



ATLIQ HARDWARE

SALES INSIGHTS FROM AD-HOC REQUESTS

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AGENDA



Introduction

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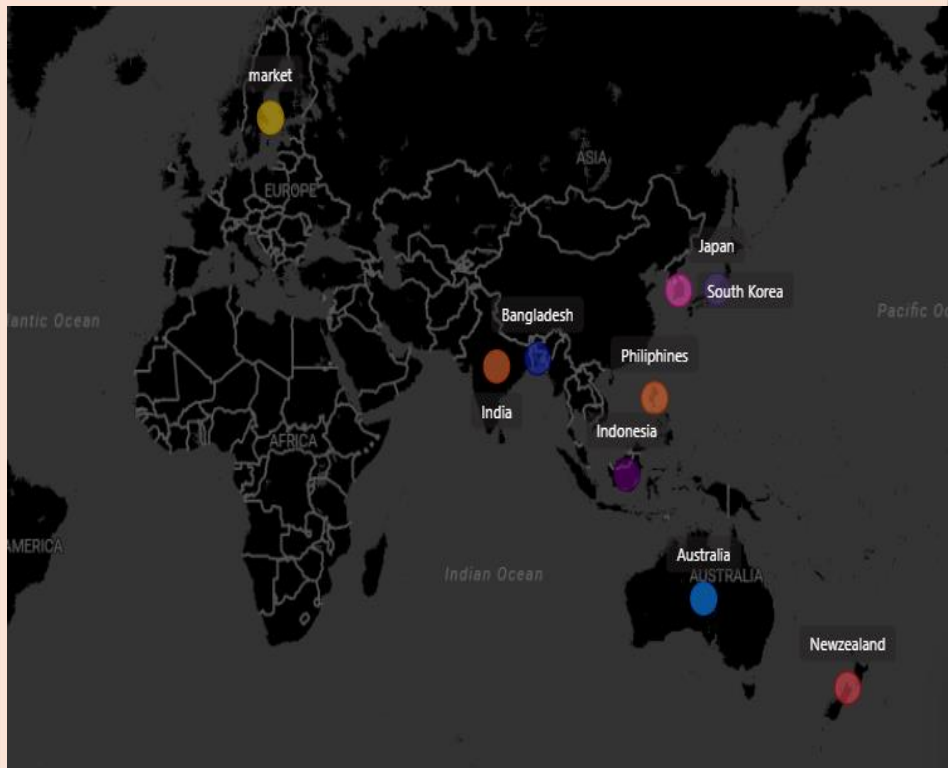
INTRODUCTION

Atliq Hardware, one of the leading computer hardware producers in India with customers from across the globe, want to get insights on company products sales to make data-informed decisions.



INSIGHTS

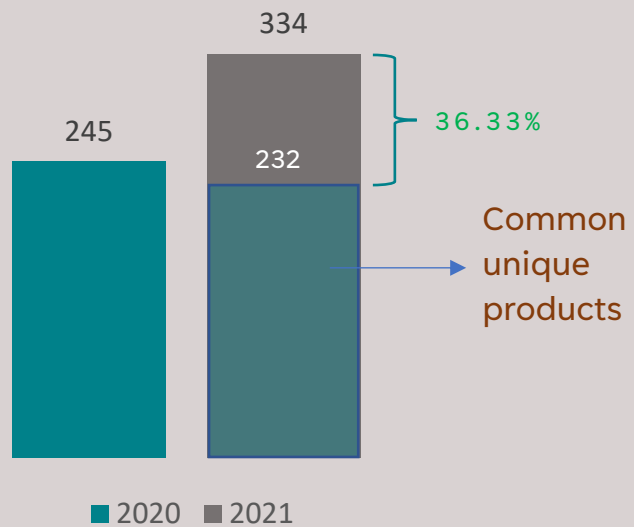
Q1. LIST OF MARKETS WHERE CUSTOMER “**ATLIQ EXCLUSIVE**” OPERATES BUSINESS IN “**ASIA PACIFIC**” REGION FOR FISCAL YEAR 2020-2021



India is a **leading market** in terms of **Gross Sales** for Atliq Exclusive in **Asia Pacific** region out of **8 countries**, followed by South Korea, Indonesia, Australia and others.

