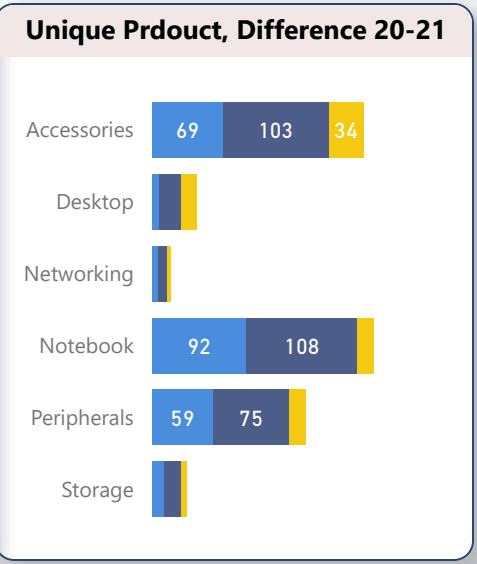
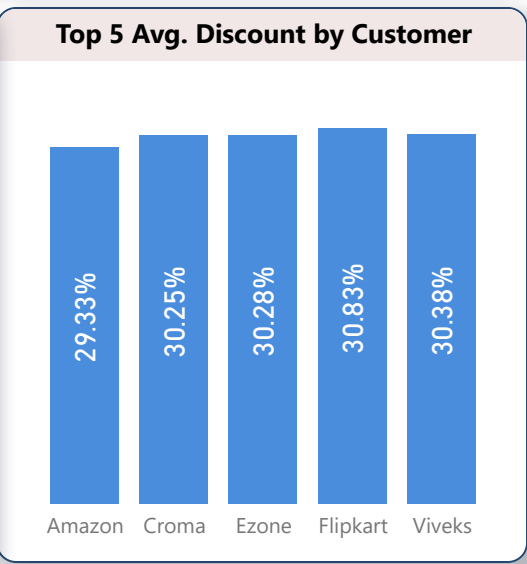
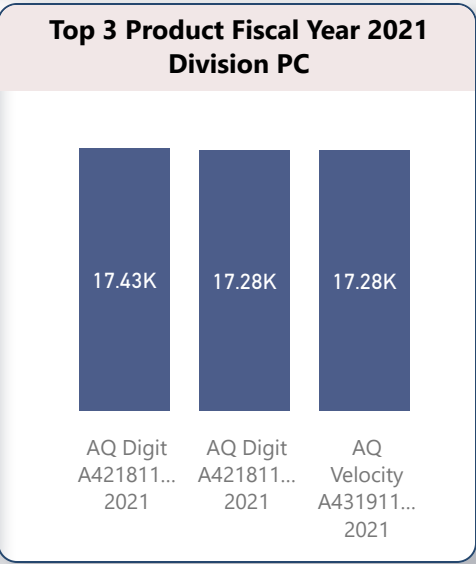
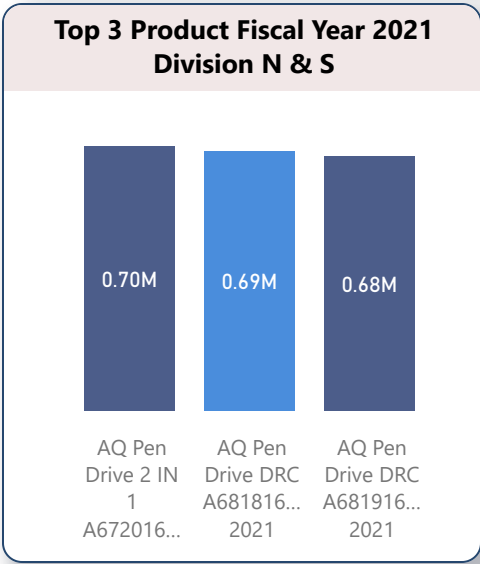
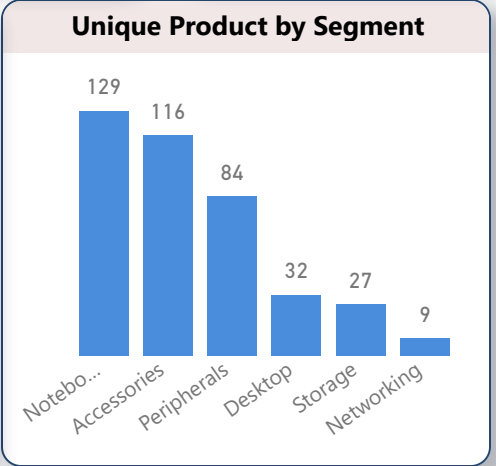
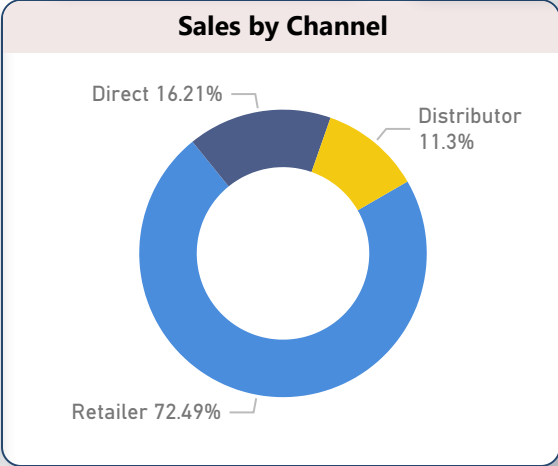
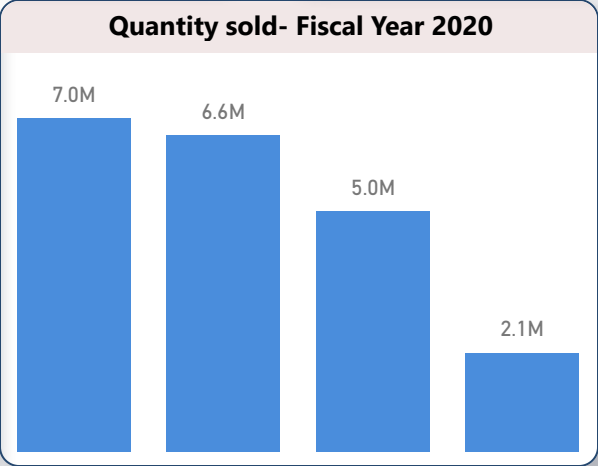
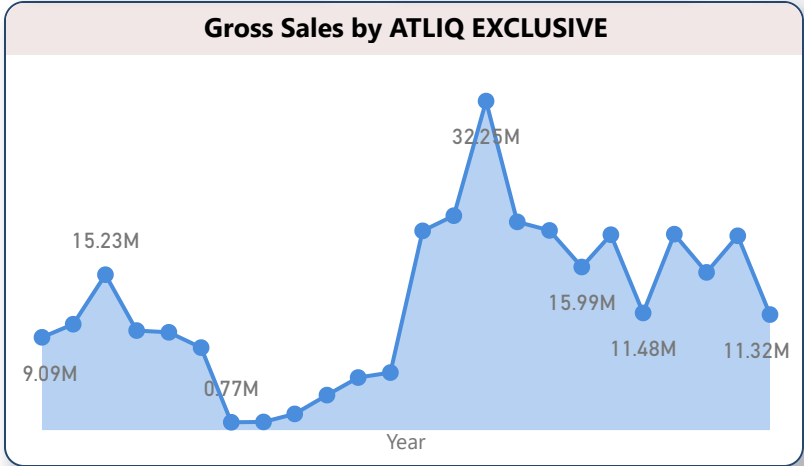


