



Consumer Goods Ad_Hoc Insights

Presented by Mayank Gupta



AGENDA

Why?

Company's Objective & Background

2 What?

Understanding Company's Market , Product line & Data

3 How?

Ad - hoc Request, Visualisation and Insights

OUR COMPANY BACKGROUND & OBJECTIVE



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



The management noticed that they do not get enough insights to make quick and smart data-informed decisions.



You need to run a SQL query to answer 10 ad hoc requests for which the business needs insights.



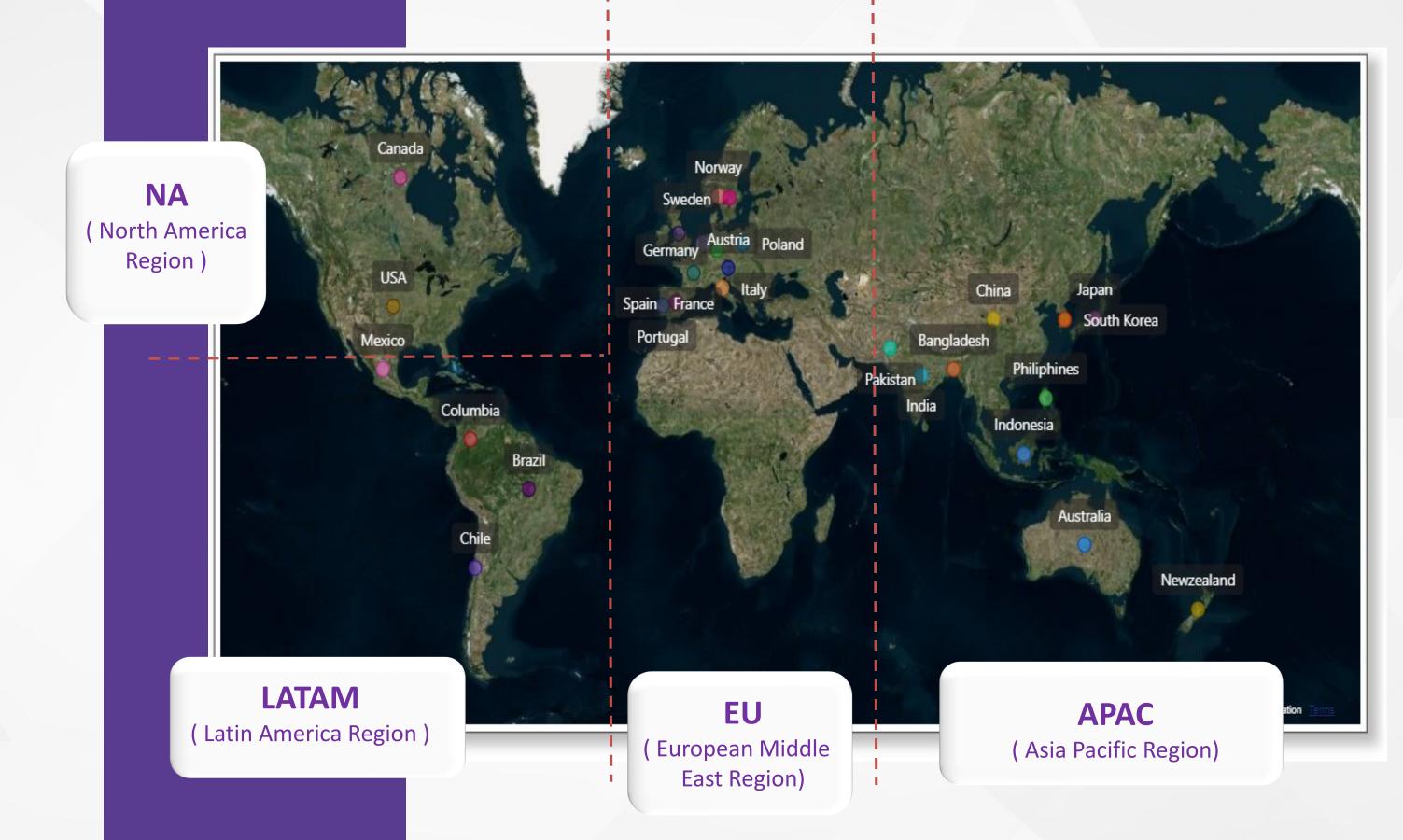
Run SQL queries to fetch data, create visualizations, and derive insights from the results.



