

SQL Project

FINANCE AND SUPPLY CHAIN ANALYTICS

AtliQ Hardware

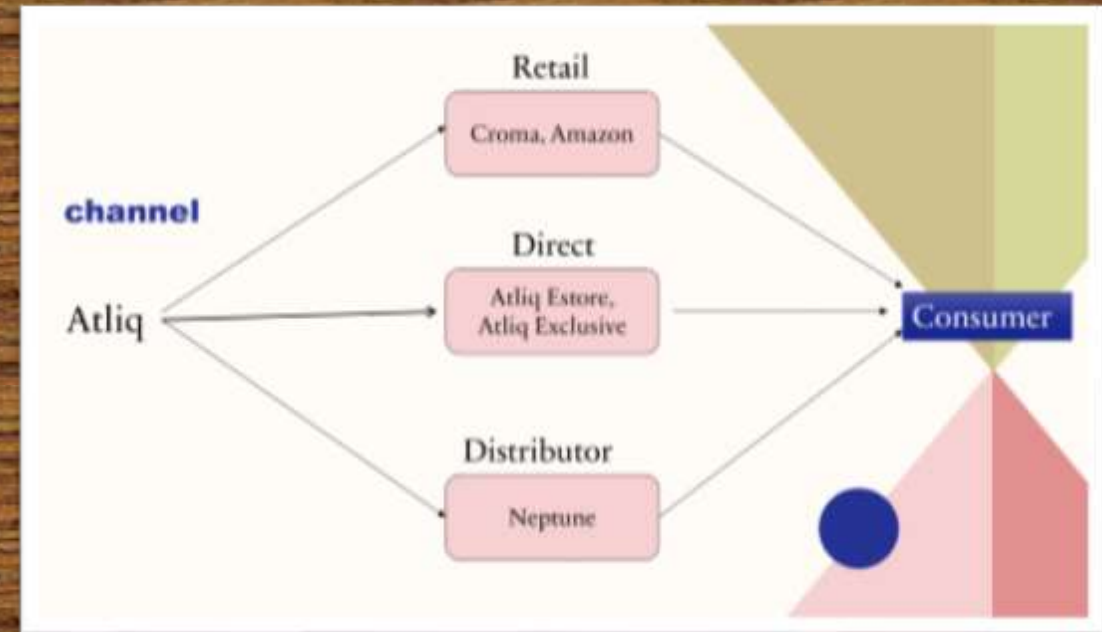


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About AtliQ Hardware & Business Model

Atliq Hardware is a prominent global leader in electronics manufacturing, renowned for producing and distributing a wide range of high-quality hardware products. Their offerings encompass personal computers, printers, mice, and various other computer peripherals, catering to the diverse needs of customers around the world.



Problem Statement

Atliq Hardware is encountering performance challenges as its Excel files become increasingly large and complex. In response, the company has established a specialized team of data analysts to harness MySQL for deriving valuable insights and boosting operational efficiency.

Project Overview

This project aims to conduct a thorough analysis of the dataset provided by Atliq Hardware. The key objectives are to generate actionable insights into sales performance, market dynamics, and customer behavior, and to forecast supply chain trends.

Atliq Exclusive Sales Report

Generate a report of product sales for Atliq Exclusive India customer throughout the fiscal year 2021

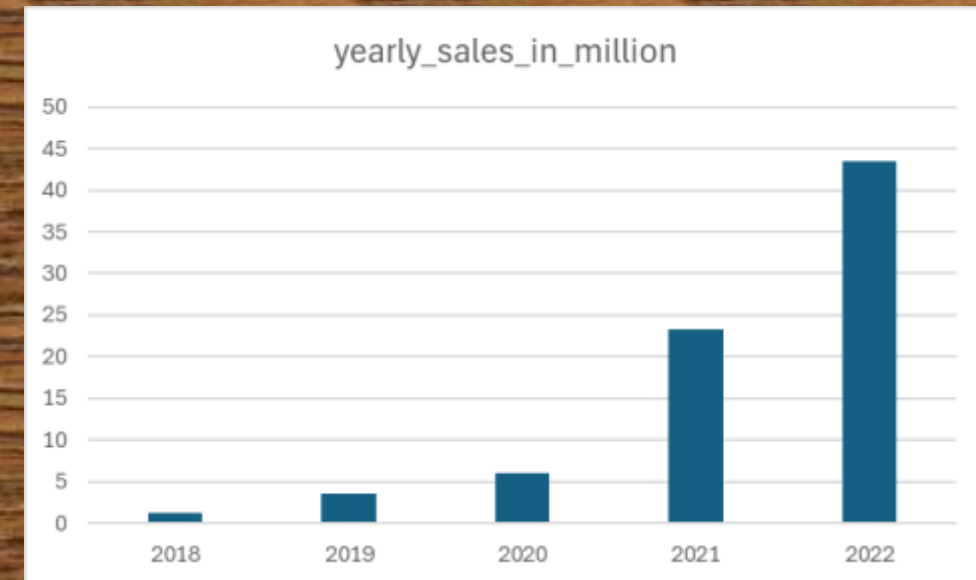
```
3 • SELECT
4     s.date, s.product_code, p.product, p.variant,
5     s.sold_quantity, g.gross_price,
6     round(g.gross_price * s.sold_quantity, 2) as gross_price_total
7 FROM fact_sales_monthly s
8 JOIN dim_product p
9     ON p.product_code = s.product_code
10 JOIN fact_gross_price g
11     ON g.product_code = s.product_code AND
12     g.fiscal_year = get_fiscal_year(s.date)
13 where
14     customer_code= 70002017 AND
15     get_fiscal_year(date) = 2021
16 ORDER BY date ASC;
```