# ATLIQ-HARDWARES-CONSUMER-GOODS-Ad-Hoc-INSIGHTS

Total Sold Quantity	Total Orders	Min. Manufacturing Cost	Max. Manufacturing Cost	Unique Product 2020	Unique Product 2021	% Change in 2020-2021
71M	971.63K	0.89	240.54	245	334	36.33%





# ATLIQ-HARDWARES-CONSUMER-GOODS-Ad-Hoc-INSIGHTS

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

select distinct market from dim\_customer  
where customer = "Atliq Exclusive" and region = "APAC"



```
1 • select distinct market from dim_customer
2   where customer = "Atliq Exclusive" and region = "APAC"
```

<	
Result Grid	Filter Rows: <input type="text"/> Export:  Wrap Cell Content: 
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

```
select X.A AS unique_product_2020, Y.B AS unique_product_2021, ROUND((B-A)*100/A, 2) AS percentage_chg
  From
(
  (select count(distinct(product_code)) AS A from fact_sales_monthly
   where fiscal_year = 2020) X,
  (select count(distinct(product_code)) AS B from fact_sales_monthly
   where fiscal_year = 2021) Y
)
```

```
1 • select X.A AS unique_product_2020, Y.B AS unique_product_2021, ROUND((B-A)*100/A, 2) AS percentage_chg
2      From
3  (
4      (select count(distinct(product_code)) AS A from fact_sales_monthly
5       where fiscal_year = 2020) X,
6      (select count(distinct(product_code)) AS B from fact_sales_monthly
7       where fiscal_year = 2021) Y
8  )
```

<			
Result Grid			
Filter Rows: <input type="text"/>			
Export: 			
Wrap Cell Content: 			
	unique_product_2020	unique_product_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

```
select segment ,count(distinct(product)) as "product_count" from dim_product  
group by segment  
order by product_count desc
```

```
1 • select segment ,count(distinct(product)) as "product_count" from dim_product  
2   group by segment  
3   order by product_count desc
```

segment	product_count
Accessories	20
Peripherals	20
Notebook	17
Storage	9
Desktop	4
Networking	3