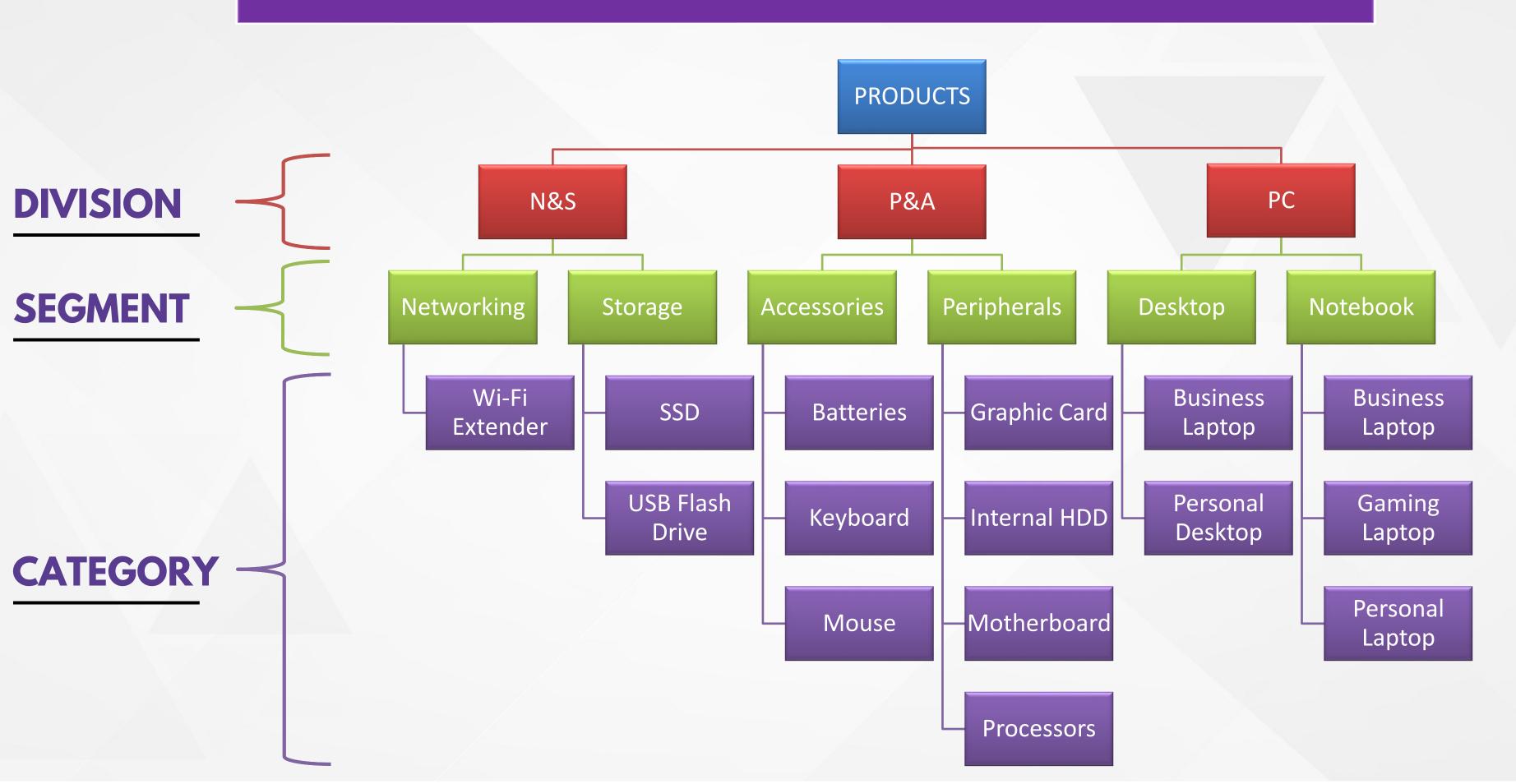
WE PROVIDE WORLDWIDE SERVICES



Atliq's Markets



Atliq's Product Line



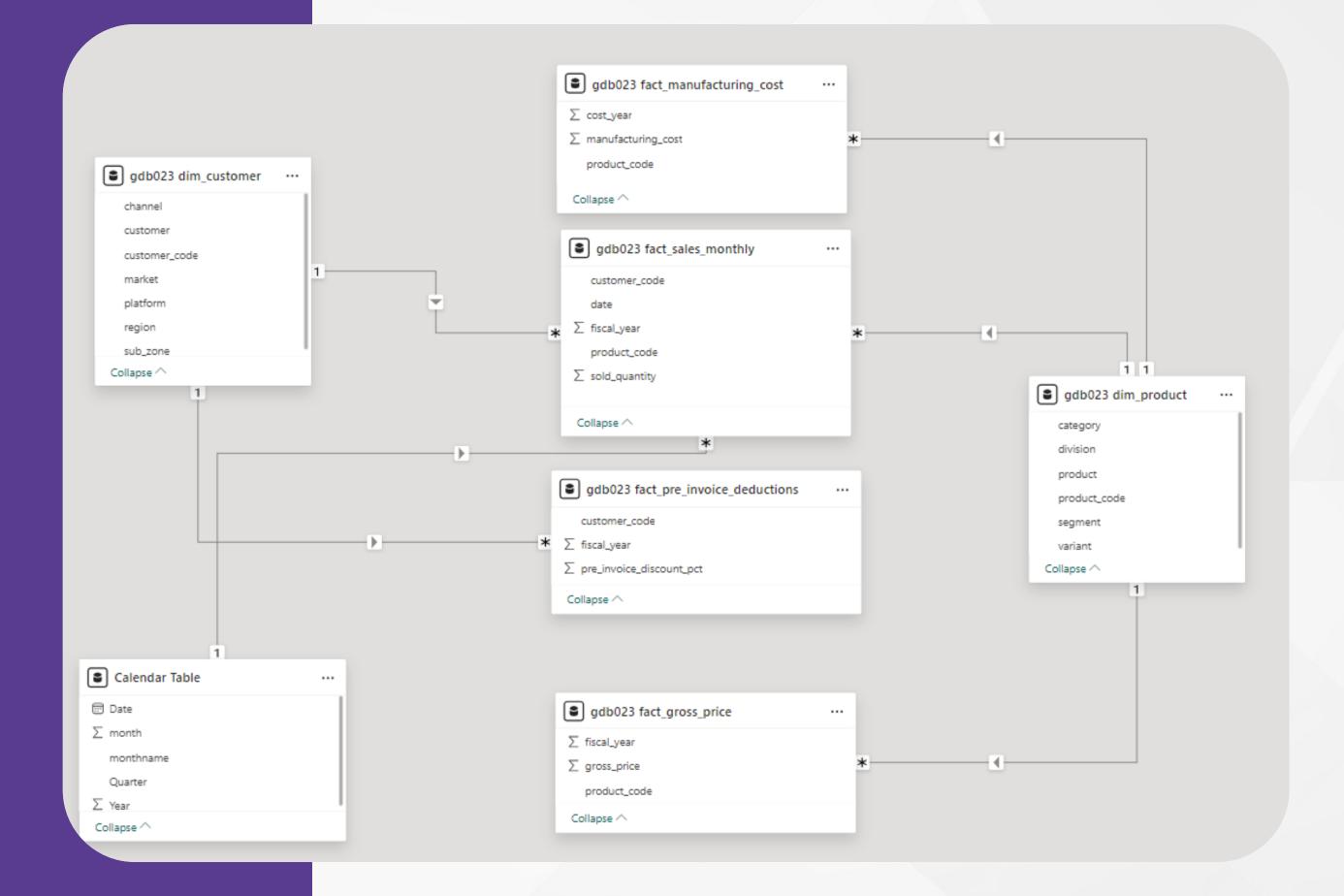
Atliq's Schema

FY 2020

(September 2019 – August 2020)

FY 2021

(September 2020 – August 2021)



REQUEST 1

