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Atliq Hardwares

FINANCE AND SUPPLY CHAIN ANALYSIS

ABOUT ATLIQ HARDWARE AND PROBLEM STATEMENT

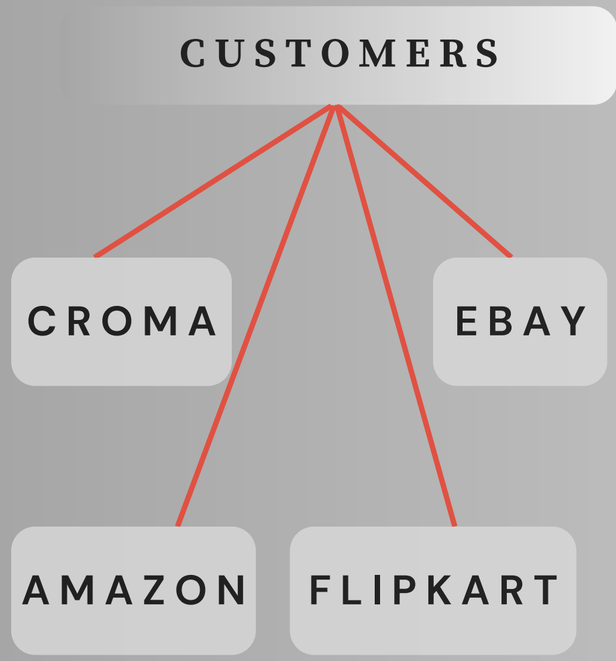
- AtliQ Hardwares is a prominent hardware enterprise known for its global presence, specializing in PCs, printers, mice, and computers.

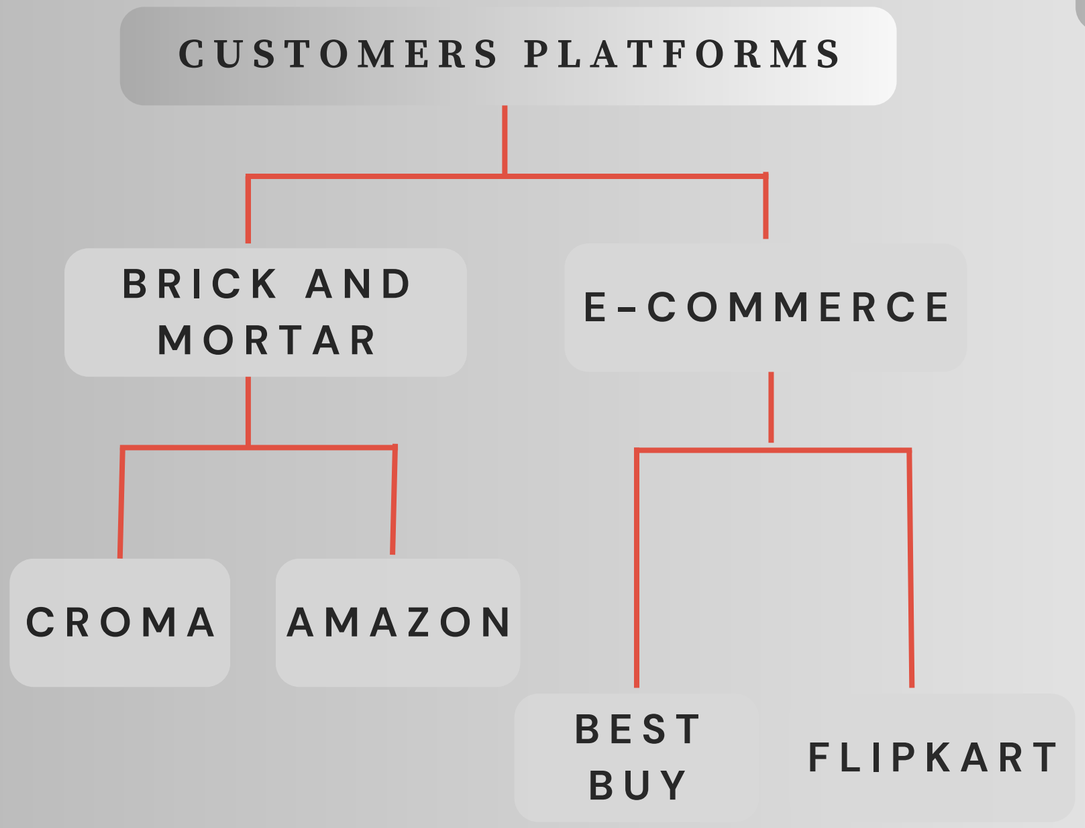
- AtliQHardware has initiated a project aimed at addressing the performance issues stemming from the increasing size of Excel files. To combat this, they've formed a team of data analysts who will harness MySQL as their database management system. Their goal is to extract valuable insights from the data, enabling the company to improve decision-making, streamline operations, and ultimately enhance overall performance.

