ATLIQ HARDWARE

Sales Insights from ad-hoc requests

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COMPANY'S MARKET

Atliq Hardware actively doing business in 27 countries across NA, EU and APAC region

QUERY & INSIGHTS

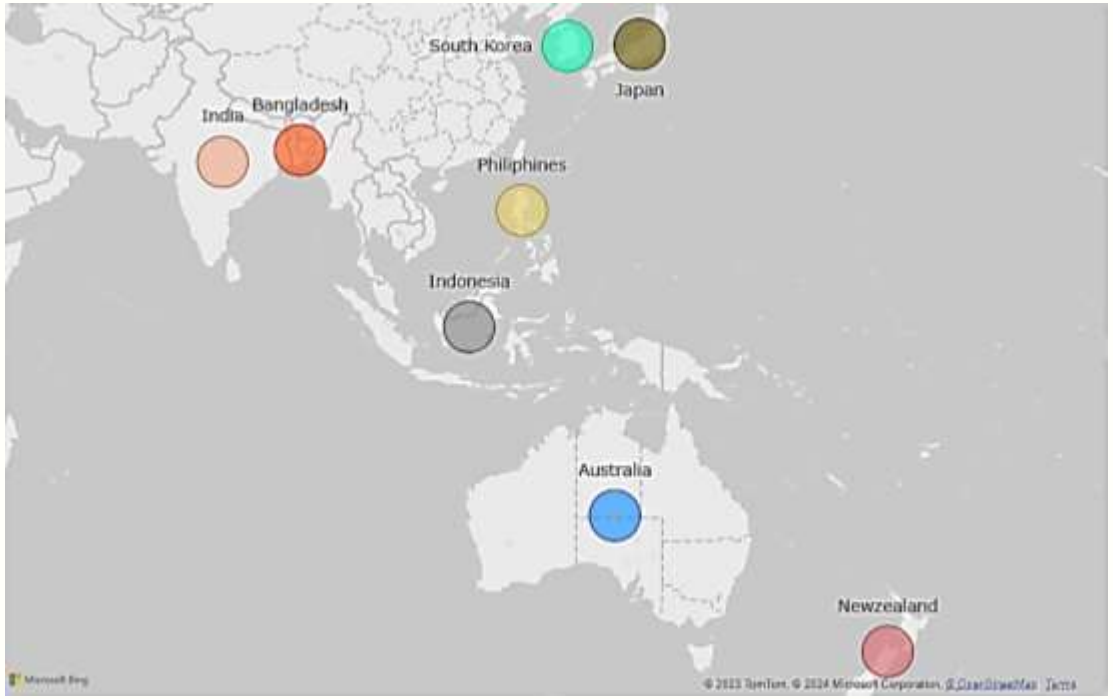
Q1. Provide the list of markets in which customer 'Atliq Exclusive' operates its business in the APAC region

Query

```
SELECT Distinct market
FROM dim_customer
WHERE customer = "Atliq Exclusive" AND region = "APAC"
GROUP By market
ORDER BY market;
```

Output

market
Australia
Bangladesh
India
Indonesia
Japan
Newzealand
Philiphines
South Korea



- Atliq Exclusive operates its business in 8 major markets of Asia Pacific region
- Atliq Exclusive has the most stores in APAC region followed by EU(6) and NA(2)

QUERY & INSIGHTS

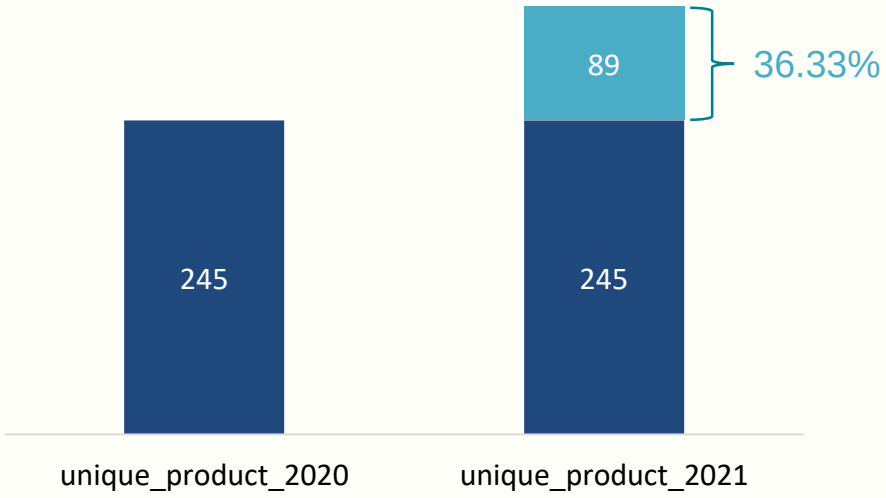
Q2. What is the percentage change of unique product increase in 2021 Vs. 2020? The final output contains the fields, unique_products_2021, unique_products_2020, Percentage_chg

Query

```
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);
```

Output

	unique_product_2020	unique_product_2021	percentage_chg
▶	245	334	36.33



Atliq observed an increase of 36.33% in number of unique products from 2020 to 2021

QUERY & INSIGHTS

Q3. 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

Query

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

Output

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

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QUERY & INSIGHTS

Q4. Follow-up: Which segment had the most increase in unique products in2021 vs 2020? The final output contains these fields,segmentproduct_count_2020product_count_2021difference

Query

```
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 a
 INNER JOIN dim_product 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;
```

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

- Accessories had the largest production growth over period
- Storage and Networking production is at lower rate in comparison to other segments

