

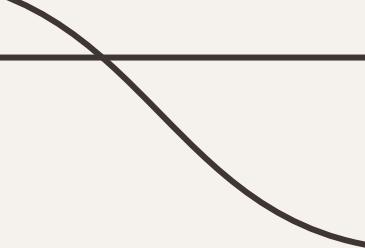


Consumer Goods Ad-Hoc Insights



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- ❖ About Company
- ❖ Company Market & Data
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- ❖ Visualization & Insights

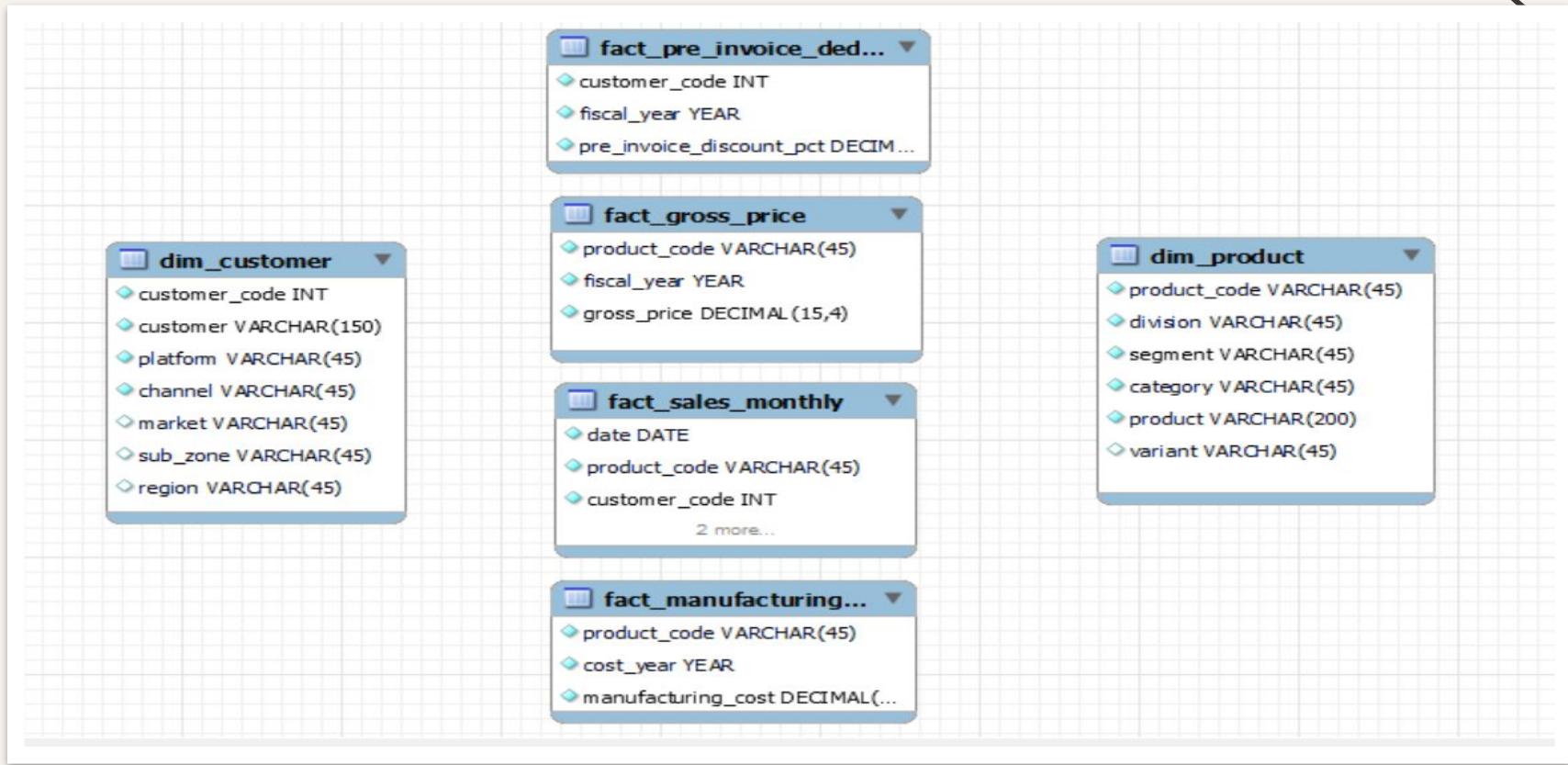
Problem Statement

- ❖ Atliq Hardware is a prominent computer hardware manufacturer in India with a global footprint, having expanded operations across multiple countries.
- ❖ The management has identified a lack of actionable insights, which limits their ability to make quick, data-driven decisions. This insight gap poses challenges in responding to market trends and optimizing operations efficiently.

Atliq Market



Input Data



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

```
SELECT Distinct(market) AS Atliq_Exclusive_mkt  
FROM dim_customer  
WHERE customer = 'Atliq Exclusive' AND region = 'APAC'
```

Atliq_Exclusive_mkt
▶ India
Indonesia
Japan
Philippines
South Korea
Australia
Newzealand
Bangladesh

Atliq Market in APAC Region

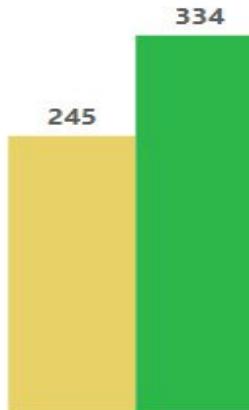


2. What is the *percentage of unique product* increase in 2021 vs. 2020?

