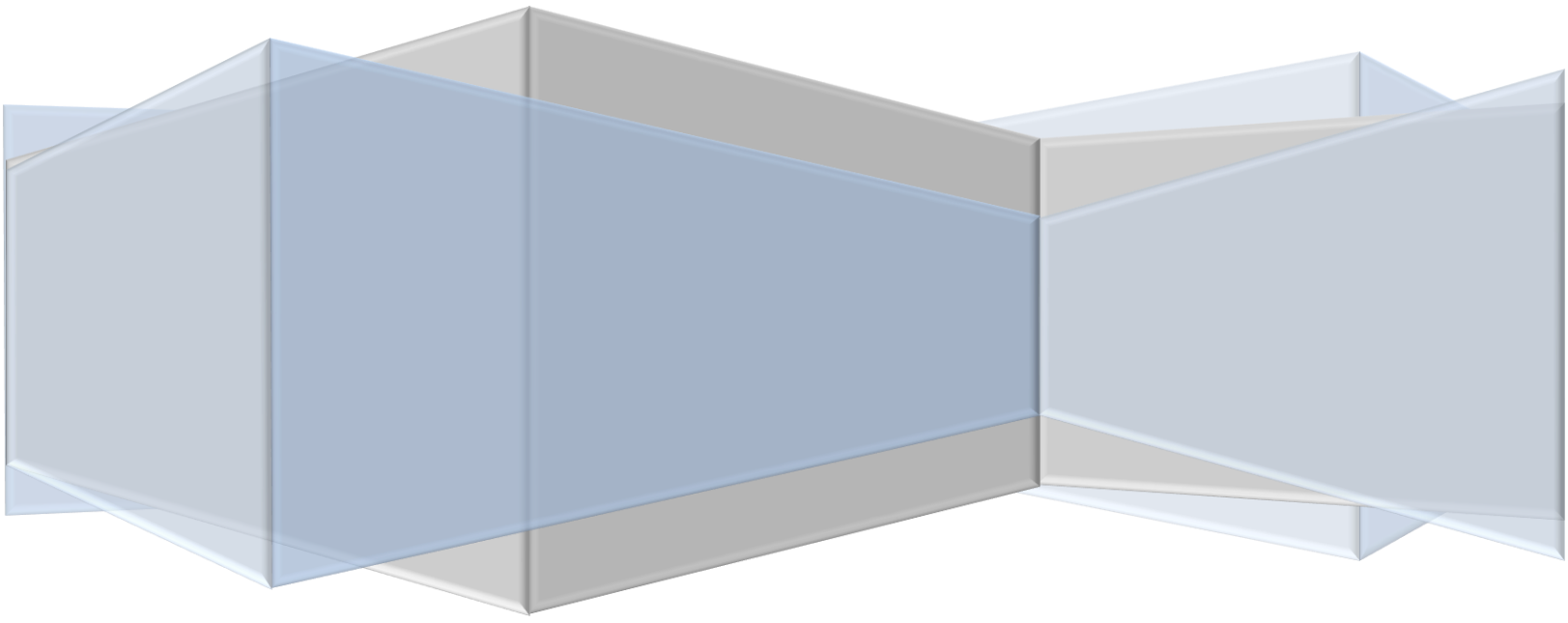
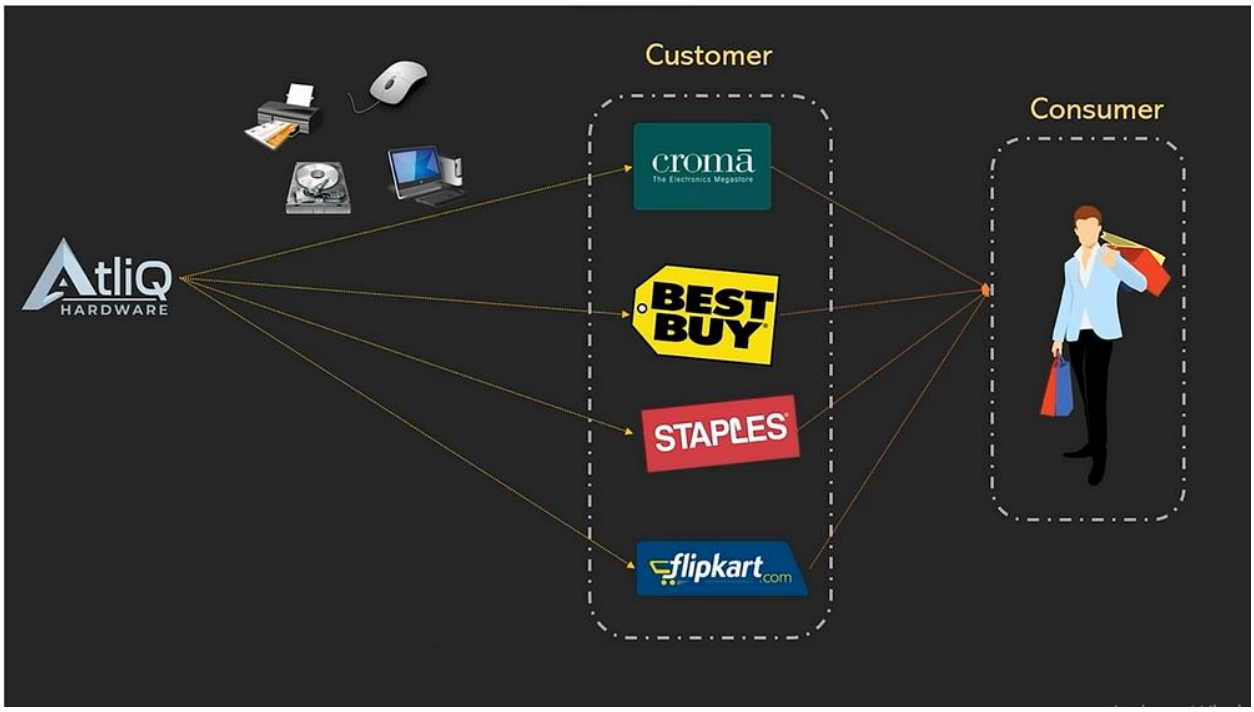
Finance & Supply Chain Analytics