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

market

India

Indonesia

Japan

Philiphines

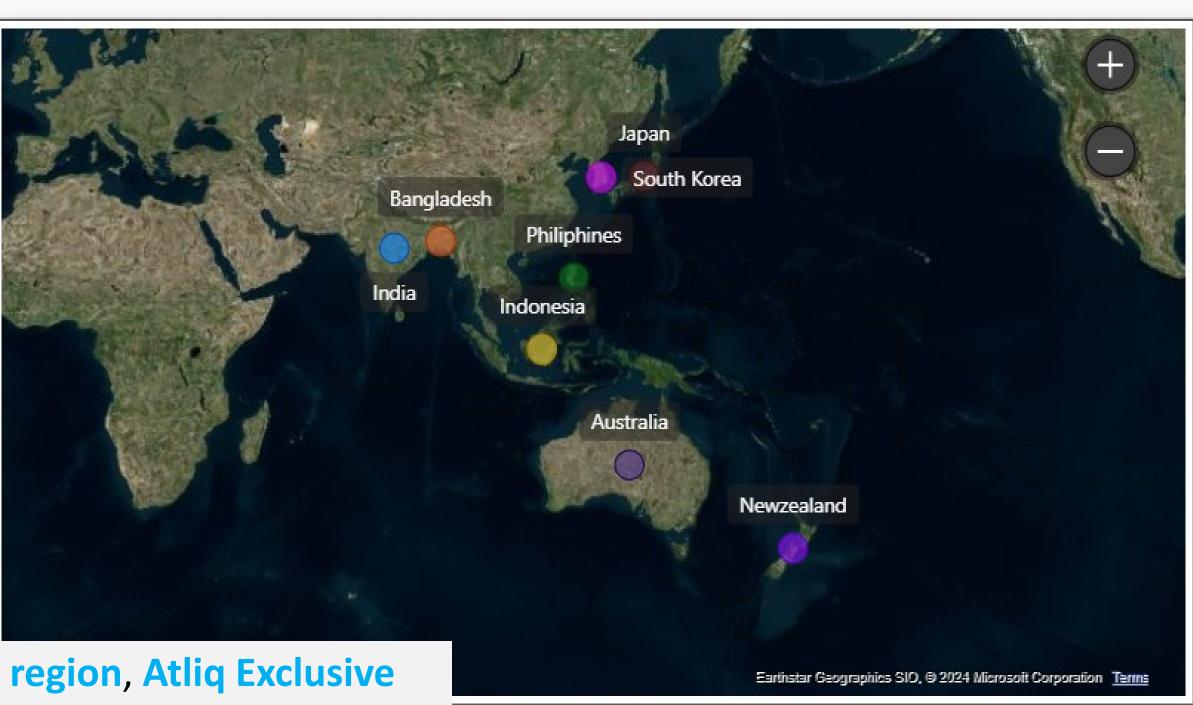
South Korea

Australia

Newzealand

Bangladesh





INSIGHTS

In the APAC region, Atliq Exclusive operates in 8 markets.

