AtliQ Hardware goods Ad-Hoc Insights



What is consumer goods domain?



- The consumer goods sector consists of companies that manufacture and sell products for consumer use.
- when the economy is growing, consumer demand grows and the sector will see an increased demand for higher-end products.
 When consumer demand shrinks, there is an increased relative demand for value products.
- Consumer goods industries sell their product throuogh various platform like by selling their product to other companies which then sell these product to the consumers or by directly selling to the consumers through e-commerce or by brick and motar type.
 - The consumer goods industry plays an important role in the global economy. It is the source of GDP of many countries

Introduction to the AtliQ Hardware

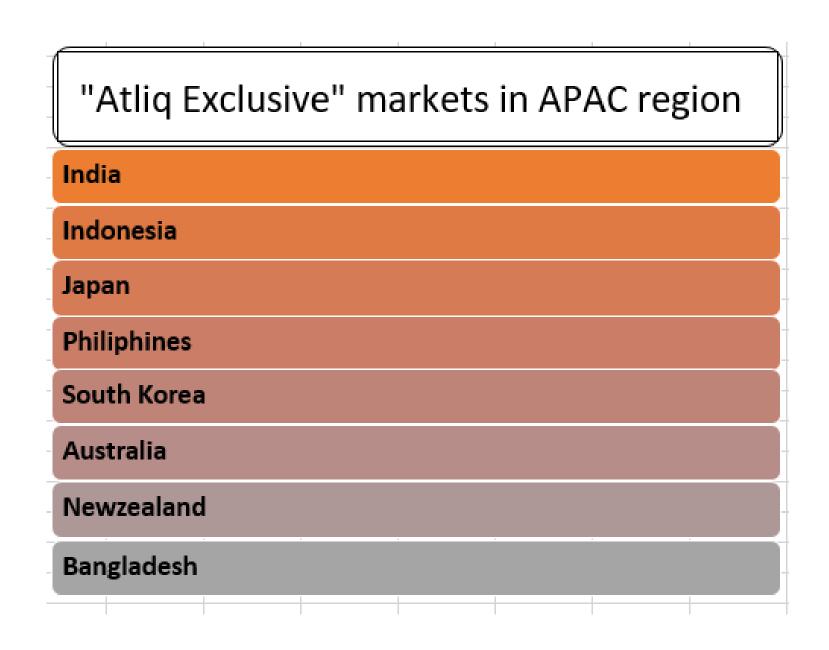
- AtliQ Hardware is computer parts manufacturing company
- It sell its product across the PAN India and abroad as well
- AtliQ has several customers along with their own companies
- e-commerce and brick and motar type which also help them to sell their products.
- Atliq Hardware----> customer----> consumer
- Atliq Exclusive, Atliq e-store ----> consumer

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

- "Atliq Exclusive" is the AtliQ Hardware firm which is of Brick and Motar type.
- APAC is the Asia-Pacific region.

Output:

	market
•	India
	Indonesia
	Japan
	Philiphines
	South Korea
	Australia
	Newzealand
	Bangladesh





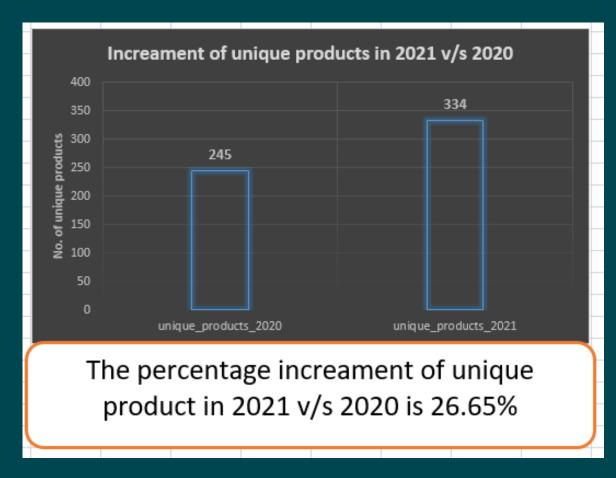
It is seen that there are total <u>8 markets</u> in <u>APAC region</u> where "Atliq Exclusive" is doing its business.