```
WITH table1 AS (
    SELECT COUNT(DISTINCT product_code) AS Unique_product_2020
    FROM fact_sales_monthly
    WHERE fiscal_year = 2020
),
table2 AS(
    SELECT COUNT(DISTINCT product_code) AS Unique_product_2021
    FROM fact_sales_monthly
    WHERE fiscal_year = 2021
)
SELECT Unique_product_2020, Unique_product_2021,
ROUND(((Unique_product_2021 - Unique_product_2020) / Unique_product_2020) * 100,2) AS percentage_change
FROM table1     CROSS JOIN table2;
```

	Unique_product_2020	Unique_product_2021	percentage_change
▶	245	334	36.33

Unique Product :- ● 2020 ● 2021



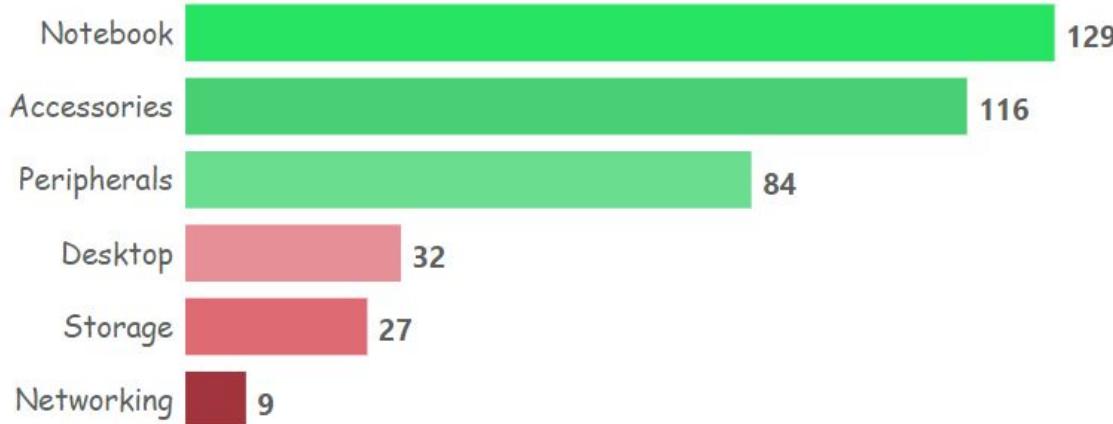
- The Product increase in 2021 is 36.33%.**

- Continuously Innovating with introducing new Product**

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

```
SELECT segment, count(DISTINCT product_code) AS product_count  
FROM dim_product  
GROUP BY segment  
ORDER BY product_count DESC;
```

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



- Notebook, Accessories & Peripherals contribute around 83%**
- Some **new product** should be introduced in **Networking** .