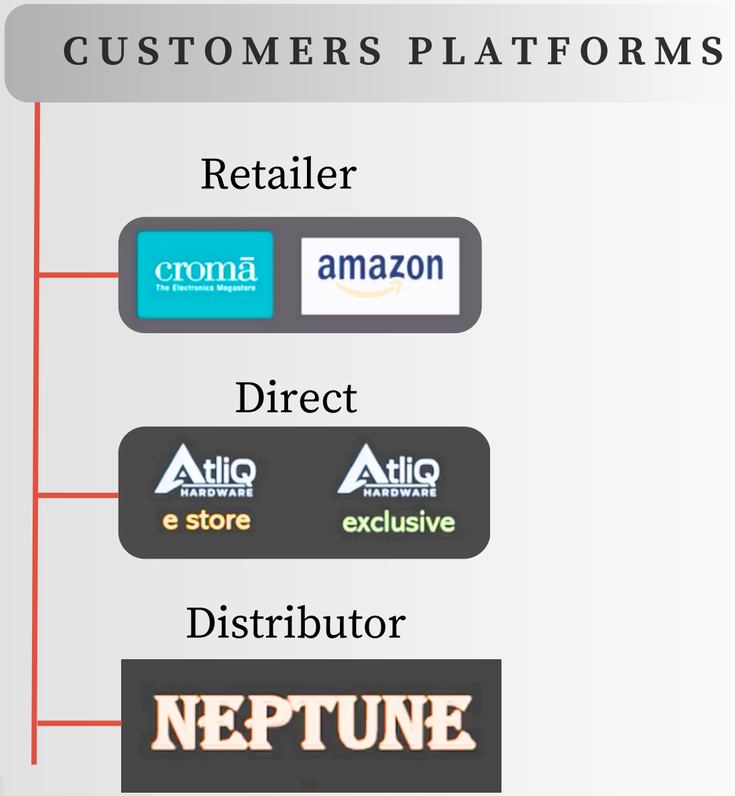
PROJECT OVERVIEW

- The goal of this project is to analyze and derive valuable insights from the database furnished with information regarding sales, products, customers, and regional data for Atliq Hardware. My focus is on answering targeted inquiries concerning sales reports, market analysis, customer behavior, and predicting supply chain needs.