2] What is the percentage of <u>unique product</u> increase in <u>2021 vs. 2020</u>? 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	26.65

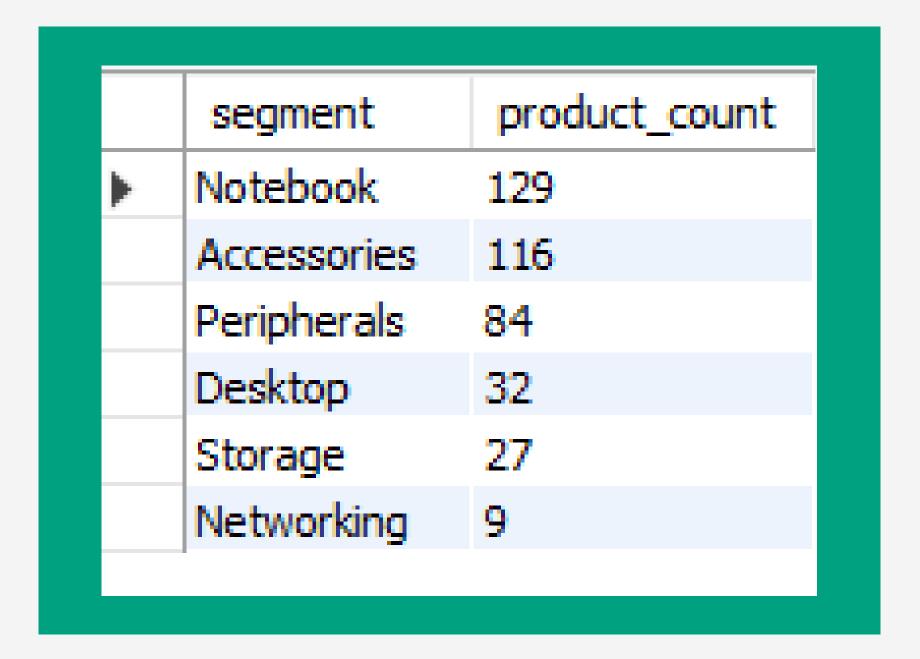
unique_products_2020	unique_products_2021	percentage_chg
245	334	26.65



- In the year 2020, there were total-245 products Atliq Hardware were selling.
- In the year 2021, the number of products increases and total product bacame 334
- In the year 2021, Atliq Hardware seen more increament in products,
- Total products increase in 2021 v/s 2020=334-245= 89 products.
- The percentage increment of No. of products in 2021 v/s 2020=26.65%

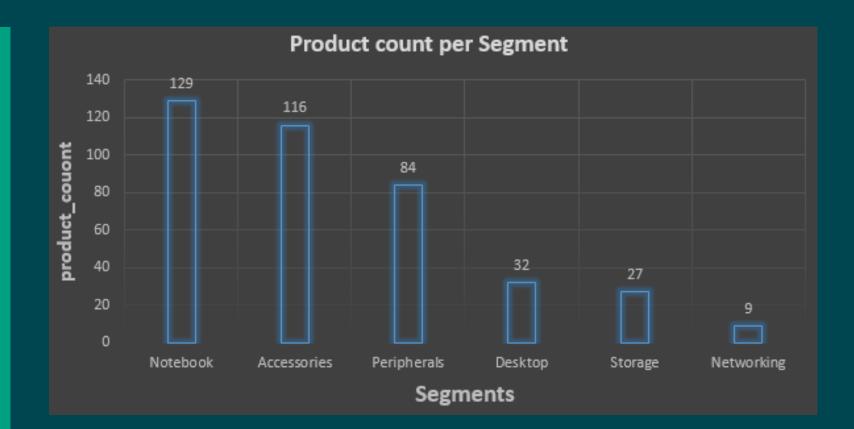
3] Provide a report with all the unique product counts for each segment and sort them in descending order of product counts. The final output contains 2 fields, segment, product_count.