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

```
• WITH unique_product AS
  (
    SELECT b.segment AS segment,
           COUNT(DISTINCT
                  (CASE
                     WHEN fiscal_year = 2020 THEN a.product_code END)) AS product_count_2020,
           COUNT(DISTINCT
                  (CASE
                     WHEN fiscal_year = 2021 THEN a.product_code END)) AS product_count_2021
      FROM fact_sales_monthly AS a
     INNER JOIN dim_product AS b
        ON a.product_code = b.product_code
     GROUP BY b.segment
  )
  SELECT segment, product_count_2020, product_count_2021,
         (product_count_2021 - product_count_2020) AS difference
    FROM unique_product
   ORDER BY difference DESC;
```

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 2020	Product 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 
Total	245	334	89

- Accessories** has 34 the largest increase in production
- Storage and **Networking** producing lowest

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

```
SELECT p.product_code, p.product,
       mc.manufacturing_cost AS MIN_and_MAX_manufacturing_cost
  FROM dim_product AS p
 JOIN fact_manufacturing_cost AS mc ON p.product_code = mc.product_code
 WHERE mc.manufacturing_cost = (
   SELECT MAX(manufacturing_cost)
     FROM fact_manufacturing_cost
)
 OR mc.manufacturing_cost = (
   SELECT MIN(manufacturing_cost)
     FROM fact_manufacturing_cost
);

```

\$241.43

AQ HOME Allin1 Gen 2

\$0.89

AQ Master wired x1 Ms

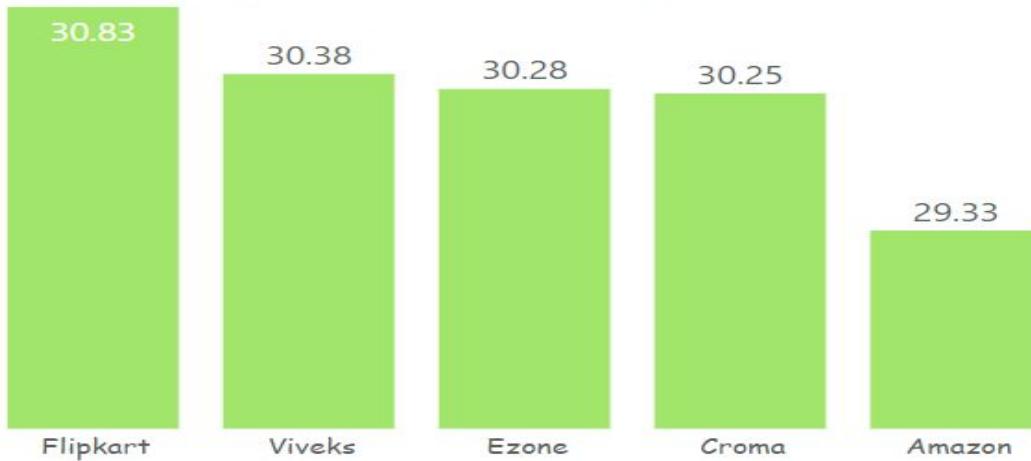
product_code	product	MIN_and_MAX_manufacturing_cost
A2118150101	AQ Master wired x1 Ms	0.8920
A6120110206	AQ HOME Allin1 Gen 2	240.5364

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.

```
SELECT c.customer_code, c.customer,
ROUND(AVG(pre_invoice_discount_pct)*100,2) as average_discount_percentage
FROM fact_pre_invoice_deductions as inv
JOIN dim_customer as c ON inv.customer_code = c.customer_code
WHERE market = 'India' AND fiscal_year = 2021
GROUP BY c.customer, c.customer_code
ORDER by average_discount_percentage DESC
LIMIT 5;
```

	customer_code	customer	average_discount_percentage
▶	90002009	Flipkart	30.83
	90002006	Viveks	30.38
	90002003	Ezone	30.28
	90002002	Croma	30.25
	90002016	Amazon	29.33

Average_discount_percentage by customer



In 2021 the **average pre invoice discount** given by top 5 customer is similar however **Flipkart** gave the highest avg discount i.e. **30.83 %**