INSIGHTS

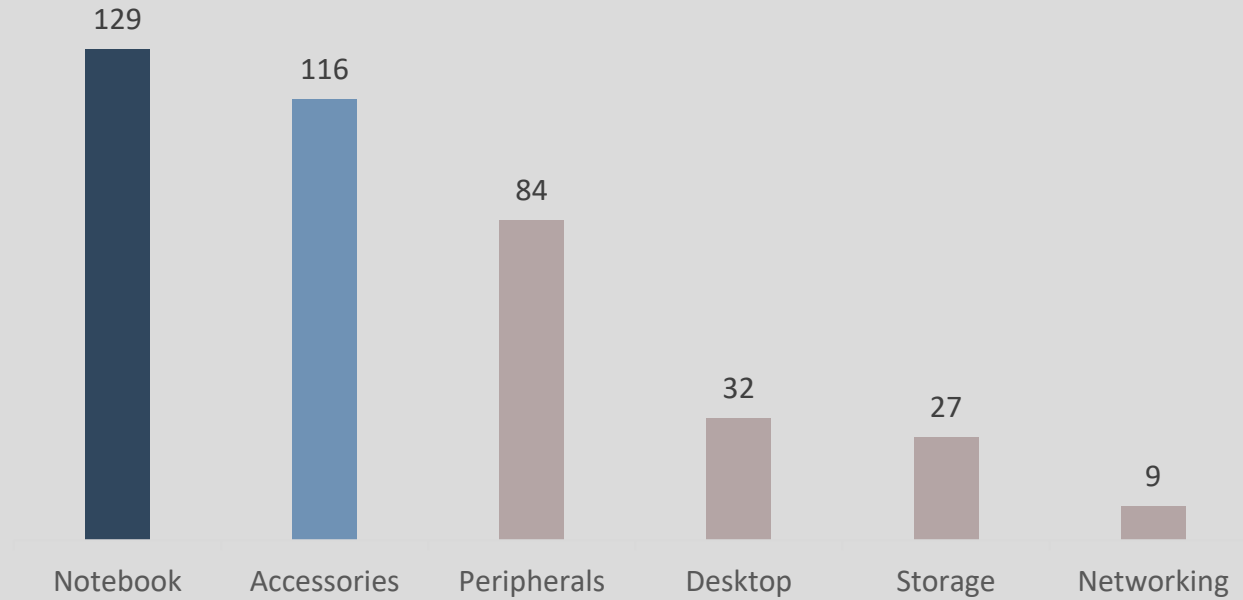
Q2. CHANGE IN NUMBER OF UNIQUE PRODUCTS



We observe a 36.33% rise in number of unique products from 2020 to 2021.

INSIGHTS

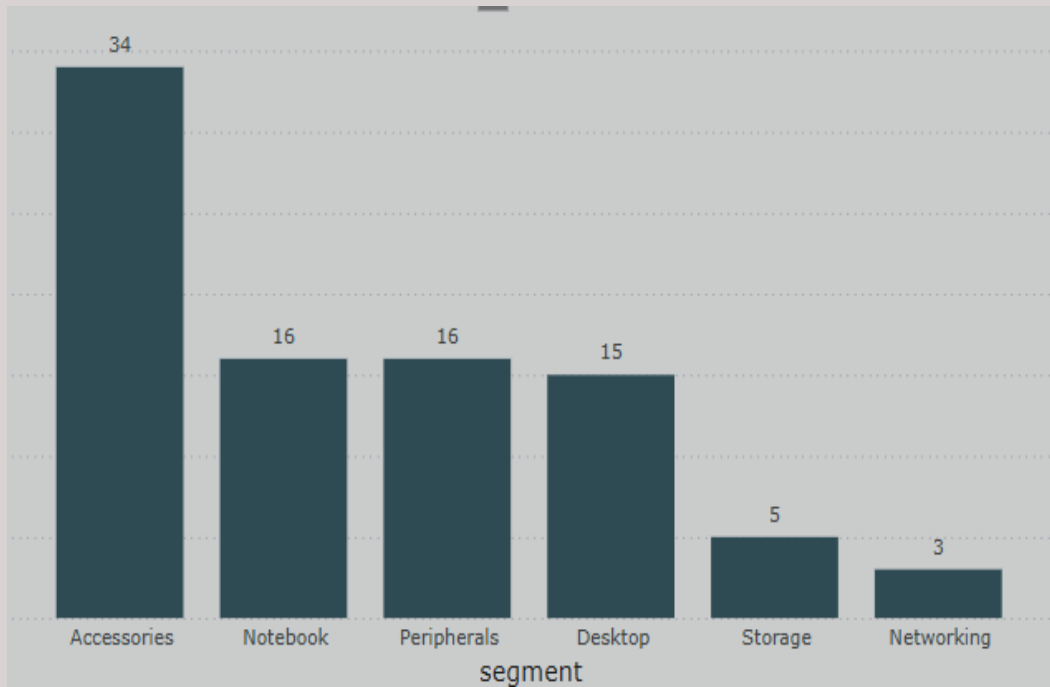
Q3 How many Products are there in each segment



Atliq hardware can research on current trends as well as needs and introduce some new products in Networking and Storage segments.