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

with CTE1 AS

```
(select P.segment AS A , count(distinct(FS.product_code)) AS B from dim_product P
join fact_sales_monthly FS
on FS.product_code = P.product_code
where FS.fiscal_year = "2020"
group by P.segment),
```

CTE2 AS

```
(select P.segment AS C , count(distinct(FS.product_code)) AS D from dim_product P
join fact_sales_monthly FS
on FS.product_code = P.product_code
where FS.fiscal_year = "2021"
group by P.segment)
```

select CTE1.A as segment, CTE1.B as product\_count\_2020, CTE2.D as product\_count\_2021, (CTE2.D - CTE1.B) AS difference

from CTE1, CTE2

where CTE1.A = CTE2.C

The screenshot shows a SQL IDE interface. The top pane contains a SQL query with 17 lines of code. The bottom pane displays the 'Result Grid' with two columns: 'segment' and 'product\_count'. The results are as follows:

segment	product_count
Accessories	20
Peripherals	20
Notebook	17
Storage	9
Desktop	4
Networking	3

The IDE interface includes a toolbar at the top with icons for undo, redo, and other functions. The bottom right corner has a 'Result Grid' button and a 'Form Editor' button.

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



product\_code

product manufacturing\_

cost

```
select P.product, P.product_code, manufacturing_cost from dim_product P
join fact_manufacturing_cost FM
on FM.product_code = P.product_code
where manufacturing_cost in (
select min(manufacturing_cost) as manufacturing_cost from fact_manufacturing_cost
union
select max(manufacturing_cost) as manufacturing_cost from fact_manufacturing_cost
order by manufacturing_cost desc
)
order by manufacturing_cost desc
```

```
1 • select P.product, P.product_code, manufacturing_cost from dim_product P
2   join fact_manufacturing_cost FM
3   on FM.product_code = P.product_code
4   where manufacturing_cost in (
5     select min(manufacturing_cost) as manufacturing_cost from fact_manufacturing_cost
6     union
7     select max(manufacturing_cost) as manufacturing_cost from fact_manufacturing_cost
8     order by manufacturing_cost desc
9   )
10  order by manufacturing_cost desc
```

Result Grid			
Filter Rows: <input type="text"/>			
Export: 			
Wrap Cell Content: 			
	product	product_code	manufacturing_cost
▶	AQ HOME Allin1 Gen 2	A6120110206	240.5364
	AQ Master wired x1 Ms	A2118150101	0.8920

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

```
select FI.customer_code, DI.customer, concat(round(avg(pre_invoice_discount_pct)*100,2), "%") as  
avg_discount_percentage  
from fact_pre_invoice_deductions FI  
JOIN dim_customer DI  
on FI.customer_code = DI.customer_code  
WHERE market = "India" and fiscal_year = 2021  
group by customer, customer_code  
order by avg(pre_invoice_discount_pct) desc  
limit 5
```

```
1 • select FI.customer_code, DI.customer, concat(round(avg(pre_invoice_discount_pct)*100,2), "%") as avg_discount_percentage  
2   from fact_pre_invoice_deductions FI  
3   JOIN dim_customer DI  
4   on FI.customer_code = DI.customer_code  
5   WHERE market = "India" and fiscal_year = 2021  
6   group by customer, customer_code  
7   order by avg(pre_invoice_discount_pct) desc  
8   limit 5
```

Result Grid			
Filter Rows: <input type="text"/>			
Export:  Wrap Cell Content:  Fetch rows: 			
	customer_code	customer	avg_discount_percentage
▶	90002009	Flipkart	30.83%
	90002006	Viveks	30.38%
	90002003	Ezone	30.28%
	90002002	Croma	30.25%
	90002016	Amazon	29.33%

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

```
select monthname(date) as Month_name, year(date) as year_name, round(sum(FG.gross_price * FS.sold_quantity) / 10000000,2) as Gross_sales_amount_millions
```

```
from fact_sales_monthly FS
```

```
join fact_gross_price FG
```

```
on FS.product_code = FG.product_code
```

```
join dim_customer DC
```

```
on DC.customer_code = FS.customer_code
```

```
where DC.customer = "Atliq Exclusive"
```

```
group by month_name,year_name
```

```
order by year_name
```

```
1 • select monthname(date) as Month_name, year(date) as year_name,
2     round(sum(FG.gross_price * FS.sold_quantity) / 10000000,2) as Gross_sales_amount_millions
3     from fact_sales_monthly FS
4     join fact_gross_price FG
5     on FS.product_code = FG.product_code
6     join dim_customer DC
7     on DC.customer_code = FS.customer_code
8     where DC.customer = "Atliq Exclusive"
9     group by month_name,year_name
10    order by year_name
```



