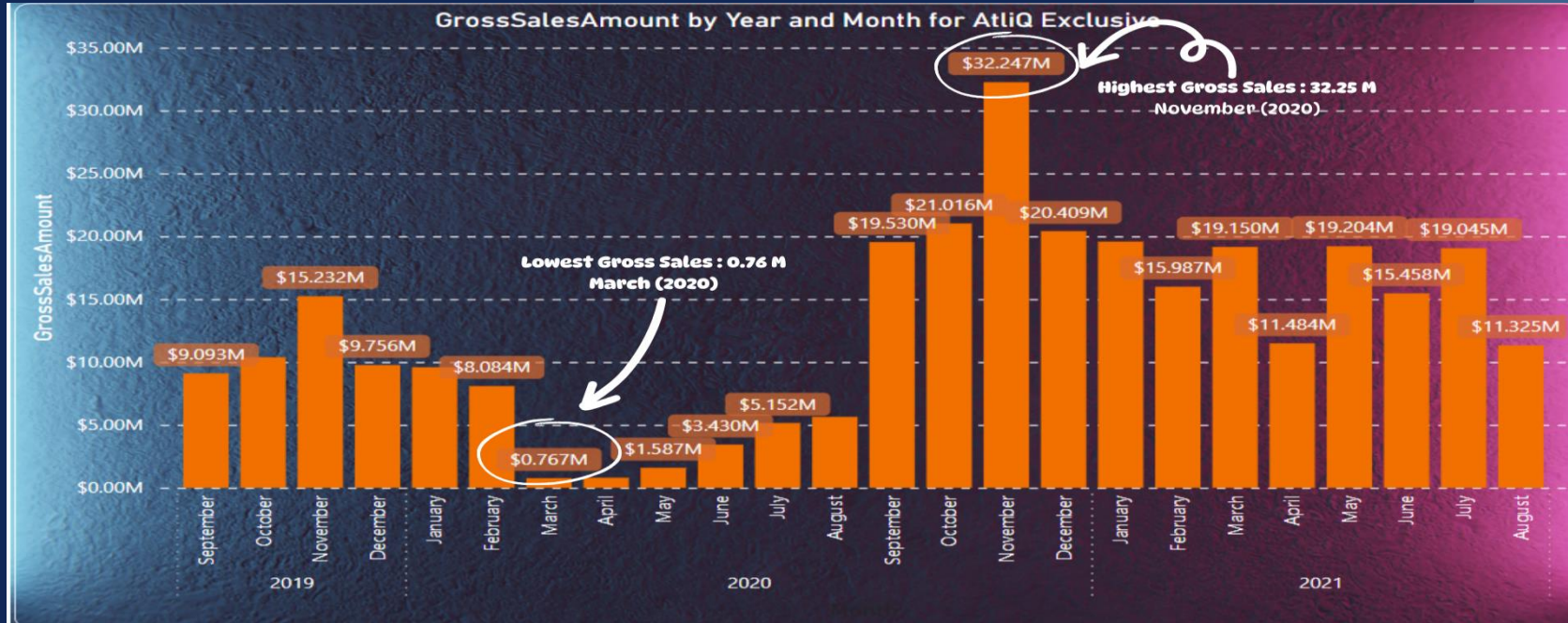
	customer	customer_code	average_discount_percentag
▶	Flipkart	90002009	0.31
	Viveks	90002006	0.30
	Croma	90002002	0.30
	Ezone	90002003	0.30
	Amazon	90002016	0.29

- ❑ Among the top 5 customers with the highest average Pre-Invoice discount percentages, Flipkart ranked 1st with 30.83%, while Vijay Sales ranked 5th with 27.53%.