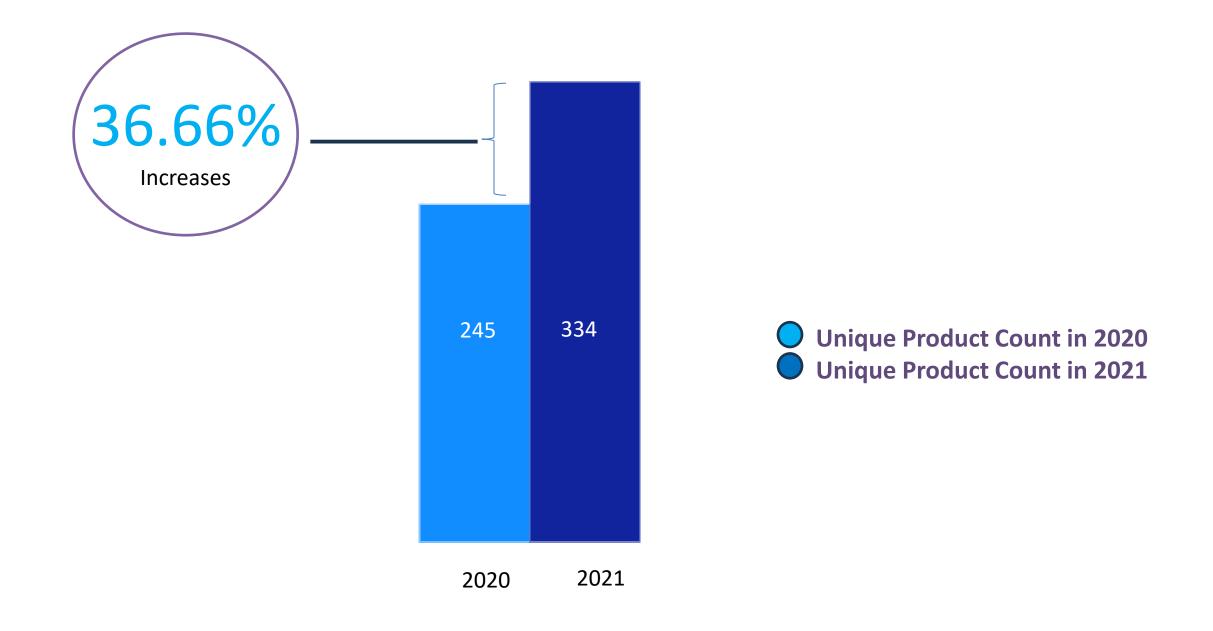
	unique_products_2020	unique_products_2021	percentage_growth
•	245	334	36.3265

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_change

Insights



According to the Trends and Demand, It is good to introduce new product in the market.

In FY 2020, Total we have 245 unique products, but in FY 2021, it increases to 334 unique products.

ebook	129 116
inhorale	
ipherals	84
ktop	32
rage	27
working	9
	working

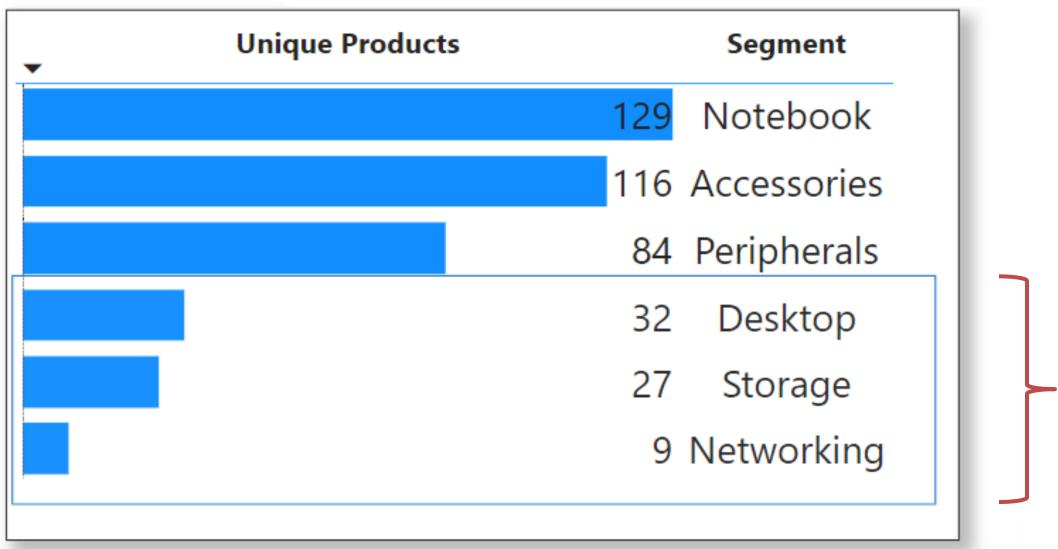
REQUEST 3

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 these fields,. segment and product count

with 129 unique products, followed by "Accessories" with 116, and "Peripherals" with 84. The "Networking" segment has the fewest unique products at 9.

Insights



The highest number of unique products is in the "Notebook" segment

Action:

Investigate why "Networking" has the least unique products.

Consider expanding the product variety in this segment to potentially increase market share.

	segment	unique_product_2020	unique_product_2021	difference
•	Accessories	69	103	34

REQUEST 4

Which segment had the most increase in unique products in 2020 vs 2021?