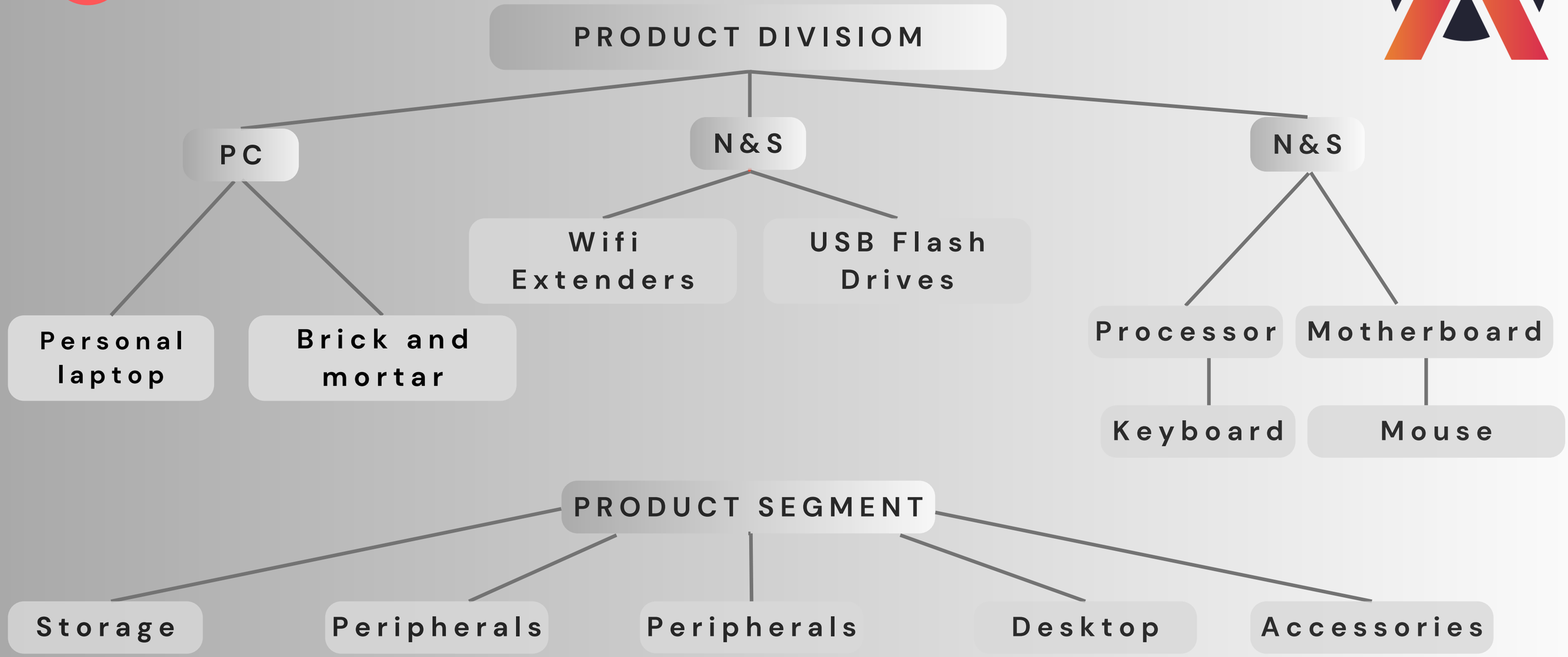
ATLIQ HARDWARE-BUSINESS MODEL



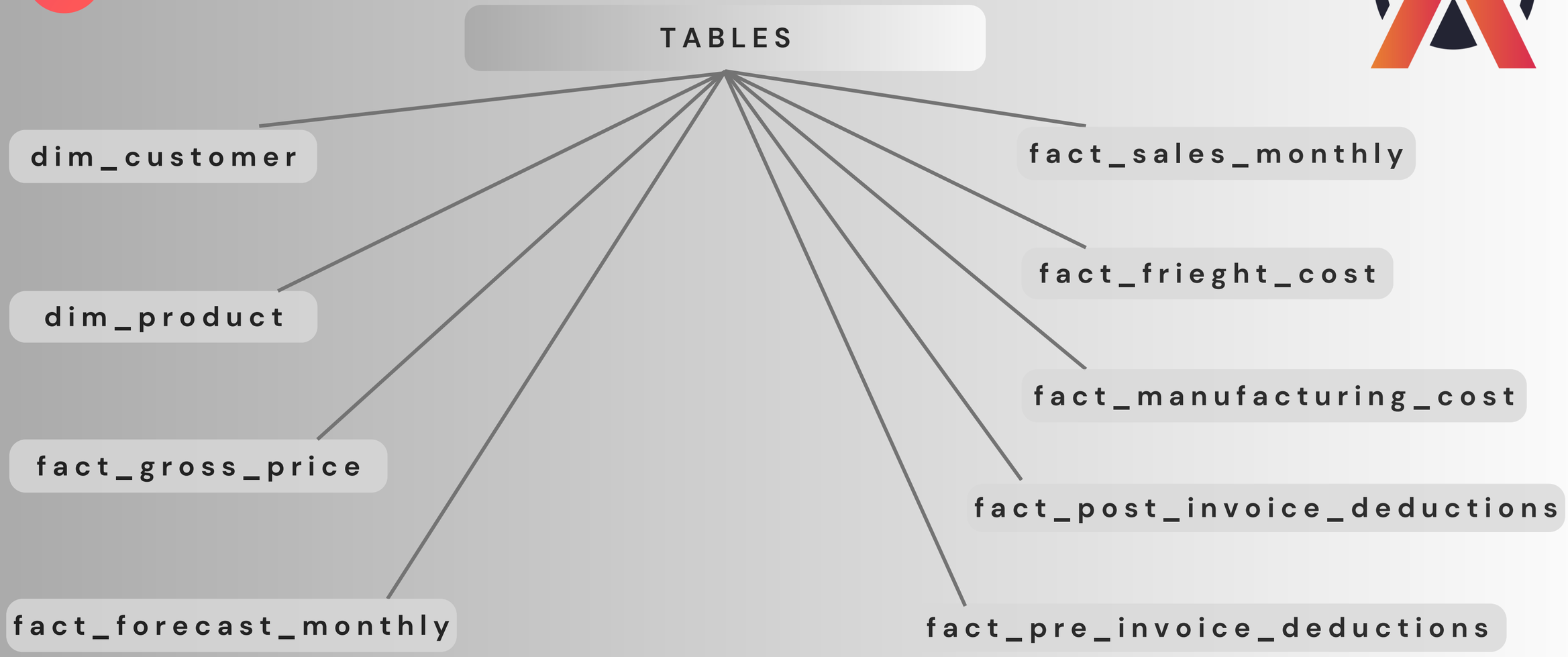




ATLIQ HARDWARE-BUSINESS MODEL



DATA SETS


TABLES
dim_customer
dim_product
fact_gross_price
fact_forecast_monthly
fact_sales_monthly
fact_frieght_cost
fact_manufacturing_cost
fact_post_invoice_deductions
fact_pre_invoice_deductions

Croma India Product wise sales report for Fiscal Year - 2021

SQL- Query

```sql
SELECT
    s.date, s.product_code, p.product,
    p.variant, s.sold_quantity,
    g.gross_price,
    ROUND(s.sold_quantity*g.gross_price,2) as gross_price_total
    FROM fact_sales_monthly s
    JOIN dim_product p
            ON s.product_code=p.product_code
    JOIN fact_gross_price g
            ON g.fiscal_year=get_fiscal_year(s.date)
        AND g.product_code=s.product_code
    WHERE customer_code=90002002 AND
            get_fiscal_year(s.date)=2021
    LIMIT 1000000;
```

Output

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	202	19.0573	3849.57
2020-10-01	A0118150101	AQ Dracula HDD – 3.5 Inch SATA 6 Gb/s 5400 R...	Standard	95	19.0573	1810.44
2020-12-01	A0118150101	AQ Dracula HDD – 3.5 Inch SATA 6 Gb/s 5400 R...	Standard	113	19.0573	2153.47
2021-01-01	A0118150101	AQ Dracula HDD – 3.5 Inch SATA 6 Gb/s 5400 R...	Standard	182	19.0573	3468.43