AD HOC REQ 7

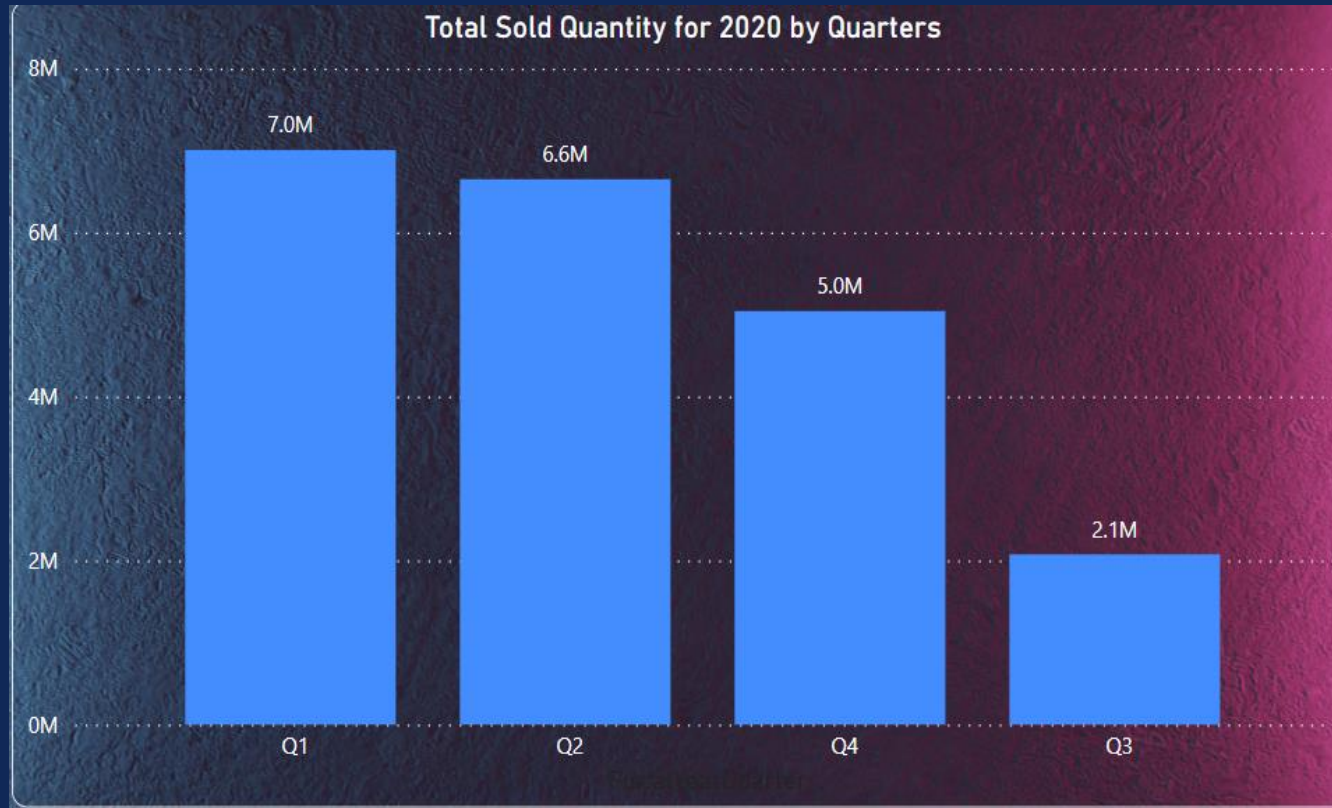
Get the complete report of the Gross sales amount for the customer "Atliq Exclusive" for each month .



- ❑ Atliq Exclusive recorded its highest gross sales amount in November 2020, totaling \$32.25 million.
- ❑ In March of the same year, it had its lowest gross sales of \$0.76 million.