The final output contains these fields,. segment, unique products 2020, unique products 2021, & difference

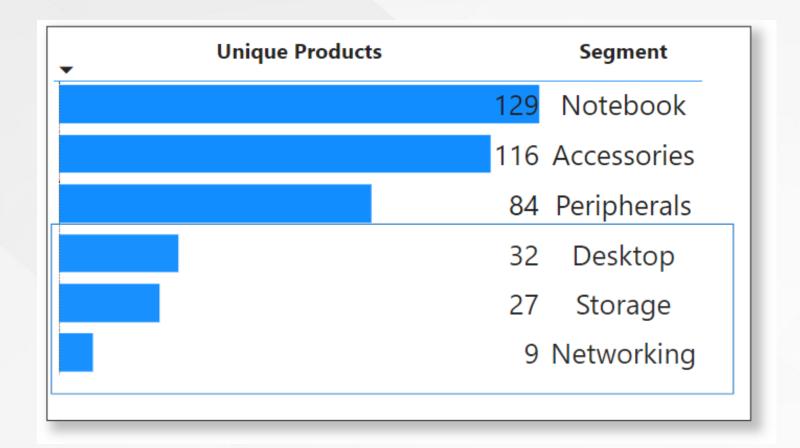
The "Accessories" segment has seen the most significant increase in unique products from 2020 to 2021, with a difference of 34 products. The "Notebook" and "Peripherals" segments also saw increases of 16 products each, while "Desktop" increased by 15 products.

Insights

segment	Unique product 2020	Unique product 2021	Differ	ence
Accessories	69	103	34	1
Notebook	92	108	16	1
Peripherals	59	75	16	1
Desktop	7	22	15	1
Storage	12	17	5	1
Networking	6	9	3	1

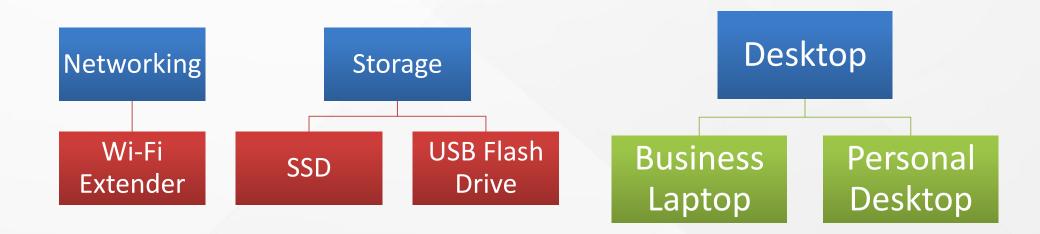
Action:

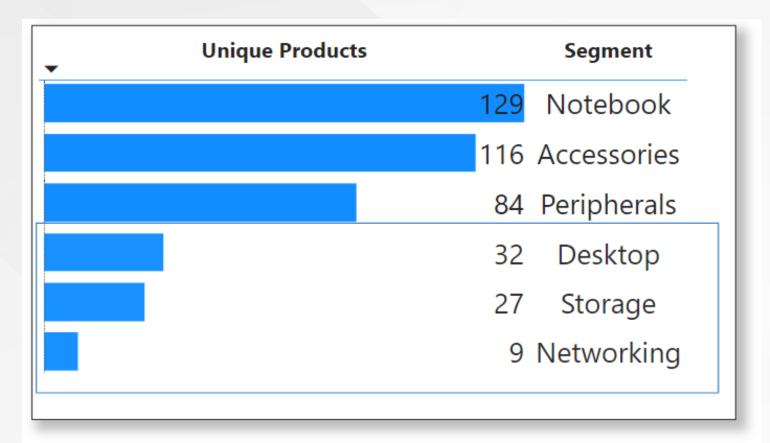
Capitalize on the growth in the "Accessories" segment by further investing in this category. Consider conducting market research to identify trends and continue expanding the product line.



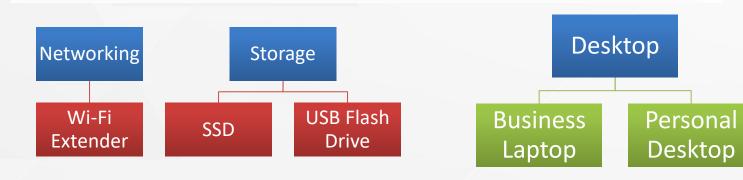
segment	Unique product 2020	Unique product 2021	Difference
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Storage	12	17	5
Networking	6	9	3

segment	AVG MC	AVG GS	Gross Profit	Gross Margin	
Desktop	\$224.88	\$752.51	\$527.63	70.12%	
Notebook	\$129.55	\$433.59	\$304.04	70.12%	
Peripherals	\$15.96	\$53.52	\$37.56	70.18%	
Networking	\$10.06	\$33.83	\$23.77	70.25%	
Accessories	\$4.62	\$15.41	\$10.79	70.03%	
Storage	\$4.48	\$14.95	\$10.46	70.00%	
L					





segment	Unique product 2020	Unique product 2021	Difference
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segment	AVG MC	AVG GS ▼	Gross Profit	Gross Margin
Desktop	\$224.88	\$752.51	\$527.63	70.12%
Notebook	\$129.55	\$433.59	\$304.04	70.12%
Peripherals	\$15.96	\$53.52	\$37.56	70.18%
Networking	\$10.06	\$33.83	\$23.77	70.25%
Accessories	\$4.62	\$15.41	\$10.79	70.03%
Storage	\$4.48	\$14.95	\$10.46	70.00%

