MYSQL

FINANCE ANALYTICS

Problem statement

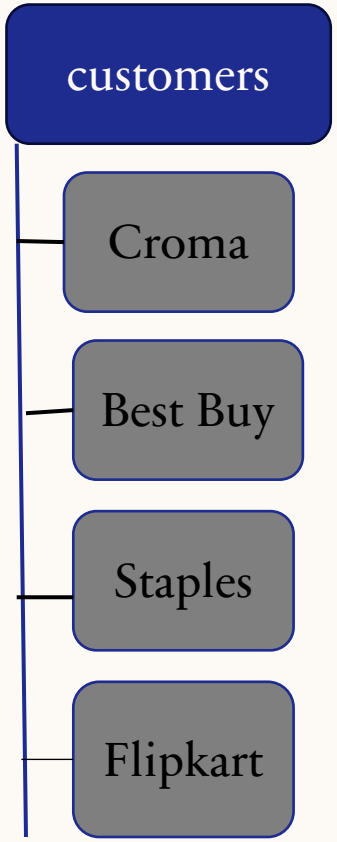
➢ AtliQ Hardwares, a leading hardware company specializing in PCs, printers, mice, and computers with a global reach.

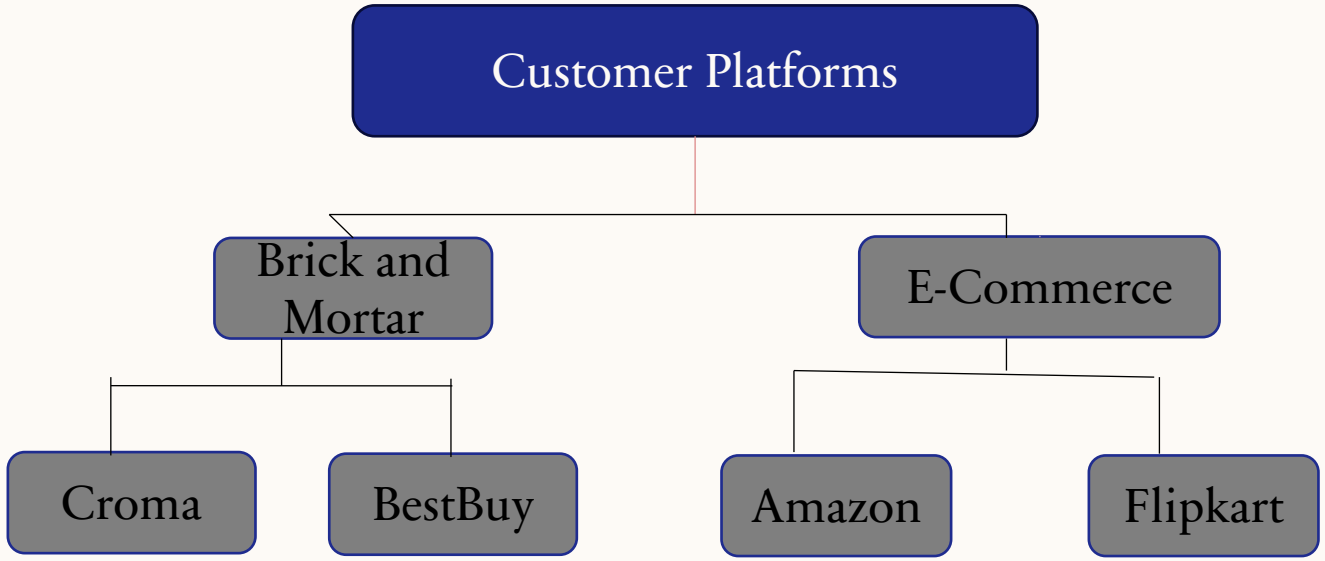
➢ The expanding size of Excel files has led to performance problems, resulting in unresponsiveness and inefficiency. AtliQ Hardware has launched a project to tackle this issue by assembling a team of data analysts. They will utilize MySQL as their database management system to extract meaningful insights from the data. These insights will empower the company to enhance decision-making and optimize operations, ultimately boosting overall performance