A robust teaching-learning platform dedicated for you to gain the industrial skills and knowledge by, making your learning journey more valuable.



Introduction :

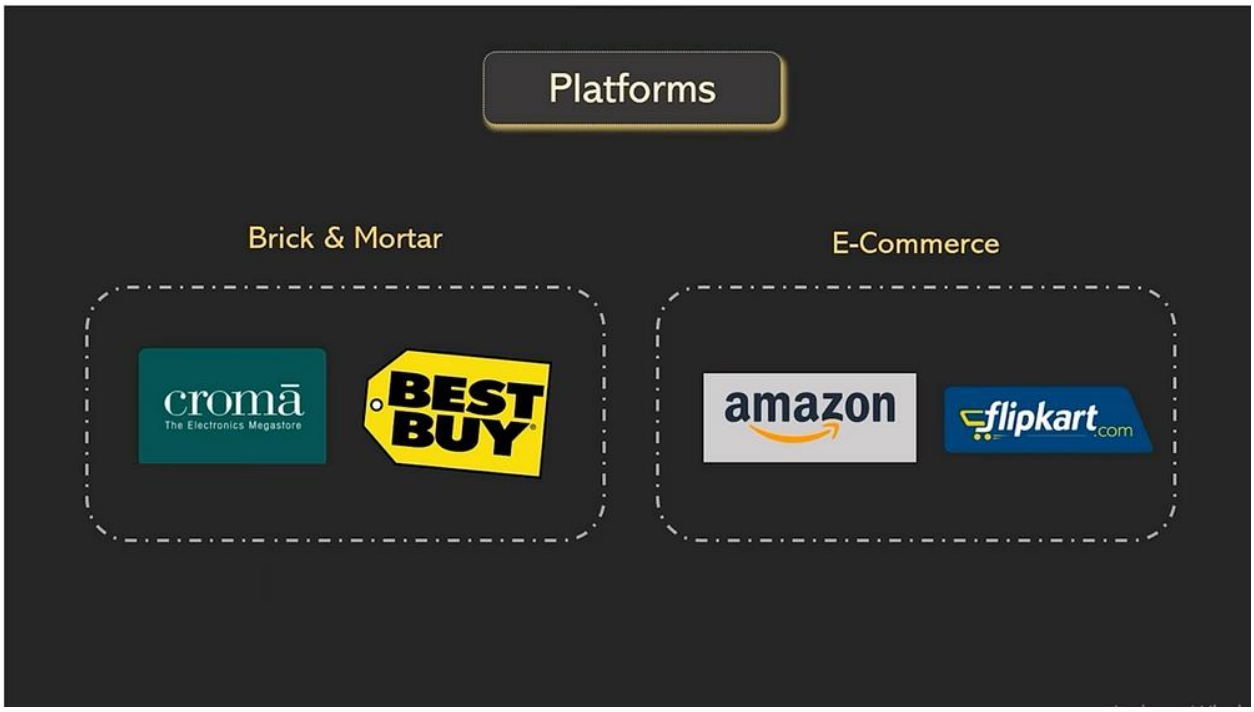
AtliQ Technology, established in 2018, operates in the hardware manufacturing sector, specializing in electronic gadgets like mice, keyboards, laptops, printers, etc.
The company distributes its products to a diverse range of customers, including both both Brick&Motar and Online stores. These intermediary customers subsequently sell the products to end-users.
The business model structure is illustrated in the image below.