Output:





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



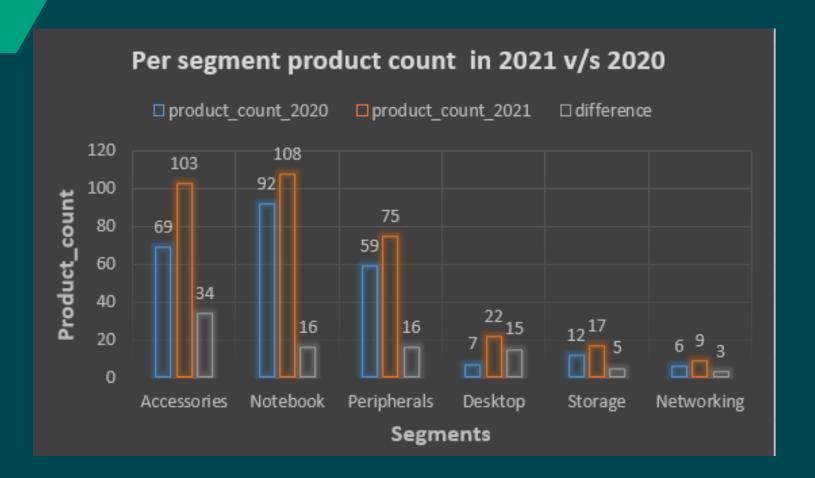
- Atliq Hardware products are divided into 6 segments.
- Out of the total 6 segments:
- Products in the Notebook segments is maximum, may be because of high demand of the products in the segment
- Products in the Networking segments in minimum, may be because of less demand for the products in this segments

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

Output:

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

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



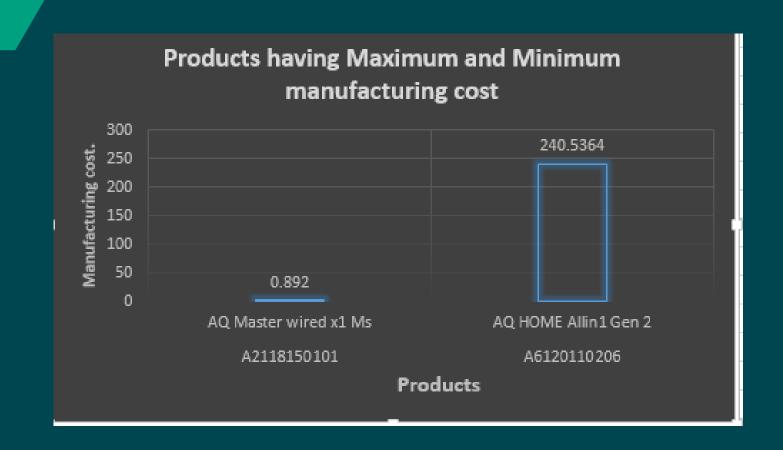
- From the data it is seen that, products in all 6 segments has increased in yr-2021 as compared to yr-2020.
- This means that Atliq Hardware in doing good business in yr-2021 v/s yr-2020.
- Maximum products has been added in the Accessories section in 2021 v/s 2020.
- Very few products has added to the Networking segment in 2021 v/s 2020.

5] Get the products that have the highest and lowest manufacturing costs. The final output should contain these fields product_code product manufacturing_cost

Output:

	product_code	product	manufacturing_cost
•	A2118150101	AQ Master wired x1 Ms	0.8920
	A6120110206	AQ HOME Allin 1 Gen 2	240.5364

	product_code	product	manufacturing_cost
•	A2118150101	AQ Master wired x1Ms	0.8920
	A6120110206	AQ HOME Allin 1 Gen 2	240.5364



- The product AQ Master wired x 1Ms has the minimum manufacturing cost, which is 0.8920\$, so the chances of the earning profit on this product is more.
- But still the profits will depends upon the gross price and number of quantities of the product we sold or depends on gross_sales_price of the product.
- The product AQ HOME All in 1 Gen 2 has the maximum manufacturing cost, which is 240.54 \$.

	product_code	product	manufacturing_cost	sum(sold_quantity)	gross_price	gross_sales_price
•	A2118150101	AQ Master wired x1 Ms	0.8920	1343568	2.9434	3936788.5968
	A6120110206	AQ HOME Allin1 Gen 2	240.5364	2291	810.6034	1857092.3894

- Here the product with the minimum manufacturing cost generating high gross sales.
- And product with high manufactring cost generating low gross sales.