7. Get the complete report of the *Gross sales amount for the customer* “Atliq Exclusive” for each month.

```
SELECT monthname(s.date) as months, year(s.date) as years,  
ROUND(SUM(s.sold_quantity*g.gross_price),2) as Gross_sales_amount  
FROM fact_gross_price as g  
JOIN fact_sales_monthly as s ON g.product_code = s.product_code  
JOIN dim_customer as c ON s.customer_code = c.customer_code  
WHERE c.customer = "Atliq Exclusive"  
GROUP BY months,years
```

	months	years	Gross_sales_amount
▶	September	2019	9092670.34
	November	2019	15231894.97
	December	2019	9755795.06
	January	2020	9584951.94
	March	2020	766976.45
	April	2020	800071.95
	May	2020	1586964.48
	July	2020	5151815.40
	August	2020	5638281.83
	September	2020	19530271.30
	November	2020	32247289.79
	December	2020	20409063.18
	January	2021	19570701.71
	March	2021	19149624.92
	April	2021	11483530.30
	May	2021	19204309.41
	July	2021	19044968.82
	August	2021	11324548.34
	October	2019	10378637.60

Gross Sales Amount



- Lowest Sales - March 2020 [Covid & Global Chip Shortage]

- Highest Sales - November 2020 [Festive Season]

8. In which quarter of 2020, got the maximum total_sold _quantity?

```
SELECT  
CASE  
    WHEN date BETWEEN '2019-09-01' AND '2019-11-01' then 1  
    WHEN date BETWEEN '2019-12-01' AND '2020-02-01' then 2  
    WHEN date BETWEEN '2020-03-01' AND '2020-05-01' then 3  
    WHEN date BETWEEN '2020-06-01' AND '2020-08-01' then 4  
END AS Quarters,  
SUM(sold_quantity) AS total_sold_quantity  
FROM fact_sales_monthly  
WHERE fiscal_year = 2020  
GROUP BY Quarters  
ORDER BY total_sold_quantity DESC;
```

	Quarters	total_sold_quantity
▶	1	7005619
	2	6649642
	4	5042541
	3	2075087

Total Quantity Sold in Million - Quarterly (2020)

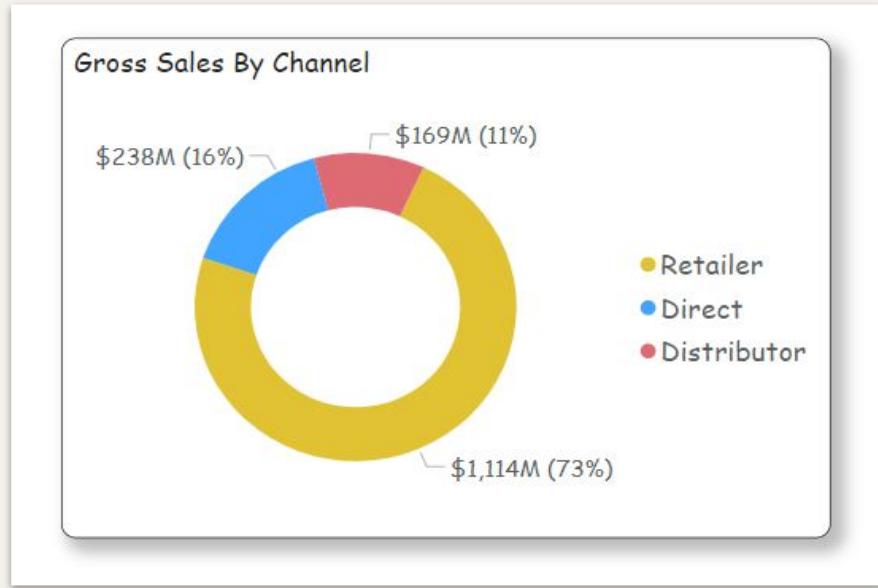


In **Quarter 1** sold maximum quantity i.e. **7 M** where as **Quarter 3** significantly decreased to **2.1 M**, the reason behind is the **Covid-Lockdown** in the month of March, April & May