INSIGHTS

Q4. % CHANGE OF UNIQUE PRODUCTS IN EACH SEGMENT FROM PREVIOUS YEAR



| unique_products_2020 | unique_products_2021 | difference | segment | pct_change |
|----------------------|----------------------|------------|-------------|------------|
| 7 | 22 | 15 | Desktop | 214.29 |
| 6 | 9 | 3 | Networking | 50.00 |
| 69 | 103 | 34 | Accessories | 49.28 |
| 12 | 17 | 5 | Storage | 41.67 |
| 59 | 75 | 16 | Peripherals | 27.12 |
| 92 | 108 | 16 | Notebook | 17.39 |

For Atliq hardware, Desktop segment saw highest comparative increase in its products in year 2021.

INSIGHTS

Flipkart
₹43,963,999.66
30.83%

Viveks
₹30,214,998.79
30.38%

Ezone
₹30,227,675.77
30.28%

Croma
₹29,856,116.65
30.25%

Vijay Sales
₹32,182,744.40
27.53%

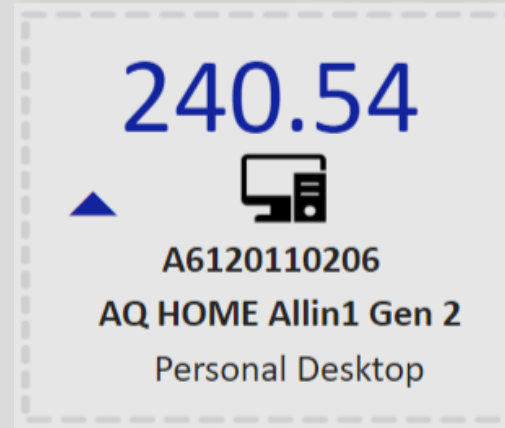
Q5. TOP 5 CUSTOMERS WITH HIGHEST AVERAGE PCT DISCOUNT FOR FISCAL YEAR 2021 IN INDIAN MARKET

FlipKart with **highest average discount** brings in the highest sales. This strategy of discount with customers is working well for the company.