Project overview

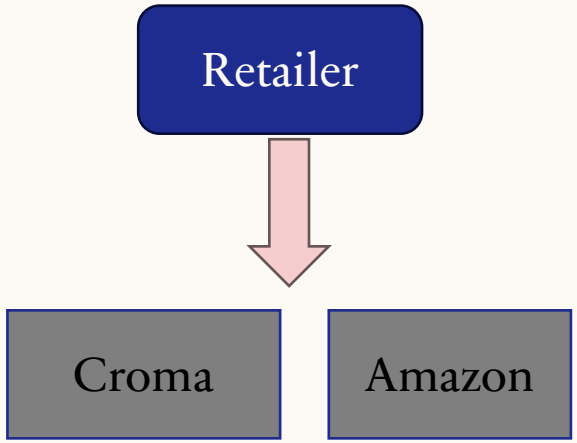
➢ This project is designed to analyze and extract valuable insights from the provided database. The database contains information about sales, products, customers, and regions for Atliq Hardware. I aim to address specific questions related to sales reports, market analysis, customer behavior, and supply chain forecasting.

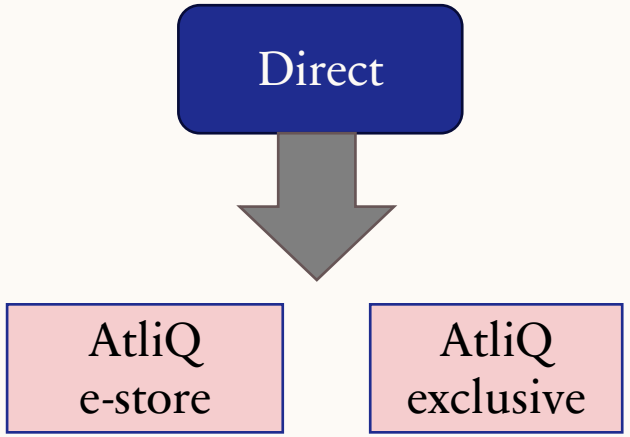
Business Model

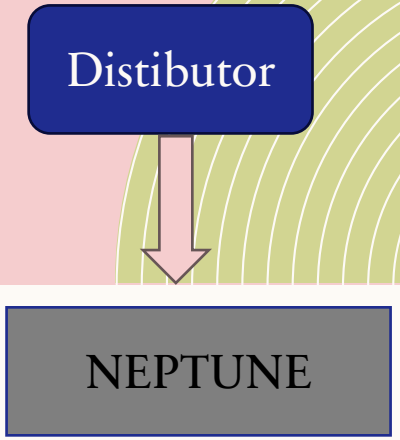




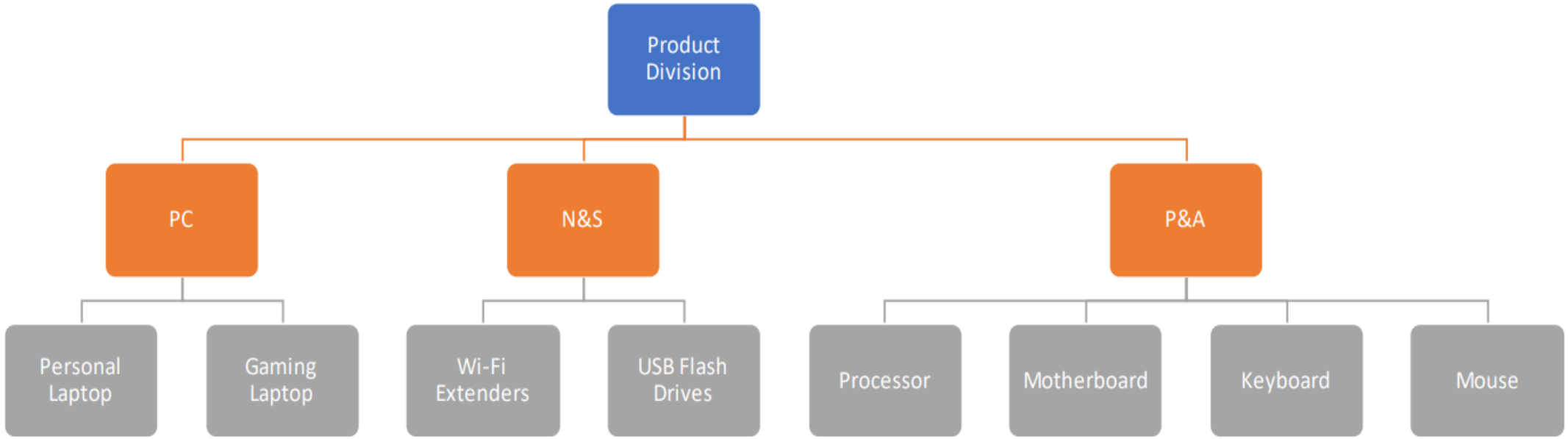