AD HOC REQ 8

In which quarter of 2020, got the maximum total_sold_quantity



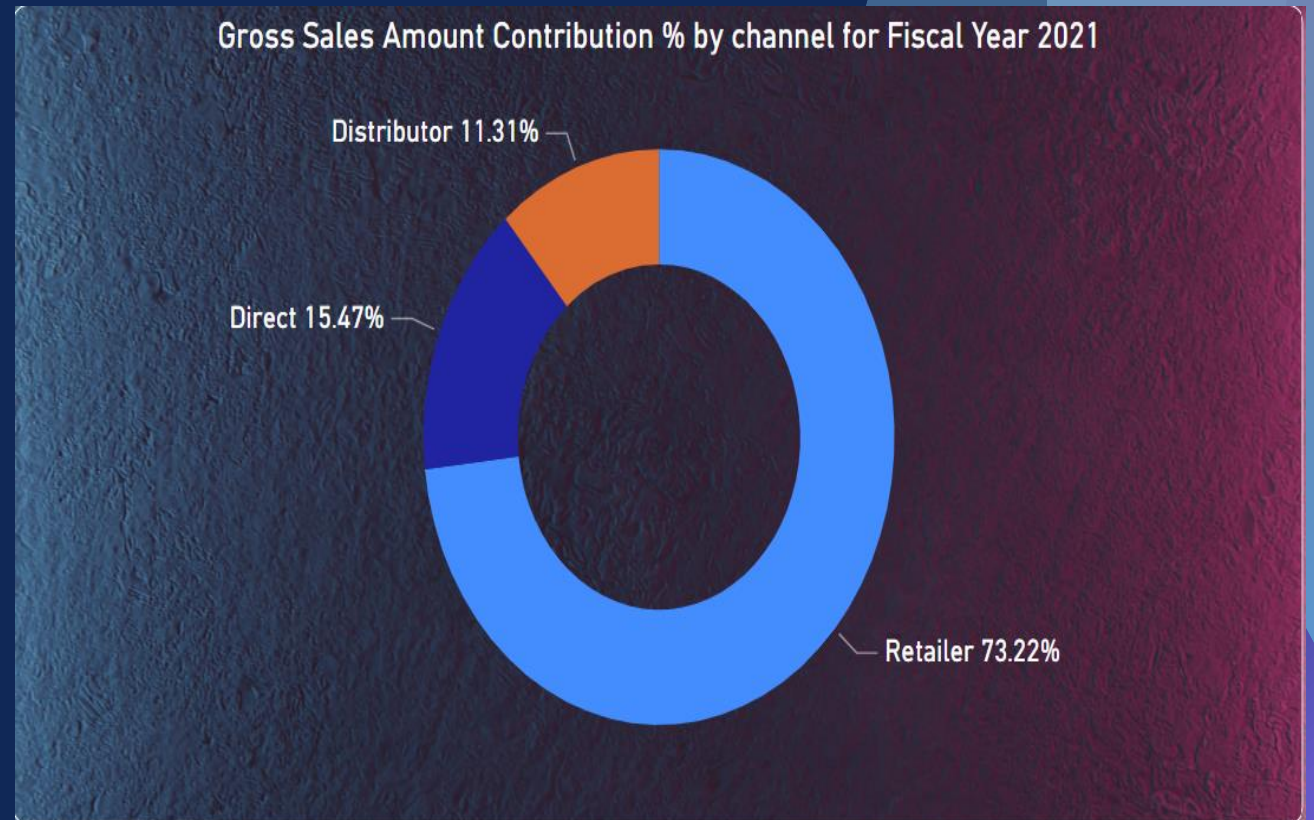
- ❑ The first quarter (Sept, Oct, Nov) of 2020 resulted with highest quantity of product sold with 7.0 M.
- ❑ The third quarter (March, April, May) resulted with the lowest number of products sold with 2.1 M.
- ❑ Q1 alone results to over 34 % of total products sold in 2020.

AD HOC REQ 9

Which channel helped to bring more gross sales in the fiscal year 2021 and the percentage of contribution?

	channel	Gross_sales_Amt	Percent_Contrib
▶	Direct	406.7	15.48
	Distributor	297.2	11.31
	Retailer	1924.2	73.22

- ❑ The Retailer channel accounted for the highest gross sales contribution, totaling over \$1924 million (73%).
- ❑ The Distributor channel had the lowest contribution, amounting to \$297 million (11%).