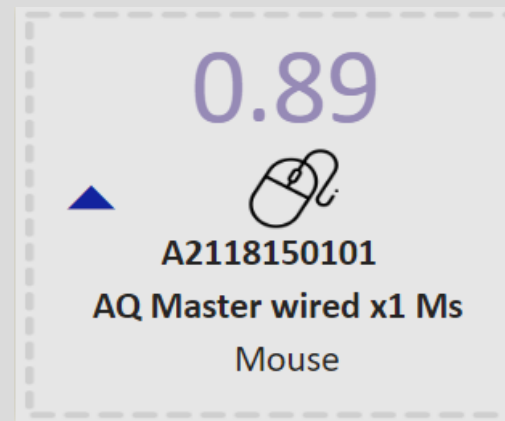
INSIGHTS

Q6. Products with highest and lowest manufacturing cost

Product with **Max Manufacturing cost**
- **AQ HOME Allin1 Gen2**

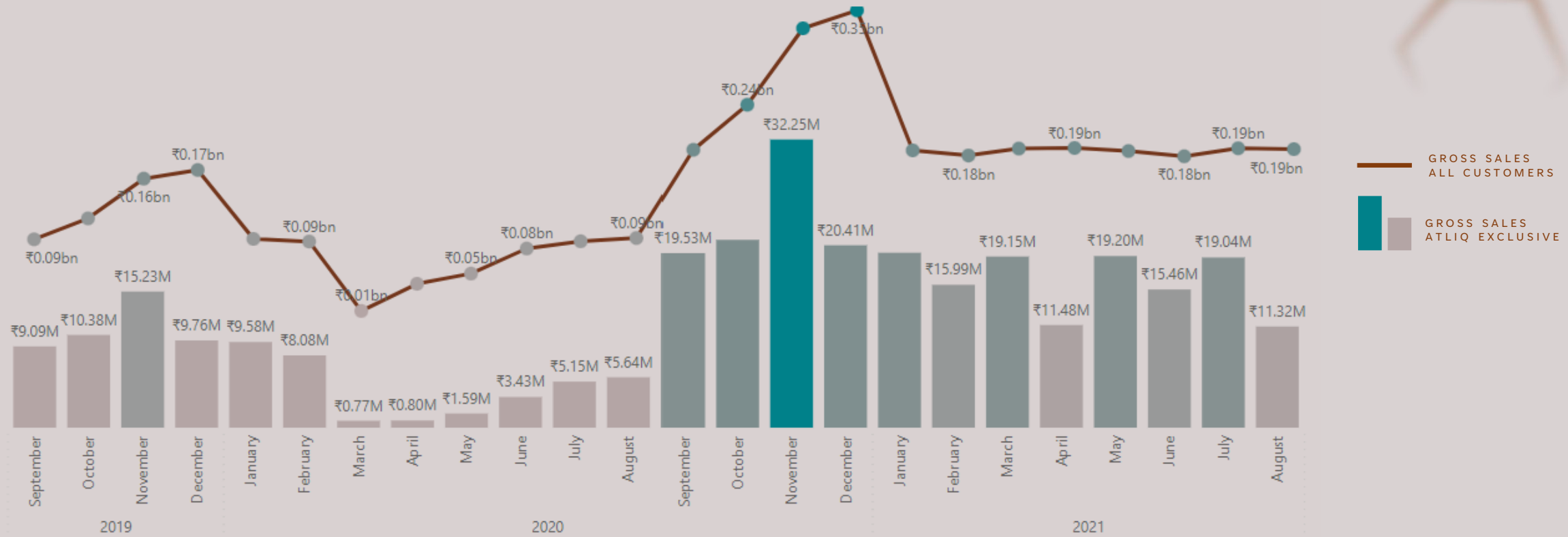


Product with **Min Manufacturing cost**
- **AQ Master Wired X1 MS**



INSIGHTS

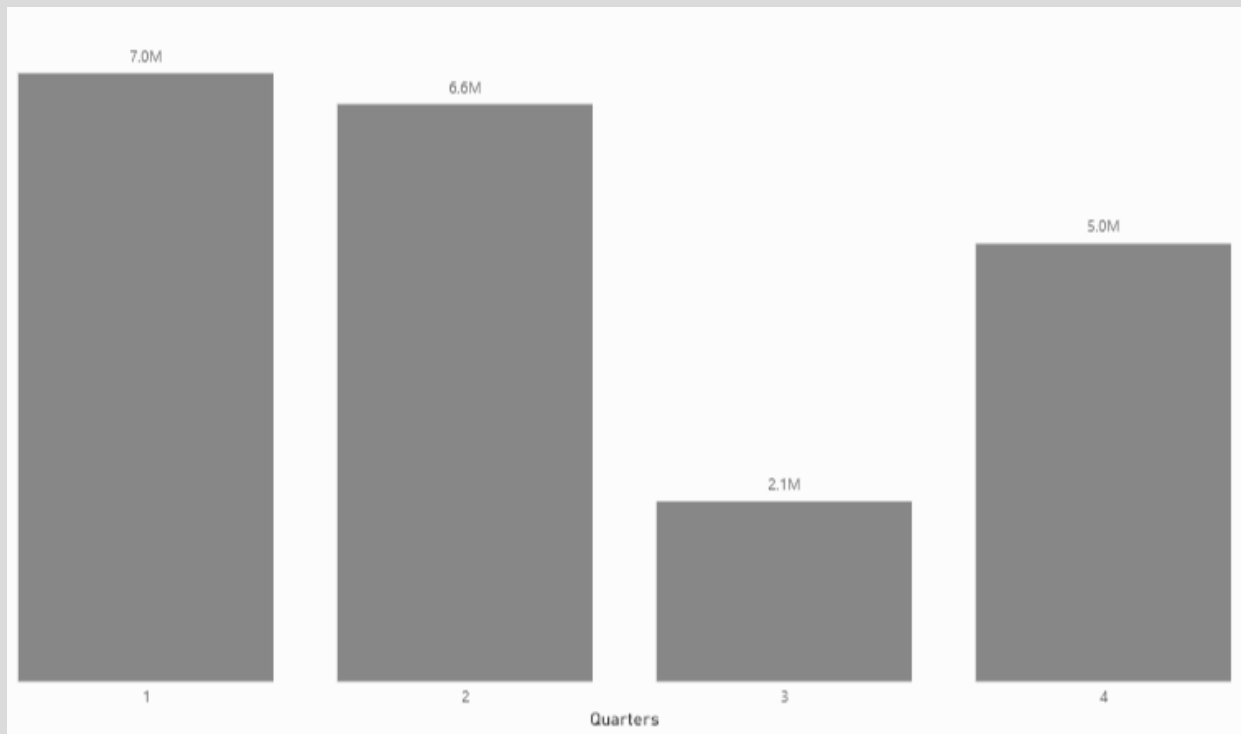
Q7. GROSS SALES FOR CUSTOMER “ATLIQ EXCLUSIVE” FOR EACH MONTH



Atliq hardware can introduce some products to increase sales in summer. Overall the sales have increased after pandemic and have remained consistently high then pre pandemic year.