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.

pre-invoice discount: An early payment discount, It is an incentive given to the customers when they pay their bills before the due date.

	customer_code	customer	average_discount_percentage
Þ	90002009	Flipkart	0.31
	90002006	Viveks	0.30
	90002002	Croma	0.30
	90002003	Ezone	0.30
	90002016	Amazon	0.29

	customer_code	customer	average_discount_percentage
•	90002009	Flipkart	0.31
	90002006	Viveks	0.30
	90002002	Croma	0.30
	90002003	Ezone	0.30
	90002016	Amazon	0.29
	-		

- These are the total Top 5 customers who got maximum preinvoice_discount
- Out of the 5 customer Flipcart(90002009) is the only customer who has received maximum pre-invoice_discount.
- It also means that in the year 2021, in INDIA flipcart is the customer, who has done the payment to Atliq hardware before due date.
 - Amazon(90002016) is the customer who has received minimum pre-invoice discount in yr-2021 in INDIA.
- Maximum number of time Amazon(90002016) delay the payment to the Atliq Hardware after due date.



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.



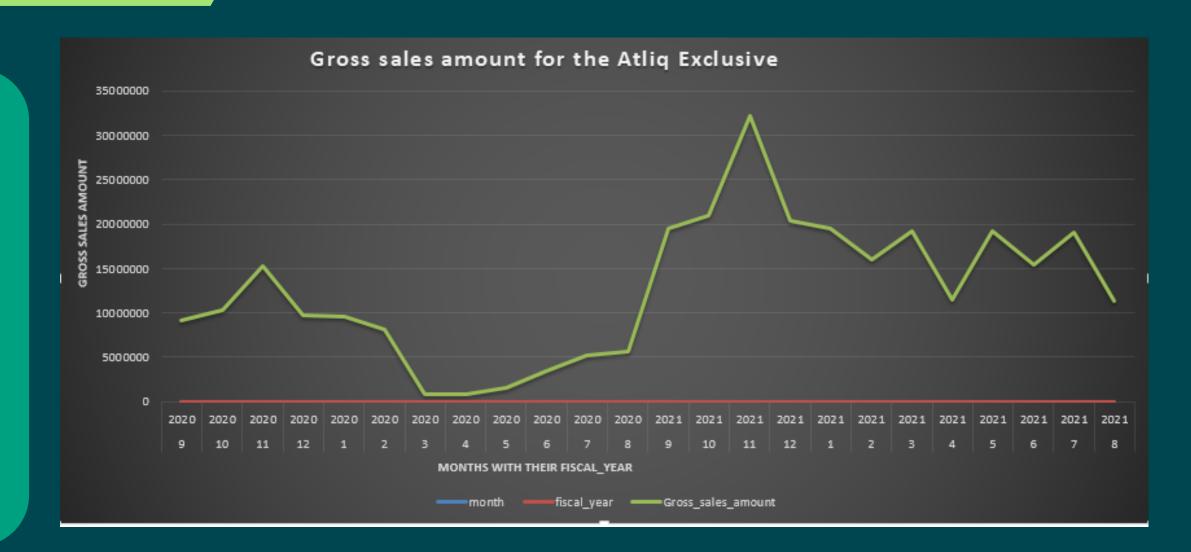
	date_month	fiscal_year	Gross_sales_Amount		9	2021	19530271.30
>	9	2020	9092670.34		10	2021	21016218.21
	10	2020	10378637.60		11	2021	32247289.79
	11	2020	15231894.97	_	12		20409063,18
	12	2020	9755795.06	_			
	1	2020	9584951.94	_	1		19570701.71
	2	2020	8083995.55		2	2021	15986603.89
	3	2020	766976.45		3	2021	19149624.92
	4	2020	800071.95		4	2021	11483530.30
	5	2020	1586964.48		5	2021	19204309.41
	6	2020	3429736.57		6	2021	15457579.66
	7	2020	5151815.40		7	2021	19044968.82
	8	2020	5638281.83		8	2021	11324548.34

Year-2020

Year-2021

Visuals:

	date_month	fiscal_year	Gross_sales_Amount
•	9	2020	9092670.34
	10	2020	10378637.60
	11	2020	15231894.97
	12	2020	9755795.06
	1	2020	9584951.94
	2	2020	8083995.55
	3	2020	766976.45
	4	2020	800071.95
	5	2020	1586964.48
	6	2020	3429736.57



- Here we have the report for Atliq Exclusive for each month per fiscal year.
- For fiscal year-2021:

November month was most profitable, gross sales = 32247289.79 \$. In the April and August month, Atliq Exclusive did least sales which was gross sales = 11483530.30 \$ and 11324548.34\$ respectively.