Month_name	year_name	Gross_sales_amount_millions
September	2019	0.91
October	2019	1.04
November	2019	1.52
December	2019	0.98
January	2020	0.96
February	2020	0.81
March	2020	0.08
April	2020	0.08
May	2020	0.16
June	2020	0.34
July	2020	0.52
August	2020	0.56
September	2020	1.95
October	2020	2.10
November	2020	3.22
December	2020	2.04
January	2021	1.96
February	2021	1.60
March	2021	1.91



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

```
select
case
when month(date) in (9,10,11) then "Q1"
when month(date) in (12,1,2) then "Q2"
when month(date) in (3,4,5) then "Q3"
when month(date) in (6,7,8) then "Q4"
end as quarter,
sum(sold_quantity) as total_quantity_sold from fact_sales_monthly
where fiscal_year = 2020
group by quarter
order by total_quantity_sold desc
```

```
1 • select
2 case
3   when month(date) in (9,10,11) then "Q1"
4   when month(date) in (12,1,2) then "Q2"
5   when month(date) in (3,4,5) then "Q3"
6   when month(date) in (6,7,8) then "Q4"
7   end as quarter,
8   sum(sold_quantity) as total_quantity_sold from fact_sales_monthly
9   where fiscal_year = 2020
10  group by quarter
11  order by total_quantity_sold desc
```

<		
Result Grid		
Filter Rows: <input type="text"/>		
Export:  Wrap Cell Content: 		
quarter	total_quantity_sold	
Q1	7005619	
Q2	6649642	
Q4	5042541	
Q3	2075087	

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

```
with gross_sales as (  
  select DC.channel, round(sum(FG.gross_price * FS.sold_quantity)/1000000,2) as gross_sales_mln  
  from fact_sales_monthly FS  
  join fact_gross_price FG  
  on FS.product_code = FG.product_code  
  and FS.fiscal_year = FG.fiscal_year  
  join dim_customer DC  
  ON DC.customer_code = FS.customer_code  
  where FG.fiscal_year = 2021  
  group by DC.channel  
)  
  
select channel, gross_sales_mln, concat(round((gross_sales_mln / sum(gross_sales_mln) over()) *100,2), "%") as  
percentage  
from gross_sales  
order by percentage desc
```

```

1 with gross_sales as (
2   select DC.channel, round(sum(FG.gross_price * FS.sold_quantity)/1000000,2) as gross_sales_mln
3   from fact_sales_monthly FS
4   join fact_gross_price FG
5   on FS.product_code = FG.product_code
6   and FS.fiscal_year = FG.fiscal_year
7   join dim_customer DC
8   ON DC.customer_code = FS.customer_code
9   where FG.fiscal_year = 2021
10  group by DC.channel
11 )
12
13 select channel, gross_sales_mln, concat(round((gross_sales_mln / sum(gross_sales_mln) over()) *100,2), "%") as percentage
14 from gross_sales
15 order by percentage desc

```

Result Grid  Filter Rows:  | Export:  | Wrap Cell Content: 

	channel	gross_sales_mln	percentage
▶	Retailer	1219.08	73.23%
	Direct	257.53	15.47%
	Distributor	188.03	11.30%

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

```
with top_sold_product as (  
  select DP.division, DP.product_code, DP.product, sum(sold_quantity) as total_sold_quantity  
  from dim_product DP  
  join fact_sales_monthly FS  
  on DP.product_code = FS.product_code  
  where fiscal_year = 2021  
  group by DP.division, DP.product_code, DP.product  
  order by total_sold_quantity desc  
)
```

```
top_sold_per_division_rank_order as (  
  select division,  
  product_code,  
  product,  
  total_sold_quantity,  
  rank() over(partition by division order by total_sold_quantity desc) as rank_order  
  from top_sold_product  
)
```

```
select * from top_sold_per_division_rank_order  
where rank_order <=3
```

```

1  ● with top_sold_product as (
2      select DP.division, DP.product_code, DP.product, sum(sold_quantity) as total_sold_quantity
3      from dim_product DP
4      join fact_sales_monthly FS
5      on DP.product_code = FS.product_code
6      where fiscal_year = 2021
7      group by DP.division, DP.product_code, DP.product
8      order by total_sold_quantity desc
9  ),
10
11  ⊖ top_sold_per_division_rank_order as (
12      select division,
13      product_code,
14      product,
15      total_sold_quantity,
16      rank() over(partition by division order by total_sold_quantity desc) as rank_order
17      from top_sold_product
18  )
19
20  select * from top_sold_per_division_rank_order
21  where rank_order <=3

```

<

Result Grid					
		Filter Rows:		Export:	Wrap Cell Content: <a href="#">IA</a>
	division	product_code	product	total_sold_quantity	rank_order
▶	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