Suggested Actions to Overcome Challenges:

- Package Deal
- Free Vouchers
- Student Discount
- Cash back
- Increase Product Variety in Low-Performing Segments

	product_code	product	cost_year manufacturing_cost
Þ	A6120110206	AQ HOME Alin1 Gen 2	2021 240.5364
	A2118150101	AQ Master wired x1 Ms	2020 0.8920

REQUEST 5

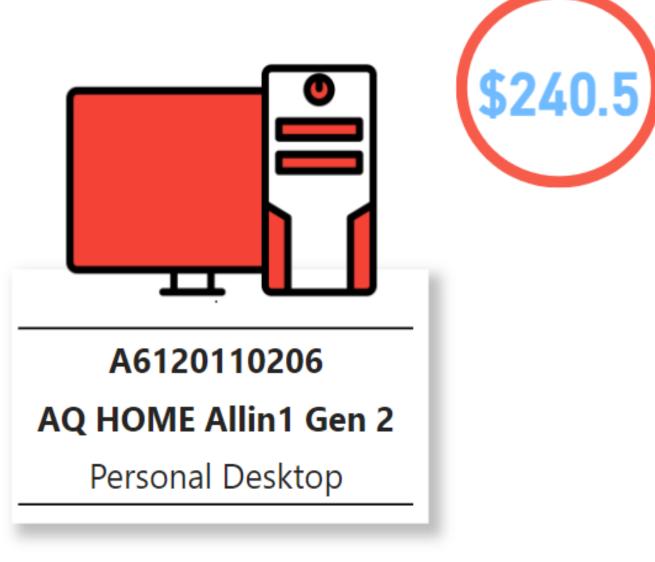
Get the products that have the highest and lowest manufacturing costs?

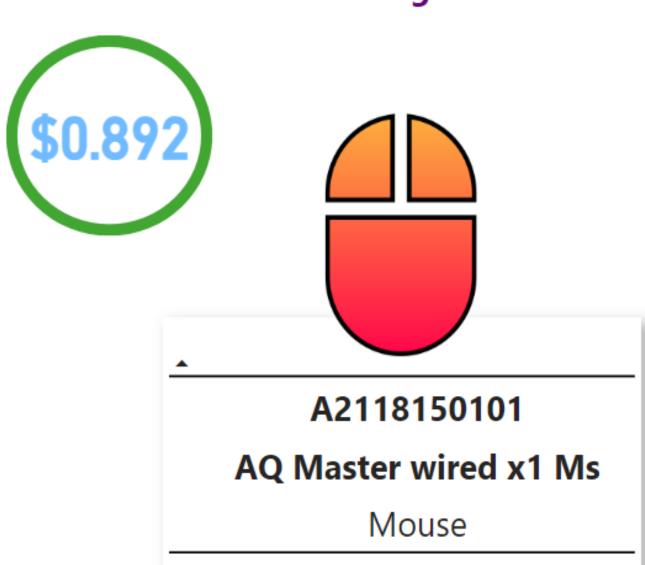
The final output contains these fields,. product code, product, & manufacturing cost

which product of our has high manufacturing cost?

which product of our has low manufacturing cost?