November month was most profitable in which Atliq Exclusive did maximum sales, gross sales = 15231894.97\$. In the March and April month, Atliq Exclusive did least sales which was gross sales=766976.45\$ 800071.95 respectively.

Conclusion:

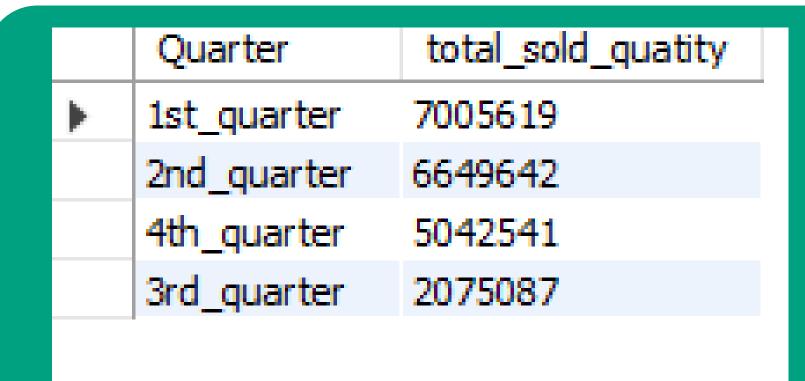
- 1) For the Atliq Exclusive, NOVEMBER month is high performing month, in which it is doing most sales.
- 2) For the Atliq Exclusive, April and March month is low performing month, in which it is least sales



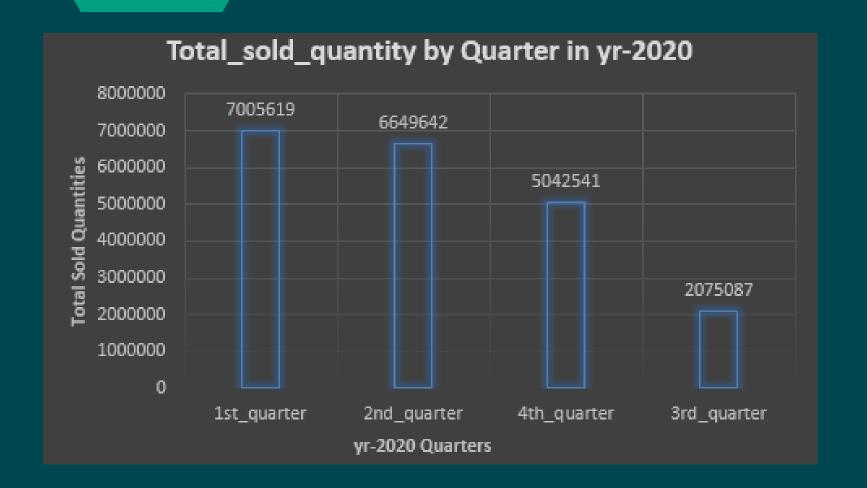
8] In which quarter of 2020, got the maximum total_sold_quantity? The final output contains these fields sorted by the total_sold_quantity, Quarter total_sold_quantity

• Atliq Hardware fiscal year starts from November to October months

ricing manarrane mocat year oca				
NOV, DEC,JAN	1st Quarter			
FEB, MAR,APR	2nd Quarter			
MAY,JUN,JULY	3rd Quarter			
AUG,SEP,OCTO	4th Quarter			