Customers channels:-

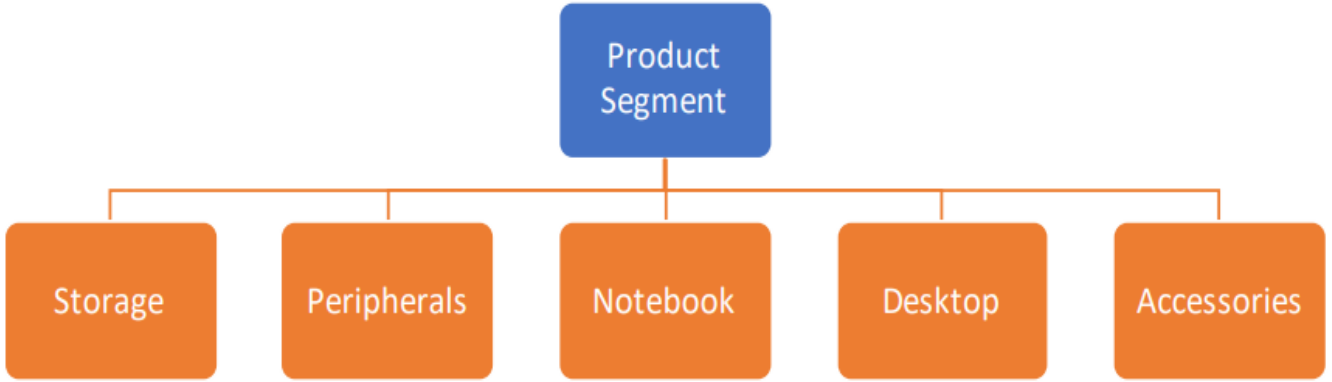




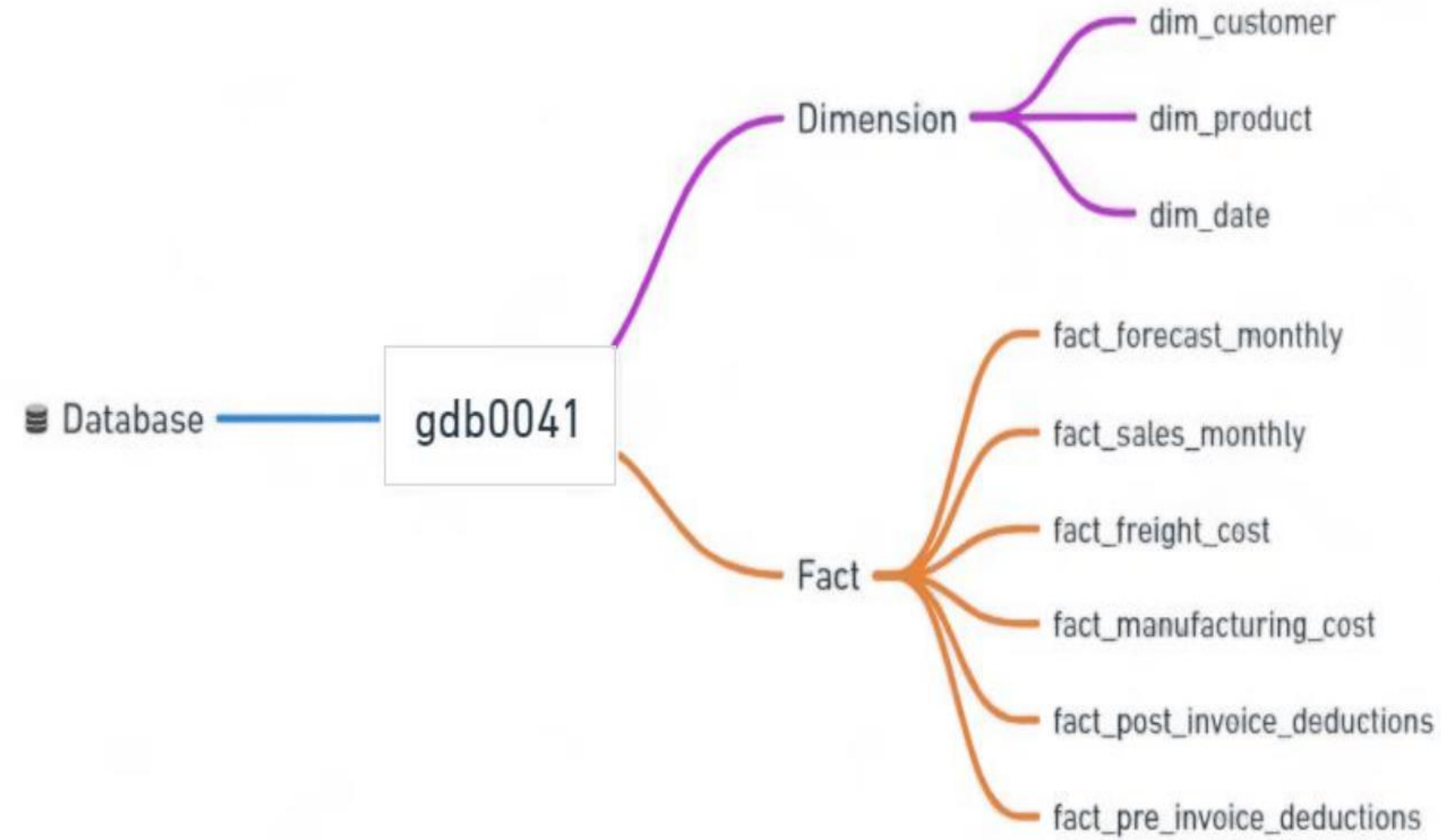


AtliQ Hardware – Business Model





Data set:-


Database
gdb0041
Dimension
dim_customer
dim_product
dim_date
Fact
fact_forecast_monthly
fact_sales_monthly
fact_freight_cost
fact_manufacturing_cost
fact_post_invoice_deductions
fact_pre_invoice_deductions

DATABASE OVERVIEW:-

Name	Engine	Version	Row Format	Rows	Avg Row Length	Data Length
dim_customer	InnoDB	10	Dynamic	209	78	16.0 KiB
dim_date	InnoDB	10	Dynamic	86	190	16.0 KiB
dim_product	InnoDB	10	Dynamic	397	165	64.0 KiB
fact_act_est	InnoDB	10	Dynamic	1911762	49	90.7 MiB
fact_forecast_monthly	InnoDB	10	Dynamic	1805707	53	92.6 MiB
fact_freight_cost	InnoDB	10	Dynamic	135	121	16.0 KiB
fact_gross_price	InnoDB	10	Dynamic	1182	69	80.0 KiB
fact_manufacturing_cost	InnoDB	10	Dynamic	1182	69	80.0 KiB
fact_post_invoice_deductions	InnoDB	10	Dynamic	2041650	47	91.7 MiB
fact_pre_invoice_deductions	InnoDB	10	Dynamic	1045	62	64.0 KiB
fact_sales_monthly	InnoDB	10	Dynamic	1436708	51	70.7 MiB