	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

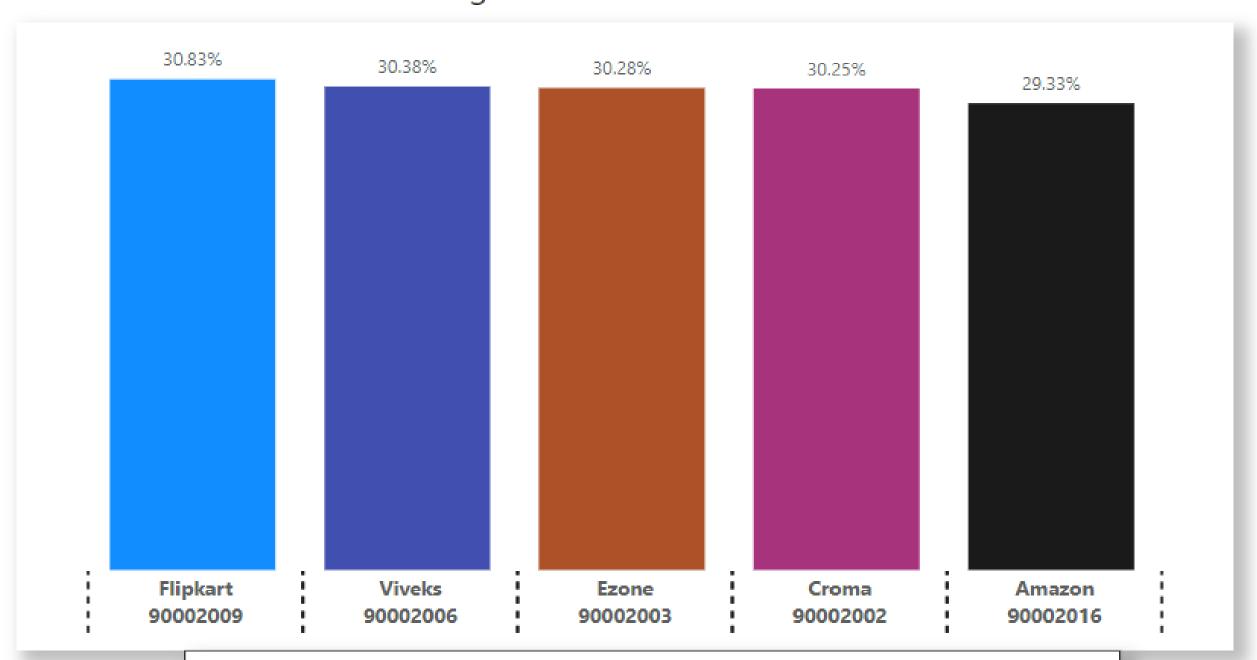
REQUEST 6

Generate a report which contains the top 5 customers who received an average high pre-invoiced 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, Vivek, Ezone, Croma, Amazon are the top customers who received highest Discount in the Indian Market. Flipkart, received highest Discount of 30.8% and Amazon 5th highest discount of 29.33%.

Insights



Top 5 customers who received the highest discounts in the Indian market for FY 2021

	months	years	gross_sales_amount
ŀ	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

REQUEST 7

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

The final output contains these fields,. months, year, & sales amount







Reason:

- Covid
- Silicon Chip

In Covid, due to work from home demand of laptop got increases that why we can see sales

hike in covid specially after "August".

The first cases of COVID-19 in India were reported on 30 January 2020 in three towns of Kerala, among three Indian medical students who had returned from Wuhan, the epicenter of the pandemic. [10][11][12] Lockdowns were announced in Kerala on 23 March, and in the rest of the country on 25 March. Infection rates started to drop in September. [13] Daily cases peaked mid-September with over 90,000

That explosion in demand—unexpectedly goosed during the Covid-19 pandemic for certain industries like smartphones and PCs—has caused a near-term supply shock triggering an unprecedented global shortage.

China's Role: China is a major player in testing and packaging these chips. But here's the twist: heavy reliance on China creates supply risks.

	Quarter	total_sold_quantity
•	Q1	7.01M
	Q2	6.65M
	Q3	2.08M
	Q4	5.04M

REQUEST 8

In which quarter of 2020, got the maximum total sold quantity?

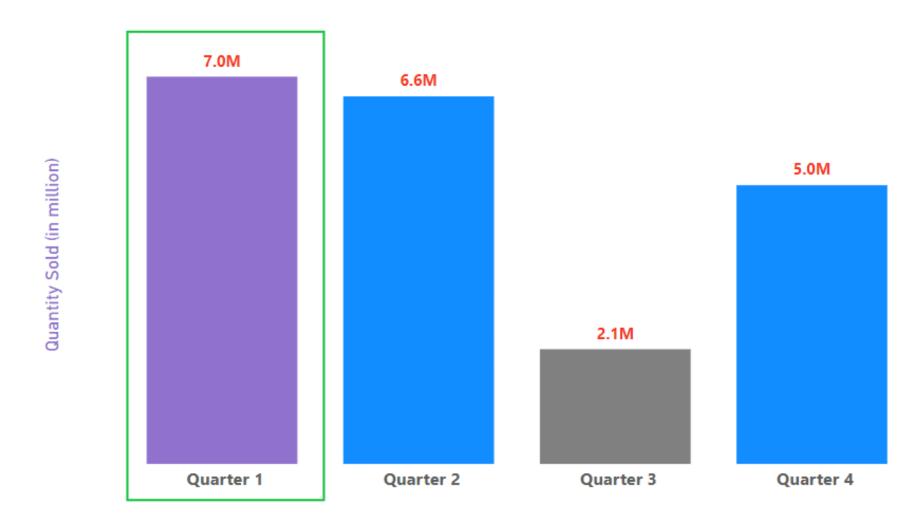
The final output contains these fields,.

Quarters, &

total-sold-quantity

FY 2020 (September 2019 – August 2020)

Insights



The data clearly shows the impact of the COVID-19 pandemic on sales quantity. The highest sales were recorded before the pandemic's impact was fully realized (Q1), followed by a gradual decline as the pandemic spread (Q2) and a significant drop during the peak of the crisis (Q3). The beginning of recovery is seen in Q4 as markets started to stabilize and adapt to the new circumstances.

	channel	gross_sales_in_million	percentage
•	Retailer	1924.17	73.22
	Direct	406.69	15.48
	Distributor	297.18	11.31

REQUEST 9

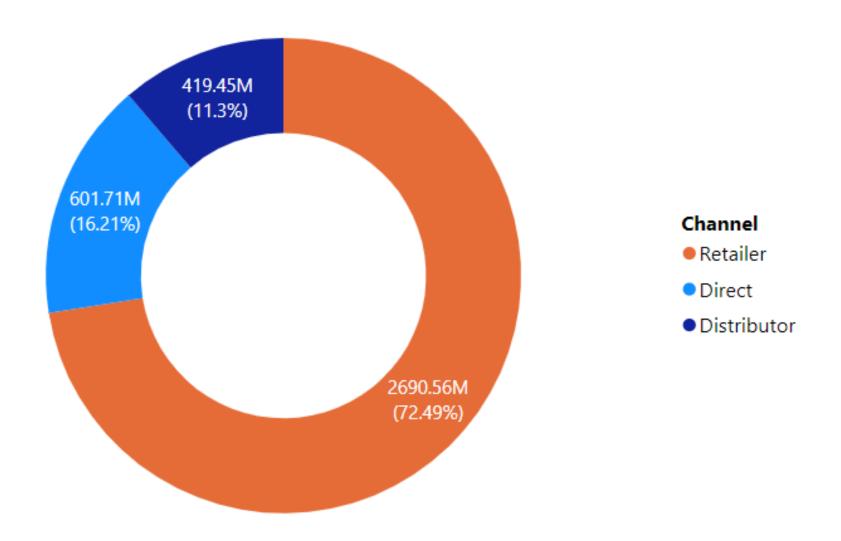
Which channel helped to bring more gross sales in the fiscal year 2021 and the percentage of contribution?