QUERY & INSIGHTS

Q5. Get the products that have the highest and lowest manufacturing costs. The final output should contain these fields, product_code, product, manufacturing_cost

Query

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

Output

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

Mouse: AQ Master wired x1 Ms has lowest manufacturing cost

Personal Desktop: AQ Home Allin1 Gen2 has highest manufacturing cost

QUERY & INSIGHTS

Q6. 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

Query

```
WITH
CTE1 AS
(SELECT ROUND(AVG(pre_invoice_discount_pct)* 100, 2) AS AVG_pre_invoice_discnt_pct, customer_code AS CC
FROM fact_pre_invoice_deductions
WHERE fiscal_year ='2021'
GROUP BY CC),
CTE2 AS
(SELECT
      customer AS C, customer_code
FROM dim_customer
WHERE market = "INDIA")

SELECT
     CTE2.C AS customer,
     CTE1.CC AS costomer_code,
     CTE1.AVG_pre_invoice_discnt_pct
FROM CTE1
JOIN CTE2 ON CTE2.customer_code = CTE1.CC
ORDER BY AVG_pre_invoice_discnt_pct DESC
LIMIT 5;
```

Output

customer	costomer_code	AVG_pre_invoice_discnt_pct
Flipkart	90002009	30.83
Viveks	90002006	30.38
Ezone	90002003	30.28
Croma	90002002	30.25
Amazon	90002016	29.33

QUERY & INSIGHTS

Q7. Get the complete report of the Gross sales amount for the customer “AtliqExclusive” 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

Query

```
SELECT CONCAT(MONTHNAME(FS.date), ' (', YEAR(FS.date), ')') AS 'Month', FS.fiscal_year,
       ROUND(SUM(G.gross_price*FS.sold_quantity), 2) AS Gross_sales_Amount
FROM fact_sales_monthly FS JOIN dim_customer C ON FS.customer_code = C.customer_code
                           JOIN fact_gross_price G ON FS.product_code = G.product_code
WHERE C.customer = 'Atliq Exclusive'
GROUP BY  Month, FS.fiscal_year
ORDER BY FS.fiscal_year ;
```

Output

Month	fiscal_year	gross_sales_amount
September 2019	2020	2610.85
October 2019	2020	762.29
November 2019	2020	3620.89
December 2019	2020	1372.13
January 2020	2020	3068.23
February 2020	2020	514.55
March 2020	2020	57.17
April 2020	2020	133.40
May 2020	2020	76.23
June 2020	2020	514.55
July 2020	2020	1410.24
August 2020	2020	762.29
September 2020	2021	4726.21
October 2020	2021	5660.02
November 2020	2021	914.75
December 2020	2021	1619.87
January 2021	2021	2267.82
February 2021	2021	3315.97
March 2021	2021	3068.23
April 2021	2021	686.06
May 2021	2021	3563.72
June 2021	2021	2344.05
July 2021	2021	3449.37
August 2021	2021	495.49

QUERY & INSIGHTS

Q8. 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

Query

```
SELECT
     CASE
        WHEN date BETWEEN '2019-09-01' AND '2019-11-01' THEN "Q1'2020"
        WHEN date BETWEEN '2019-12-01' AND '2020-02-01' THEN "Q2'2020"
        WHEN date BETWEEN '2019-03-01' AND '2020-05-01' THEN "Q3'2020"
        WHEN date BETWEEN '2019-06-01' AND '2020-08-01' THEN "Q4'2020"
    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;
```

Output

Quarters	total_sold_quantity
Q1'2020	7005619
Q2'2020	6649642
Q4'2020	5042541
Q3'2020	2075087

QUERY & INSIGHTS

Q9. Which channel helped to bring more gross sales in the fiscal year 2021and the percentage of contribution? The final output contains these fields: channel, gross_sales_mln, percentage

Query

```
WITH CTE AS (SELECT
      C.channel,
      round(SUM(G.gross_price*FS.sold_quantity/1000000),2) AS gross_sales_mln
FROM fact_sales_monthly FS
      JOIN dim_customer C ON C.customer_code = FS.customer_code
      JOIN fact_gross_price G ON G.product_code = FS.product_code
WHERE FS.fiscal_year = 2021
GROUP BY channel
ORDER BY gross_sales_mln DESC)

SELECT channel, gross_sales_mln, CONCAT(ROUND(Gross_sales_mln*100/total , 2), ' %') AS percentage
FROM
(
(SELECT SUM(Gross_sales_mln) AS total FROM CTE) A,
(SELECT * FROM CTE) B
)
ORDER BY percentage DESC;
```

Output

	channel	gross_sales_mln	percentage
▶	Retailer	1924.17	73.22 %
	Direct	406.69	15.48 %
	Distributor	297.18	11.31 %

QUERY & INSIGHTS

Q10. 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

Query

```
WITH top_sold_products AS
(SELECT b.division AS division, b.product_code AS product_code, b.product AS product,
 SUM(a.sold_quantity) AS total_sold_quantity
    FROM fact_sales_monthly AS a
    INNER JOIN dim_product AS b
    ON a.product_code = b.product_code
    WHERE a.fiscal_year = 2021
    GROUP BY  b.division, b.product_code, b.product
    ORDER BY total_sold_quantity DESC
),
top_sold_per_division AS
( SELECT division, product_code, product, total_sold_quantity,
    DENSE_RANK() OVER(PARTITION BY division ORDER BY total_sold_quantity DESC) AS rank_order
 FROM top_sold_products)
 SELECT * FROM top_sold_per_division
 WHERE rank_order <= 3;
```

Output

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