2021-02-01	A0118150101	AQ Dracula HDD – 3.5 Inch SATA 6 Gb/s 5400 R...	Standard	208	19.0573	3963.92
2021-04-01	A0118150101	AQ Dracula HDD – 3.5 Inch SATA 6 Gb/s 5400 R...	Standard	199	19.0573	3792.40
2021-05-01	A0118150101	AQ Dracula HDD – 3.5 Inch SATA 6 Gb/s 5400 R...	Standard	58	19.0573	1105.32
2021-06-01	A0118150101	AQ Dracula HDD – 3.5 Inch SATA 6 Gb/s 5400 R...	Standard	205	19.0573	3906.75
2021-08-01	A0118150101	AQ Dracula HDD – 3.5 Inch SATA 6 Gb/s 5400 R...	Standard	88	19.0573	1677.04
2020-09-01	A0118150102	AQ Dracula HDD – 3.5 Inch SATA 6 Gb/s 5400 R...	Plus	162	21.4565	3475.95
2020-10-01	A0118150102	AQ Dracula HDD – 3.5 Inch SATA 6 Gb/s 5400 R...	Plus	237	21.4565	5085.19
2020-12-01	A0118150102	AQ Dracula HDD – 3.5 Inch SATA 6 Gb/s 5400 R...	Plus	172	21.4565	3690.52
2021-01-01	A0118150102	AQ Dracula HDD – 3.5 Inch SATA 6 Gb/s 5400 R...	Plus	121	21.4565	2596.24
2021-02-01	A0118150102	AQ Dracula HDD – 3.5 Inch SATA 6 Gb/s 5400 R...	Plus	77	21.4565	1652.15

Gross Monthly Total Sales Report for Croma

SQL- Query

```sql
select
        monthname(s.date) as month,
        SUM(ROUND(s.sold_quantity*g.gross_price,2)) as monthly_sales
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=90002002
GROUP BY date;
```