Tables

Name	Type	Definer	Modified	Created	Security Type
get_forecast_accuracy	PROCEDURE	root@localhost	2024-04-22 01:1...	2024-04-22 01:1...	DEFINER
get_market_badge	PROCEDURE	root@localhost	2024-04-17 01:0...	2024-04-17 01:0...	DEFINER
get_monthly_gross_reports_for_c...	PROCEDURE	root@localhost	2024-04-17 00:3...	2024-04-17 00:3...	DEFINER
get_top_n_customers_by_net_sales	PROCEDURE	root@localhost	2024-04-19 00:4...	2024-04-19 00:4...	DEFINER
get_top_n_market_by_net_sales	PROCEDURE	root@localhost	2024-04-19 00:3...	2024-04-19 00:3...	DEFINER
get_top_n_products_by_net_sales	PROCEDURE	root@localhost	2024-04-19 23:0...	2024-04-19 23:0...	DEFINER
top_n_product_per_division_by_qt...	PROCEDURE	root@localhost	2024-04-20 23:5...	2024-04-20 23:5...	DEFINER

Stored Procedures

Name	Type	Definer	Modified	Created	Security Type
get_fiscal_quarter	FUNCTION	root@localhost	2024-04-16 00:0...	2024-04-16 00:0...	DEFINER
get_fiscal_year	FUNCTION	root@localhost	2024-04-15 23:4...	2024-04-15 23:4...	DEFINER

Functions

Name
net_sales
sales_postinv_discounts
sales_preinv_discount

Views

Croma India Product wise sales report for fiscal year-2021

```sql
SELECT monthname(s.date) as month,
p.product,p.variant,s.sold_quantity,
round(g.gross_price,2) as gross_price,
round(s.sold_quantity * g.gross_price,2) as gross_price_total
FROM fact_sales_monthly s
join dim_product p
using (product_code)
join fact_gross_price g
on g.product_code = s.product_code and
g.fiscal_year = get_fiscal_year(s.date)
where
 customer_code = 90002002
 and get_fiscal_year(date) = 2021
order by date asc
limit 1000000;
```

month	product	variant	sold_quantity	gross_price	gross_price_total
September	AQ Dracula HDD – 3.5 Inc...	Standard	202	19.06	3849.57
September	AQ Dracula HDD – 3.5 Inc...	Plus	162	21.46	3475.95
September	AQ Dracula HDD – 3.5 Inc...	Premium	193	21.78	4203.44
September	AQ Dracula HDD – 3.5 Inc...	Premium Plus	146	22.97	3354.04
September	AQ WereWolf NAS Interna...	Standard	149	23.70	3531.11
September	AQ WereWolf NAS Interna...	Plus	107	24.73	2646.24
September	AQ WereWolf NAS Interna...	Premium	123	23.62	2904.69
September	AQ Zion Saga	Standard	146	23.72	3463.46
September	AQ Zion Saga	Plus	236	27.10	6396.24
September	AQ Zion Saga	Premium	137	28.01	3836.81
September	AQ Mforce Gen X	Standard 3	23	19.52	449.04
September	AQ Mforce Gen X	Plus 1	82	19.92	1633.76

GROSS MONTHLY TOTAL SALES FOR CROMA

```sql
SELECT monthname(s.date) as month,
round(sum(s.sold_quantity * g.gross_price),2) as gross_price_total
FROM fact_sales_monthly s
join fact_gross_price g
on g.product_code = s.product_code and g.fiscal_year = get_fiscal_year(s.date)
where
 customer_code = 90002002
group by s.date
order by date asc;
```