INSIGHTS

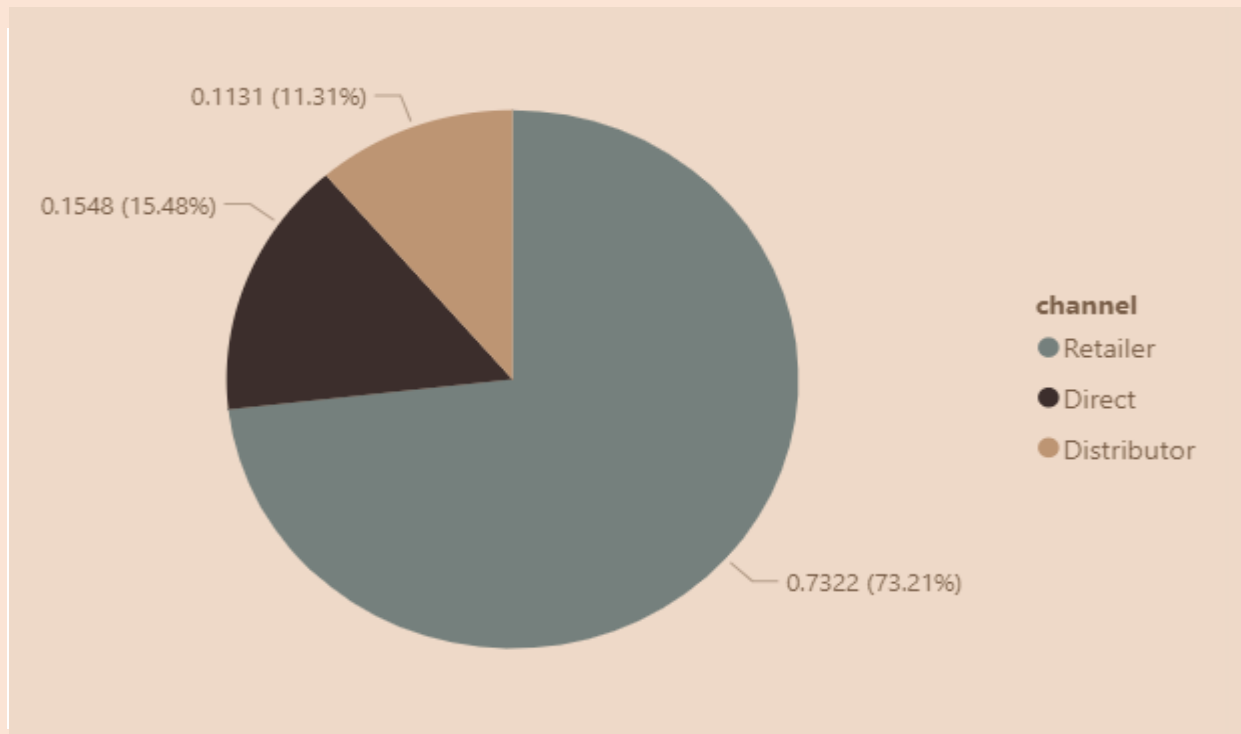
Q8. QUARTER WITH MAX QUANTITIES SOLD FOR FISCAL YEAR 2020



For fiscal year **2020**, **Q3** was with the **least products sold**. In **summer** the computer hardware **demand decreases** and Atliq Hardware can come up with some outdoor products like waterproof speakers to hike up the sales.