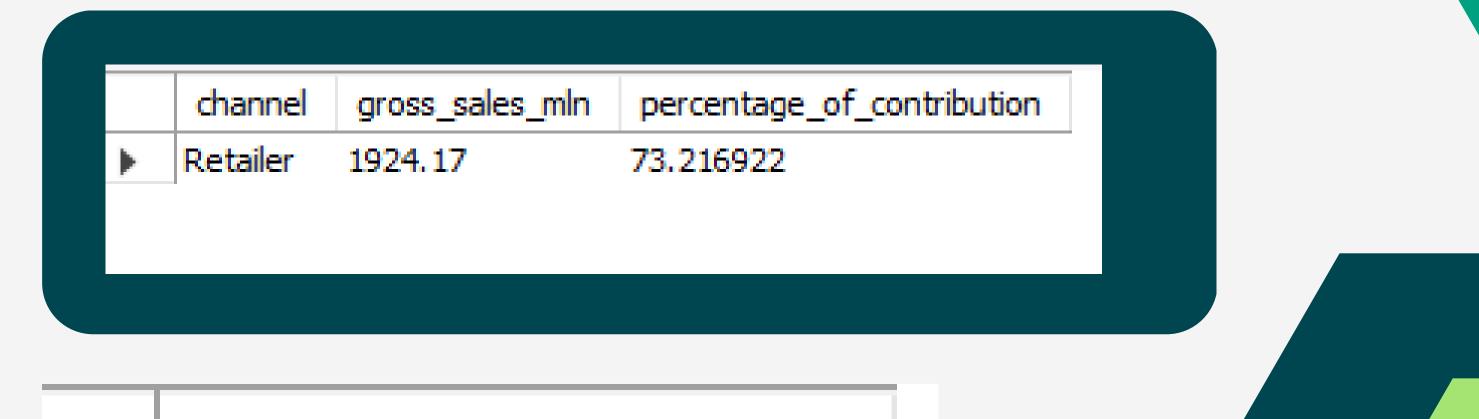


	Quarter	total_sold_quatity
•	1st_quarter	7005619
	2nd_quarter	6649642
	4th_quarter	5042541
	3rd_quarter	2075087



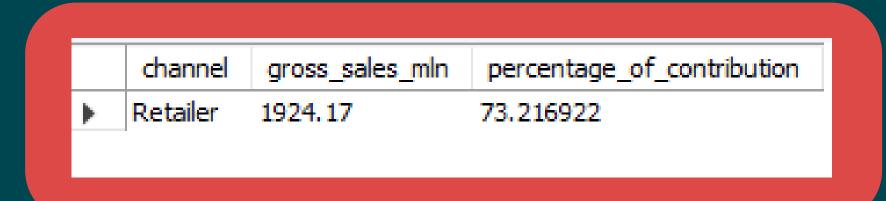
- In the fiscal year 2020, 1st quarter (Nov, Dec, Jan) was the highest selling quarter, So in the 1st quarter we can expect high profit.
- In the fiscal year 2020, 3rd quarter(Mar, April, May) was the quarter with least profit quarter because minimum number of product were sold in this quarter.

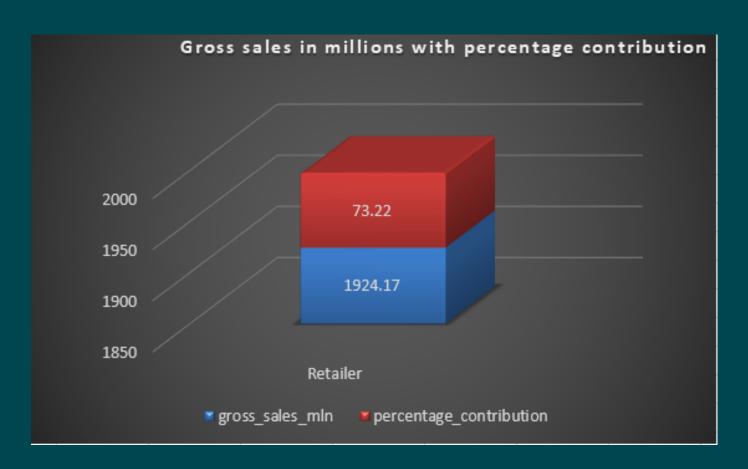
9] Which channel helped to bring more gross sales in the fiscal year 2021 and the percentage of contribution? The final output contains these fields, channel gross_sales_mln percentage