The final output contains these fields,.

Channel,

gross sales in million, & percentage

Insights



Strategic Implications:

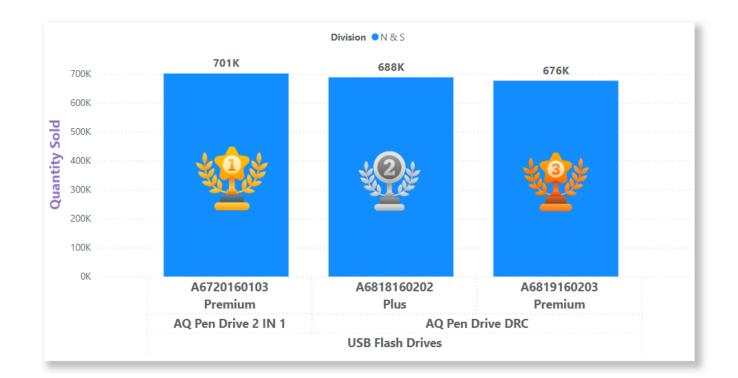
- **Focus on Retailers:** Given that the Retailer channel is responsible for the majority of sales, the company should prioritize supporting this channel with targeted promotions, better supply chain management, and exclusive product offerings.
- **Growth of Direct Sales:** To reduce dependency on retailers and improve profit margins, the company could explore strategies to boost direct sales, such as enhancing online presence, direct marketing campaigns, or loyalty programs.
- **Optimizing Distributor Relationships:** Since distributors play a smaller but still significant role, the company should ensure these relationships are optimized for maximum reach and efficiency, possibly exploring new distributor partnerships in untapped regions.

	division	product_code	product	total_sold_quantity	mk
•	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

REQUEST 10

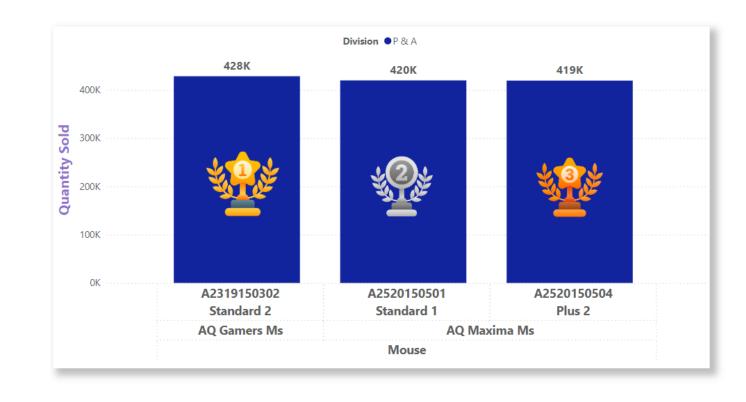
Get the Top 3 products in each division that have a high total sold quantity in the fiscal year 2021?

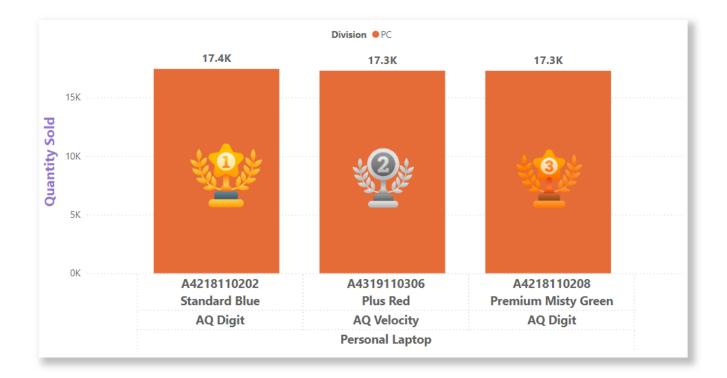
The final output contains these fields,. division, product code, product, total sold quantity, & rank



Insight: The N & S division shows strong performance in the **USB Flash Drives category**, with all top three products being different variants of AQ **Pen Drives**. The high sales numbers indicate a strong market demand for these products, particularly the **Premium and Plus versions**.

Insight: The P & A division's top products are all mouse variants, with the AQ Gamers and AQ Maxima series leading in sales. The close competition in sales figures between the top three products suggests that there is consistent demand across different mouse models, particularly in the gaming and high-performance segments.





Insight: The PC division's top-selling products are from the AQ Digit and AQ Velocity laptop series, with minimal difference in the number of units sold among them. This indicates that customers in the laptop segment have a nearly equal preference for different product variants, suggesting a balanced demand across multiple laptop configurations.



THANK YOU



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