INSIGHTS

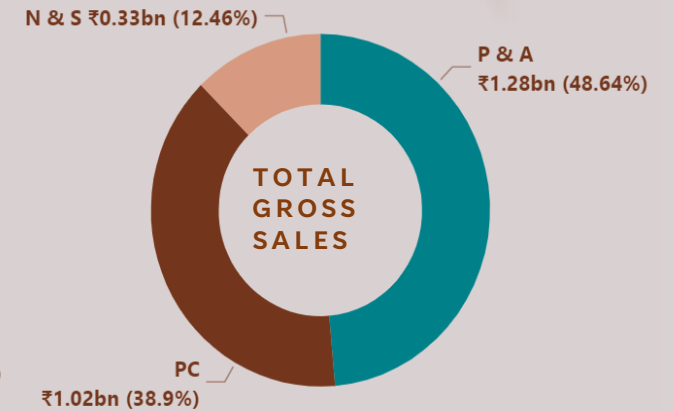
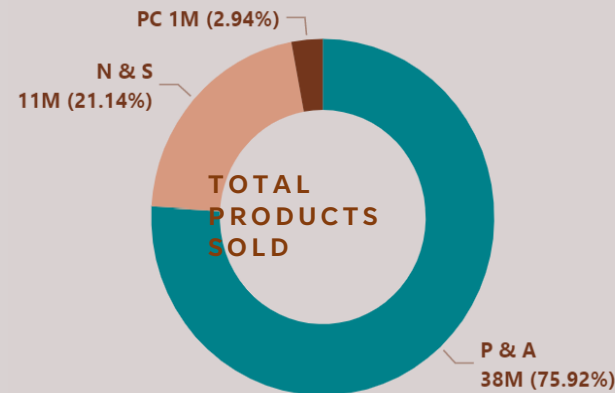
Q9. CHANNELS WITH GROSS SALES AND ITS PERCENTAGE CONTRIBUTION



INSIGHTS

Q10. TOP 3 PRODUCTS IN EACH DIVISION WITH HIGHEST QUANTITY SOLD IN FISCAL YEAR 2021

| product_code | product | division | total_sold_quantity | rank_order |
|--------------|---------------------|----------|---------------------|------------|
| A6720160103 | AQ Pen Drive 2 IN 1 | N & S | 701373 | 1 |
| A6818160202 | AQ Pen Drive DRC | N & S | 688003 | 2 |
| A6819160203 | AQ Pen Drive DRC | N & S | 676245 | 3 |
| A2319150302 | AQ Gamers Ms | P & A | 428498 | 1 |
| A2520150501 | AQ Maxima Ms | P & A | 419865 | 2 |
| A2520150504 | AQ Maxima Ms | P & A | 419471 | 3 |
| A4218110202 | AQ Digit | PC | 17434 | 1 |
| A4319110306 | AQ Velocity | PC | 17280 | 2 |
| A4218110208 | AQ Digit | PC | 17275 | 3 |



Even though P & A accounts for the division with maximum quantities sold, the products with highest quantities sold belongs to N & S. Quantities sold in PC division are significantly lower than other two divisions but still accounts for 38.9% of all gross sales.

PUTTING IT ALL TOGETHER

- Atliq Hardware has **performed well in year 2021** introducing 102 new products with Peripherals and Accessories bringing in the highest revenue followed by PC.
- PC is the strongest performing division, generating 39% of total sales while accounting for only 3% of overall quantities of products sold.
- Try to **tweak discounts rates** such that the customers bring in more gross sales for the company.
- Space to increase e-commerce sales by **partnering with new e-commerce platforms** with competitive discounts.



QUERIES

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 region = "APAC" and customer="Atliq Exclusive"
;
```

| market |
|-------------|
| India |
| Indonesia |
| Japan |
| Philippines |
| South Korea |
| Australia |
| Newzealand |
| Bangladesh |

QUERIES

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

```
with tot_products as
  (SELECT count( distinct product_code) as total_products, fiscal_year as year
   FROM fact_sales_monthly
   GROUP BY fiscal_year)

SELECT a.total_products as unique_products_2020,b.total_products as unique_products_2021,
       (b.total_products - a.total_products) as new_products_introduced,
       ROUND((b.total_products - a.total_products) /a.total_products *100, 2) as pct_change
FROM tot_products as a
LEFT JOIN tot_products as b
ON a.year+1 = b.year
LIMIT 1
;
```

| unique_products_2020 | unique_products_2021 | new_products_introduced | pct_change |
|----------------------|----------------------|-------------------------|------------|
| 245 | 334 | 89 | 36.33 |

QUERIES

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 |

QUERIES

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

```
with tot_products as
    (SELECT count( distinct fs.product_code) as total_products, fiscal_year , segment
    FROM fact_sales_monthly as fs
    LEFT JOIN dim_product
    ON fs.product_code = dim_product.product_code
    GROUP BY fiscal_year, segment)
SELECT a.total_products as unique_products_2020,
       b.total_products as unique_products_2021,
       b.total_products - a.total_products as difference,
       a.segment,
       ROUND((b.total_products-a.total_products) /a.total_products *100 , 2) as pct_change