Total_gross_sales_mln

2628.03





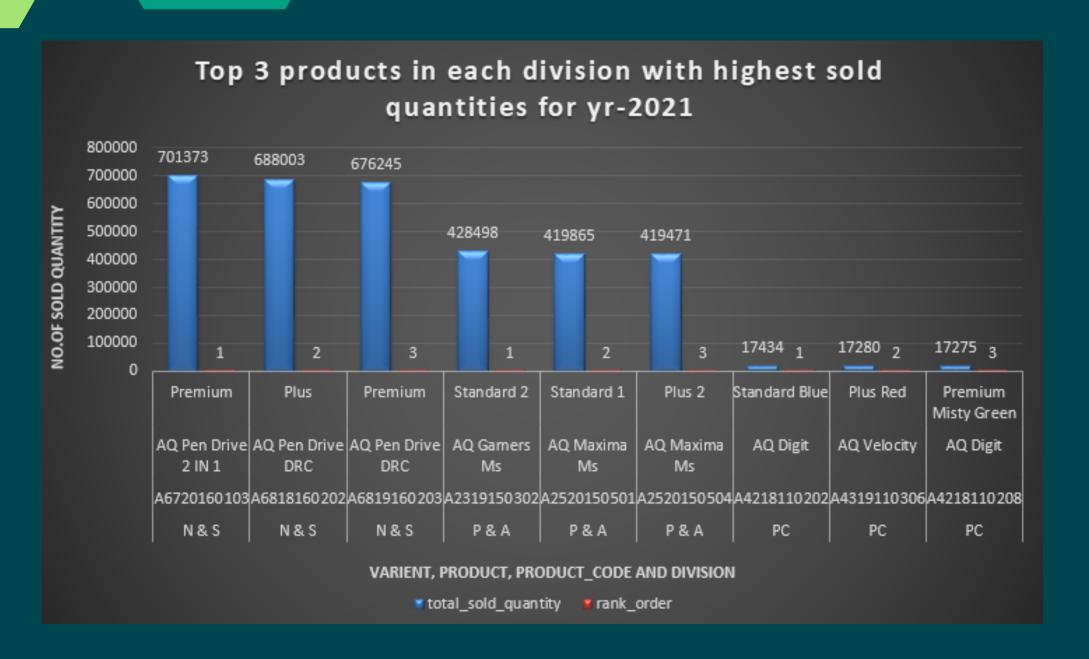
- Retailer is the channel which has generated heighest gross sales i.e 1924.17\$ million in the year 2021 out of total gross sales of 2628.04\$ million
- Retailer is the only channel of the Atliq Hardware which contribute maximum percentage i.e 73.22% in the total Atliq Hardware gross sales. Hence this section is very important for the company.
- Though Retailer is the highest contributor (73.22%) in the gross sales, but Atliq Hardware should focus on the other channels why they are generating very low sales.

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	variant 🔺	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

Visuals:

	division	product_code	product ==	variant 🔺	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



- There are total 3 division in Atliq Hardware: N &S, P & A and PC
- This data shows the top 3 products in each division that has highest selling quantities in year-2021.
- But if we compare the top 3 products of each division that has highest number of sales in yr-2021 then:
- ----> N & S division's product are being sold most.
- ----> P & A division's product sold_quantities less than sold quantities in N & S division.
- -----> PC division's product are being sold less out of all the division.

Summary:

- 1) There are total 8 markets in APAC region, where Atliq Exclusive doing its business.
- 2) 26.65 % of the products has increased in year 2021 as compared to year 2020.
- 3) There are total 6 segments in Atliq Hardware, Out of which there are maximum products in Notebook segment and minimum products in the Networking segment.
- 4) Out of 6 segments, Maximum products has added in the Accessories segment (i.e 34) in yr-2021 as compared to yr-2020 and minimum products added in the Networking segments (i.e 3) products.
- 5) "AQ Master wired x 1Ms" is the product which has lowest manufacturing cost (i.e 0.8920 \$) and " AQ HOME All in 1 Gen 2" has the maximum manufacturing cost (i.e 240.54 \$). Where AQ Master wired x 1Ms is generating maximum profit than AQ HOME All in 1 Gen 2.

- 6) In the fiscal year-2021 in Indian market, Flipcart is the customer who got maximum pre invoice discount and Amazon got minimum pre invoice discount.
- 7) For the Atliq Exclusive, November is the top performing month in which maximum sales takes place

 And April and March month is low performing month in which lowest sales take place.
- 8) For the fiscal year-2020, Maximum sales takes place in 1st quarter and minimum sales takes place in 3rd quarter.
- 9) Retailer is the only channel which contributing maximum i.e 73.22% of the total gross sales.
- 10) There are total 3 division in the Atliq Hardware N & S, P & A and PC. If we compare the top 3 products in all the 3 division then products in the N & S division has high demand and Top 3 Products in the PC region has very low demand.



It always seems impossible, until it is done!