date	product_code	product	variant	sold_quantity	gross_price	gross_price_total
2020-09-01	A0118150101	AQ Dracula HDD – 3.5 Inch SATA 6 Gb/s 5400 R...	Standard	248	19.0573	4726.21
2020-09-01	A0118150102	AQ Dracula HDD – 3.5 Inch SATA 6 Gb/s 5400 R...	Plus	42	21.4565	901.17
2020-09-01	A0118150103	AQ Dracula HDD – 3.5 Inch SATA 6 Gb/s 5400 R...	Premium	166	21.7795	3615.40
2020-09-01	A0118150104	AQ Dracula HDD – 3.5 Inch SATA 6 Gb/s 5400 R...	Premium Plus	83	22.9729	1906.75
2020-09-01	A0219150201	AQ WereWolf NAS Internal Hard Drive HDD – 8....	Standard	94	23.6987	2227.68
2020-09-01	A0219150202	AQ WereWolf NAS Internal Hard Drive HDD – 8....	Plus	242	24.7312	5984.95
2020-09-01	A0220150203	AQ WereWolf NAS Internal Hard Drive HDD – 8....	Premium	134	23.6154	3164.46
2020-09-01	A0320150301	AQ Zion Saga	Standard	108	23.7223	2562.01
2020-09-01	A0321150302	AQ Zion Saga	Plus	223	27.1027	6043.90
2020-09-01	A0321150303	AQ Zion Saga	Premium	234	28.0059	6553.38
2020-09-01	A0418150103	AQ Mforce Gen X	Standard 3	119	19.5235	2323.30
2020-09-01	A0418150104	AQ Mforce Gen X	Plus 1	64	19.9239	1275.13
2020-09-01	A0418150105	AQ Mforce Gen X	Plus 2	23	20.0766	461.76
2020-09-01	A0418150106	AQ Mforce Gen X	Plus 3	37	19.9365	737.65
2020-09-01	A0519150201	AQ Mforce Gen Y	Standard 1	170	22.3984	3807.73
2020-09-01	A0519150202	AQ Mforce Gen Y	Standard 2	42	24.9298	1047.05
2020-09-01	A0519150203	AQ Mforce Gen Y	Standard 3	160	26.5871	4253.94
2020-09-01	A0519150204	AQ Mforce Gen Y	Plus 1	67	26.1081	1749.24
2020-09-01	A0519150205	AQ Mforce Gen Y	Plus 2	122	29.7008	3623.50

Generate a yearly report for **Atliq Exclusive India** with 2 columns:
1.Fiscal year 2.Total Gross sales amount

```
SELECT get_fiscal_year (date) as fiscal_year,  
       ROUND(SUM(sold_quantity * g.gross_price)/1000000,2) AS yearly_sales_in_million  
FROM fact_sales_monthly s  
JOIN fact_gross_price g  
     ON g.fiscal_year = get_fiscal_year(s.date) AND g.product_code = s.product_code  
WHERE customer_code = 70002017  
GROUP BY get_fiscal_year(date)  
ORDER BY fiscal_year;
```