Output

month	monthly_sales
September	122407.57
October	162687.56
December	245673.84
January	127574.73
February	144799.54
April	130643.92
May	139165.06
June	125735.36
August	125409.90
September	343337.14
October	440562.10
December	653944.72
January	359025.06
February	356607.19
April	379549.74
May	340152.29
June	343792.08

Yearly Gross Sales Report for Croma India

SQL- Query

```sql
select
    get_fiscal_year(date) as fiscal_year,
    round(sum(sold_quantity*g.gross_price)/1000000,2) as "gross_total_price(in Mln)"
    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=90002002
    group by get_fiscal_year(date)
    order by fiscal_year;
```

Output

fiscal_year	gross_total_price(in Mln)
2018	1.32
2019	3.56
2020	6.50
2021	23.22
2022	44.64

Top Market and Customers for a Financial Year “2021”

Customers

SQL- Query

```
SELECT c.customer,
round(sum(net_sales)/1000000,2) as net_sales_mln
FROM gdb0041.net_sales s
join dim_customer c
using (customer_code)
where fiscal_year = 2021
group by customer
order by net_sales_mln desc
limit 5;
```

Output

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

Top Market and Customers for a Financial Year “2021”

Market

SQL- Query

```
SELECT
        market,
        round(sum(net_sales)/1000000,2) as net_sales_mln
FROM gdb0041.net_sales
where fiscal_year=2021
group by market
order by net_sales_mln desc
limit 5;
```

Output

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

Net Sales % Share by Customers

SQL- Query

```sql
with cte as
(select c.customer,
    round(sum(net_sales)/1000000,2) as net_sales_mln
    from gdb0041.net_sales s
    join dim_customer c
    using(customer_code)
    where s.fiscal_year = 2021
    group by customer
    order by net_sales_mln desc
    )
    select *,
    round(net_sales_mln*100/sum(net_sales_mln) over(),2) as net_sales_perc
    from cte
    order by net_sales_perc desc
    limit 10 ;
```

Output

customer	net_sales_mln	net_sales_perc
Amazon	109.03	13.23
Atliq Exclusive	79.92	9.70
Atliq e Store	70.31	8.53
Sage	27.07	3.29
Flipkart	25.25	3.06
Leader	24.52	2.98
Neptune	21.01	2.55
Ebay	19.88	2.41
Electricalsocity	16.25	1.97
Synthetic	16.10	1.95

Net Sales % Share by Region - “APAC”

SQL- Query

```sql
with cte as
(select customer,
    sum(net_sales) as net_sales
    from gdb0041.net_sales s
    join dim_customer c
    using(customer_code)
    where s.fiscal_year = 2021 and region = "APAC"
    group by customer
    order by net_sales desc
    )
    select customer,
    round(net_sales*100/sum(net_sales) over(),2) as net_sales_perc
    from cte
    limit 10 ;
```

Output

customer	net_sales_perc
Amazon	12.99
Atliq Exclusive	11.67
Atliq e Store	8.36
Leader	5.55
Sage	5.17
Neptune	4.75
Electricalsocity	3.68
Propel	3.20
Synthetic	3.20
Flipkart	2.93

Top 2 Market in Every Region by their Gross Sales Amount

SQL- Query

```
with cte1 as(
SELECT c.region , c.market,
sum(g.gross_price_total) as gross_sales_total
FROM gdb0041.`gross sales` g
join dim_customer c
using (customer_code)
group by 1,2
),
cte2 as(
select *, dense_rank() over(partition by region
order by gross_sales_total desc) as rnk
from cte1
)
select * from cte2
where rnk <= 2
;
```

Output

region	market	gross_sales_total	rnk
APAC	India	1600385171.57	1
APAC	South Korea	489801582.42	2
EU	United Kingdom	266584122.34	1
EU	France	223223400.31	2
LATAM	Brazil	10108873.70	1
LATAM	Mexico	8765894.17	2
NA	USA	906908680.70	1
NA	Canada	304977062.38	2

Conclusion

- Amazon recorded the highest net sales of 109.03 million in the fiscal year 2021, followed by AtliQ Exclusive with 79.02 million.
- The Indian market led in generating the highest net sales, reaching 210.67 million in the fiscal year 2021, followed by the USA with 132.05 million.
- In the fiscal year 2021, Amazon accounted for 13.23% of the total net sales across all customers.
- Among the customers in the APAC region in 2021, Amazon had the highest net sales contribution at 12.99% compared to others.
- India holds the top position in total gross sales within the APAC region.