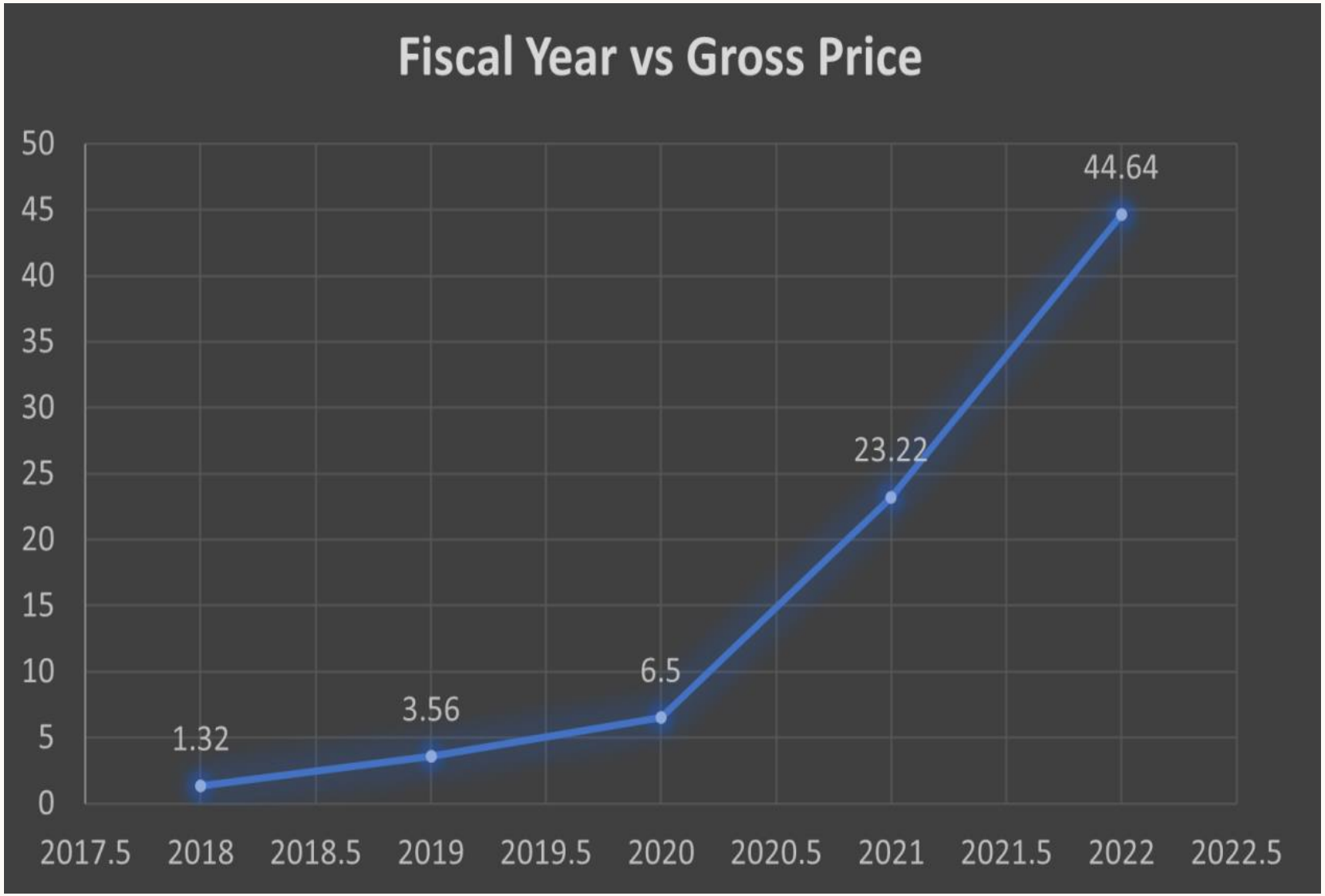
month	gross_price_total
September	122407.56
October	162687.57
December	245673.80
January	127574.74
February	144799.52
April	130643.90
May	139165.10
June	125735.38
August	125409.88
September	343337.17
October	440562.08
December	653944.75
January	359025.02
February	356607.17

YEARLY GROSS SALES REPORT FOR CROMA

```sql
select g.fiscal_year,
round(sum(s.sold_quantity * g.gross_price)/1000000,2) as "gross_price_total(in mln)"
from fact_sales_monthly s
join fact_gross_price g
on s.product_code = g.product_code
and get_fiscal_year(s.date) = g.fiscal_year
where customer_code = 90002002
group by g.fiscal_year;
```

fiscal_year	gross_price_total(in mln)
2018	1.32
2019	3.56
2020	6.50
2021	23.22
2022	44.64

YEARLY GROSS SALES REPOTY FOR CROMA INDIA



Thank You