FROM tot_products as a
LEFT JOIN tot_products as b
ON (a.fiscal_year+1 = b.fiscal_year and a.segment = b.segment)
WHERE b.total_products is not null
ORDER BY a.fiscal_year,pct_change DESC
;
```

| unique_products_2020 | unique_products_2021 | difference | segment | pct_change |
|----------------------|----------------------|------------|-------------|------------|
| 7 | 22 | 15 | Desktop | 214.29 |
| 6 | 9 | 3 | Networking | 50.00 |
| 69 | 103 | 34 | Accessories | 49.28 |
| 12 | 17 | 5 | Storage | 41.67 |
| 59 | 75 | 16 | Peripherals | 27.12 |
| 92 | 108 | 16 | Notebook | 17.39 |

QUERIES

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

```
SELECT F.product_code, P.product, F.manufacturing_cost
FROM fact_manufacturing_cost F
JOIN dim_product P
    ON F.product_code = P.product_code
WHERE F.manufacturing_cost IN (
    SELECT MAX(manufacturing_cost) FROM fact_manufacturing_cost
    UNION
    SELECT MIN(manufacturing_cost) FROM fact_manufacturing_cost
)
ORDER BY F.manufacturing_cost DESC;
```

| product_code | manufacturing_cost_max_min | product | segment |
|--------------|----------------------------|-----------------------|-------------|
| A6120110206 | 240.5364 | AQ HOME Allin1 Gen 2 | Desktop |
| A2118150101 | 0.8920 | AQ Master wired x1 Ms | Accessories |

QUERIES

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 dc.customer,  
       dc.customer_code,  
       ROUND(fp.pre_invoice_discount_pct * 100, 2) as Avg_disc_pct  
  
FROM fact_pre_invoice_deductions as fp  
INNER JOIN dim_customer as dc  
ON fp.customer_code = dc.customer_code  
WHERE fiscal_year = 2021 and market = "India"  
GROUP BY dc.customer  
ORDER BY Avg_disc_pct DESC  
LIMIT 5  
;
```

| customer | customer_code | Avg_disc_pct |
|-------------|---------------|--------------|
| Flipkart | 90002009 | 30.83 |
| Viveks | 90002006 | 30.38 |
| Ezone | 90002003 | 30.28 |
| Croma | 90002002 | 30.25 |
| Vijay Sales | 90002004 | 27.53 |

QUERIES

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

```
SELECT
    YEAR(date) as Year,
    MONTH(date) as month,
    sum(sold_quantity * gross_price) AS gross_sales_amount

FROM fact_sales_monthly as fs
INNER JOIN fact_gross_price as fp
ON fs.product_code = fp.product_code and fs.fiscal_year = fp.fiscal_year
INNER JOIN dim_customer as dc
ON fs.customer_code = dc.customer_code
WHERE customer = "Atliq Exclusive"
group by month, YEAR(date)
ORDER BY Year, month
;
```

| Year | month | gross_sales_amount |
|------|-------|--------------------|
| 2019 | 9 | 4496259.6724 |
| 2019 | 10 | 5135902.3467 |
| 2019 | 11 | 7522892.5608 |
| 2019 | 12 | 4830404.7285 |
| 2020 | 1 | 4740600.1605 |
| 2020 | 2 | 3996227.7661 |
| 2020 | 3 | 378770.9700 |
| 2020 | 4 | 395035.3535 |
| 2020 | 5 | 783813.4238 |
| 2020 | 6 | 1695216.6008 |
| 2020 | 7 | 2551159.1584 |
| 2020 | 8 | 2786648.2601 |
| 2020 | 9 | 12353509.7938 |
| 2020 | 10 | 13218636.1966 |
| 2020 | 11 | 20464999.0997 |
| 2020 | 12 | 12944659.6509 |

QUERIES

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

```
SELECT
CASE
    WHEN MONTH(date) BETWEEN 9 AND 11 THEN 'FIRST QUARTER'
    WHEN MONTH(date) BETWEEN 12 AND 2 THEN 'SECOND QUARTER'
    WHEN MONTH(date) BETWEEN 3 AND 5 THEN 'THIRD QUARTER'
    WHEN MONTH(date) BETWEEN 6 AND 8 THEN 'FOURTH QUARTER'
END AS QUARTER ,
date,
CONCAT(CAST(ROUND(SUM(sold_quantity)/1000000, 2) AS CHAR), " M")
as total_quantities_sold
FROM fact_sales_monthly
WHERE fiscal_year = 2020
GROUP BY QUARTER
ORDER BY total_quantities_sold DESC
;
```

| QUARTER | date | total_quantities_sold |
|----------------|------------|-----------------------|
| FIRST QUARTER | 2019-09-01 | 7.01 M |
| NULL | 2019-12-01 | 6.65 M |
| FOURTH QUARTER | 2020-06-01 | 5.04 M |
| THIRD QUARTER | 2020-03-01 | 2.08 M |