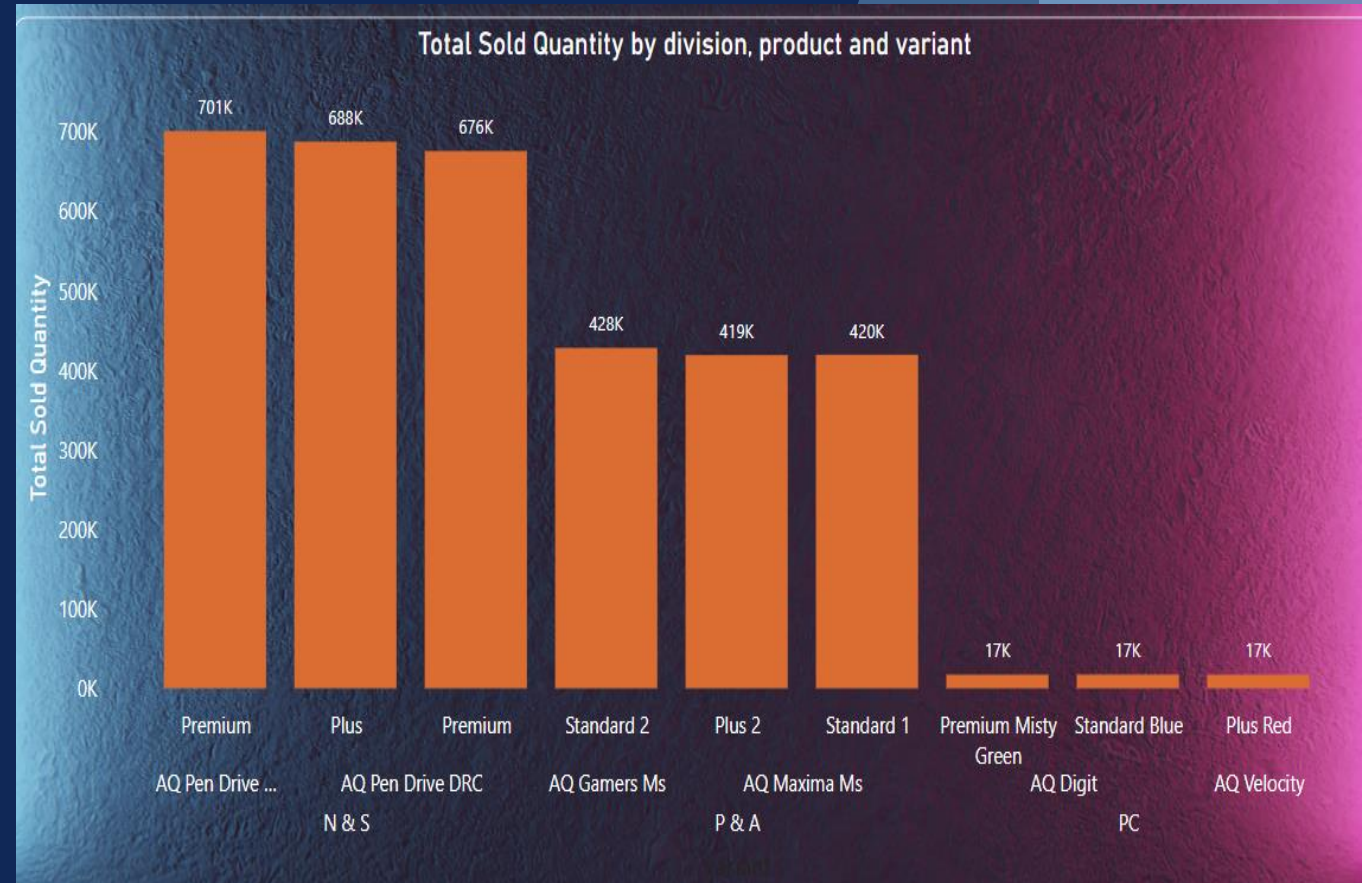


AD HOC REQ 10

Get the Top 3 products in each division that have a high total_sold_quantity in the fiscal year 2021

division	product_code	product	total_sales	rank_num
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

- All the top 3 selling products in each numbers have similar numbers.
- Another interesting fact is that for each division, there is a product with two of its variant among top 3.



SPECIAL THANKS



Dhaval Patel AKA
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Tony Sharma



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Bruce Haryali

THANK YOU

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