9. Which **channel** helped to bring **more gross sales** in the fiscal year **2021** and also find the percentage of contribution?

```
+ WITH GrossSalesByChannel AS (
, TotalGrossSales AS (
    SELECT SUM(gross_sales_mln) AS total_gross_sales_mln
    FROM GrossSalesByChannel
)
SELECT
    G.channel,
    ROUND(G.gross_sales_mln, 2) AS gross_sales_mln,
    ROUND((G.gross_sales_mln / T.total_gross_sales_mln) * 100, 2) AS percentage
FROM GrossSalesByChannel AS G
CROSS JOIN TotalGrossSales AS T
ORDER BY G.gross_sales_mln DESC;
```

	channel	gross_sales_mln	percentage
▶	Retailer	1113959553.91	73.24
	Direct	237724525.48	15.63
	Distributor	169225139.83	11.13

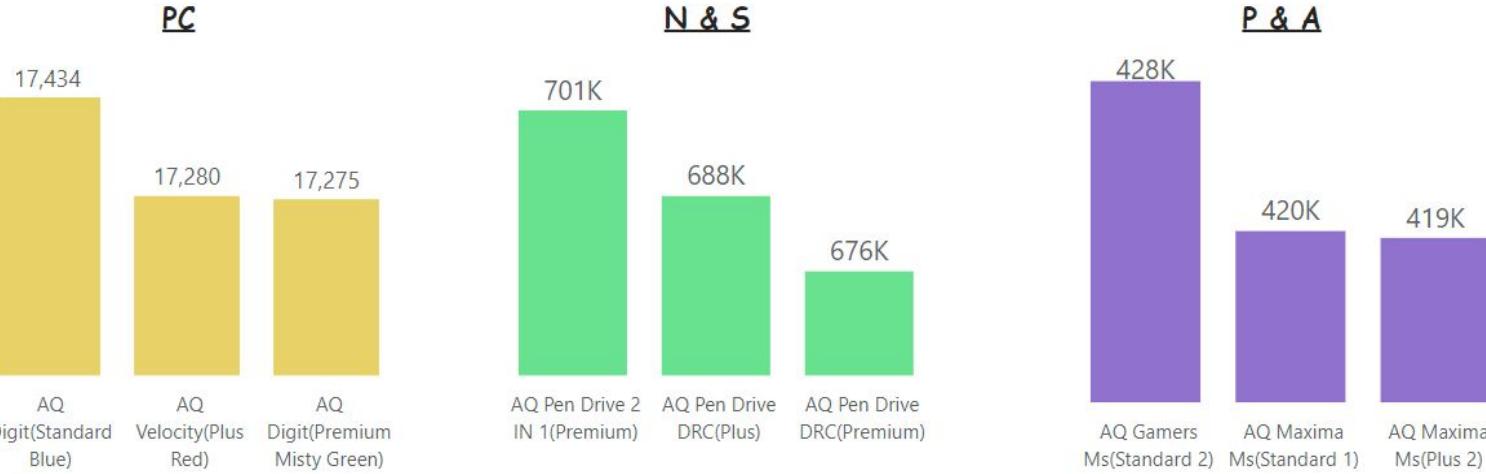


The **Retailers** contribute to the major portion of the **sales** that is **73%** where as Direct and Distributer combined sales is **27%**

10. Get the Top 3 products in each division that have a highest total_sold_quantity in the fiscal_year 2021?

```
• WITH temp_table AS (
    select division, s.product_code, concat(p.product,"(",p.variant,")") AS product ,
           sum(sold_quantity) AS total_sold_quantity,
           rank() OVER (partition by division order by sum(sold_quantity) desc) AS rank_order
  FROM
fact_sales_monthly s
JOIN dim_product p
ON s.product_code = p.product_code
WHERE fiscal_year = 2021
GROUP BY product_code
)
SELECT * FROM temp_table
WHERE rank_order IN (1,2,3);
```

	division	product_code	product	total_sold_quantity	rank_order
	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	A4218110208	AQ Digit(Premium Misty Green)	17275	3
	PC	A4319110306	AQ Velocity(Plus Red)	17280	2
	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



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

*Thank,
you!*