QUERIES

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

```
WITH channels as (SELECT
    channel,
    (SUM(sold_quantity * gross_price) / 1000000) as gross_sales_mln
FROM fact_sales_monthly as fm
JOIN fact_gross_price as fp
ON fm.product_code = fp.product_code
JOIN dim_customer as dc
ON fm.customer_code = dc.customer_code
WHERE fm.fiscal_year = 2021
GROUP BY channel
ORDER BY gross_sales_mln DESC )

SELECT *,
    ROUND(gross_sales_mln * 100 / (SELECT SUM(gross_sales_mln) FROM channels) ,2) as pct_contributions
FROM channels
;
```

| channel | gross_sales_mln | pct_contributions |
|-------------|-----------------|-------------------|
| Retailer | 1924.17039791 | 73.22 |
| Direct | 406.68687390 | 15.47 |
| Distributor | 297.17587972 | 11.31 |

QUERIES

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

```
WITH ranked_product as (  
    -- creating a table with total_sold_quantities and rank_order columns  
    WITH top_product AS (SELECT fm.product_code,  
                                product,  
                                division,  
                                SUM(sold_quantity) as total_sold_quantity  
                        FROM fact_sales_monthly as fm  
                        JOIN dim_product as dp  
                        ON fm.product_code = dp.product_code  
                        WHERE fiscal_year =2021  
                        GROUP BY fm.product_code, division  
                        ORDER BY total_sold_quantity DESC)  
  
    SELECT *,  
        -- creating a rank column  
        RANK () OVER ( PARTITION BY division  
                        ORDER BY total_sold_quantity DESC) as rank_order  
    FROM top_product )  
  
-- finally filtering the above created table to have 1,2 and 3 ranks  
SELECT *  
FROM ranked_product  
WHERE rank_order in (1,2,3)  
;
```

| product_code | product | division | total_sold_quantity | rank_order |
|--------------|---------------------|----------|---------------------|------------|
| A6720160103 | AQ Pen Drive 2 IN 1 | N & S | 701373 | 1 |
| A6818160202 | AQ Pen Drive DRC | N & S | 688003 | 2 |
| A6819160203 | AQ Pen Drive DRC | N & S | 676245 | 3 |
| A2319150302 | AQ Gamers Ms | P & A | 428498 | 1 |
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| A4218110202 | AQ Digit | PC | 17434 | 1 |
| A4319110306 | AQ Velocity | PC | 17280 | 2 |
| A4218110208 | AQ Digit | PC | 17275 | 3 |

QUERIES

Extra: Number of unique products that were discontinued in year 2021 from year 2020.

```
-- Extra Insights
-- Number of products that were discontinued in year 2021 from 2020.
```

```
SELECT DISTINCT product_code, product, segment, fiscal_year
FROM fact_sales_monthly as fm
JOIN dim_product as dp
USING (product_code)
WHERE product_code NOT IN (SELECT DISTINCT product_code
                           FROM fact_sales_monthly
                           WHERE fiscal_year=2021)
and fiscal_year = 2020
;
```

| product_code | product | segment | fiscal_year |
|--------------|-----------------|-------------|-------------|
| A0418150101 | AQ Mforce Gen X | Peripherals | 2020 |
| A0418150102 | AQ Mforce Gen X | Peripherals | 2020 |
| A0418150107 | AQ Mforce Gen X | Peripherals | 2020 |
| A0418150108 | AQ Mforce Gen X | Peripherals | 2020 |
| A3718150104 | AQ LION x1 | Accessories | 2020 |
| A4118110101 | AQ Aspireon | Notebook | 2020 |
| A4118110102 | AQ Aspireon | Notebook | 2020 |
| A4118110103 | AQ Aspireon | Notebook | 2020 |
| A4118110104 | AQ Aspireon | Notebook | 2020 |
| A5119110304 | AQ BZ Gen Y | Notebook | 2020 |
| A5219110404 | AQ BZ Gen Z | Notebook | 2020 |
| A5318110101 | AQ Gamer 1 | Notebook | 2020 |
| A5318110102 | AQ Gamer 1 | Notebook | 2020 |

THANK YOU

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