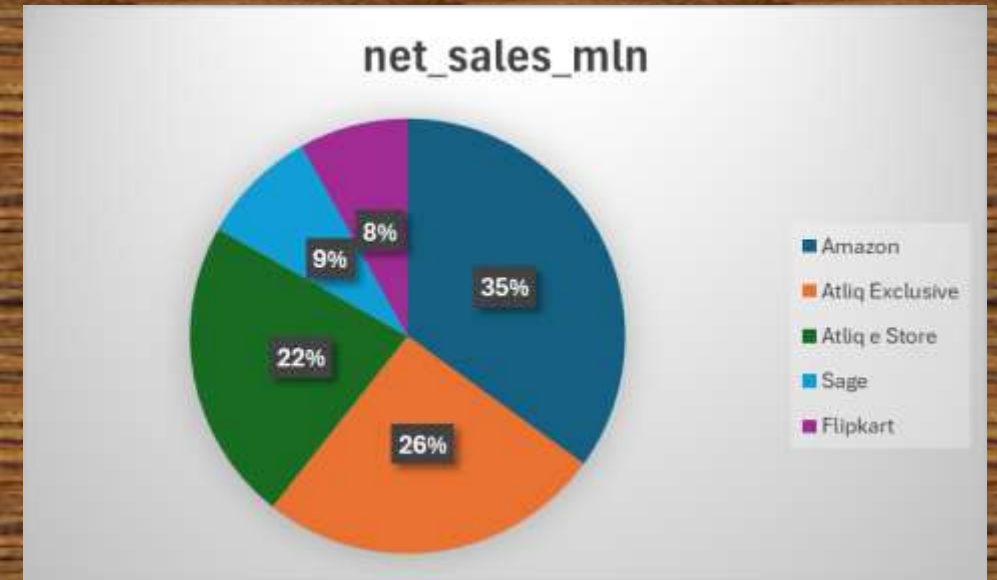
	fiscal_year	yearly_sales_in_million
►	2018	1.33
	2019	3.62
	2020	6.01
	2021	23.24
	2022	43.51



Generate a report having top
5 customers by Net Sales
in fiscal year 2021

```
SELECT
    c.customer,
    ROUND(SUM(net_sales)/1000000,2) as net_sales_mln
FROM net_sales s
JOIN dim_customer c
    ON s.customer_code=c.customer_code
WHERE s.fiscal_year=2021
GROUP BY c.customer
ORDER BY net_sales_mln DESC
LIMIT 5
```

	customer	net_sales_mln
►	Amazon	109.03
	Atliq Exclusive	79.92
	Atliq e Store	70.31
	Sage	27.07
	Flipkart	25.25



Generate a Net Sales % report of Customers in different region

```
WITH cte1 AS (SELECT
    c.customer, c.region,
    round(sum(net_sales)/1000000,2) AS net_sales_mln
FROM net_sales s
JOIN dim_customer c
    ON s.customer_code=c.customer_code
WHERE s.fiscal_year=2021
    GROUP BY c.customer, c.region)

SELECT *,
    ROUND(net_sales_mln * 100/ SUM(net_sales_mln) OVER (PARTITION BY region ),2)
    AS pct_share_region
FROM cte1
ORDER BY region, net_sales_mln DESC;
```

customer	region	net_sales_mln	pct_share_region
Amazon	APAC	57.41	12.99
Atliq Exclusive	APAC	51.58	11.67
Atliq e Store	APAC	36.97	8.36
Leader	APAC	24.52	5.55
Sage	APAC	22.85	5.17
Neptune	APAC	21.01	4.75
Electricalsociety	APAC	16.25	3.68
Propel	APAC	14.14	3.20
Synthetic	APAC	14.14	3.20
Flipkart	APAC	12.96	2.93
Novus	APAC	12.91	2.92
Expression	APAC	12.90	2.92
Girias	APAC	11.30	2.56
Vijay Sales	APAC	11.27	2.55
Ebay	APAC	11.14	2.52
Reliance Digital	APAC	11.10	2.51
Electricalslytical	APAC	11.08	2.51
Lotus	APAC	10.53	2.38

Generate a report with **Top 5 products by Net sales in fiscal year 2021**

```
SELECT p.product, ROUND(SUM(net_sales)/1000000,2) AS net_sales_mln
FROM net_sales n
JOIN dim_product p
ON n.product_code = p.product_code
WHERE fiscal_year = 2021
GROUP BY p.product
ORDER BY net_sales_mln DESC
LIMIT 5;
```

	product	net_sales_mln
▶	AQ BZ Allin1	33.75
	AQ Qwerty	27.84
	AQ Trigger	26.95
	AQ Gen Y	23.58
	AQ Maxima	22.32

Generate a report getting Top 5 markets by Net Sales in fiscal year 2021

```
SELECT
    market, ROUND(SUM(net_sales)/1000000,2) AS net_sales_mln
FROM net_sales
WHERE fiscal_year = 2021
GROUP BY market
ORDER BY net_sales_mln DESC
LIMIT 5;
```

	market	net_sales_mln
▶	India	210.67
	USA	132.05
	South Korea	64.01
	Canada	45.89
	United Kingdom	44.73

Conclusion

- Amazon leads with net sales of \$109.03 million in the fiscal year 2021, followed by Atliq Exclusive and Atliq E-Store.
- Amazon accounted maximum net sales of 12.99% in APAC region in the fiscal year 2021.
- India emerged as the leading market in fiscal year 2021, recording net sales of \$ 210.67 million, with the USA and South Korea following at a considerable distance.
- The AQ BZ Allin1 was the leading product in 2021, achieving \$33.75 million in sales.

Thankyou