Note :
You should not confuse consumer as a customer here.
Here customer means the direct customer of AtliQ.
The real customer in business model is Brick & Motar stores and online stores.
Consumer means the end user who consumes the product.

AtliQ have a manufacturing facility where they build all this hardware and then they send it to a warehouse, distribution centers and so on they have business in different countries, so they ship or supply these hardware gadgets to different customers across different countries.

AtliQ diversifies its sales channels, employing both brick-and-mortar stores and online E-commerce marketplaces to get their products into customers' hands.



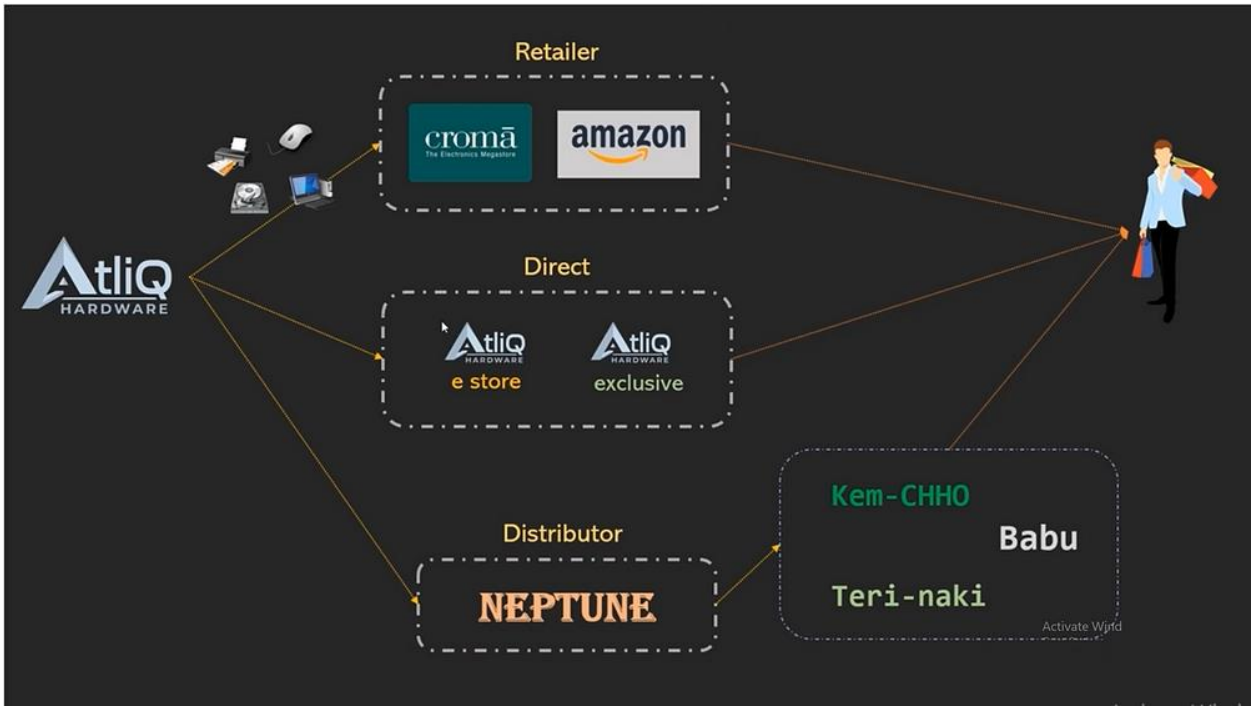
In terms of customer channels, they utilize 3 types of Channels in selling their products to consumers :

1. Retailers :- This includes partnerships with both traditional brick-and- mortar stores and online marketplaces.

2. Direct Sales :- They also operate their own online stores (AtliQ Direct E-Stores) and physical exclusive showrooms

(AtliQ Exclusive showrooms).

3. Distributors :- They leverage a network of distributors to distribute product to local stores across the country.

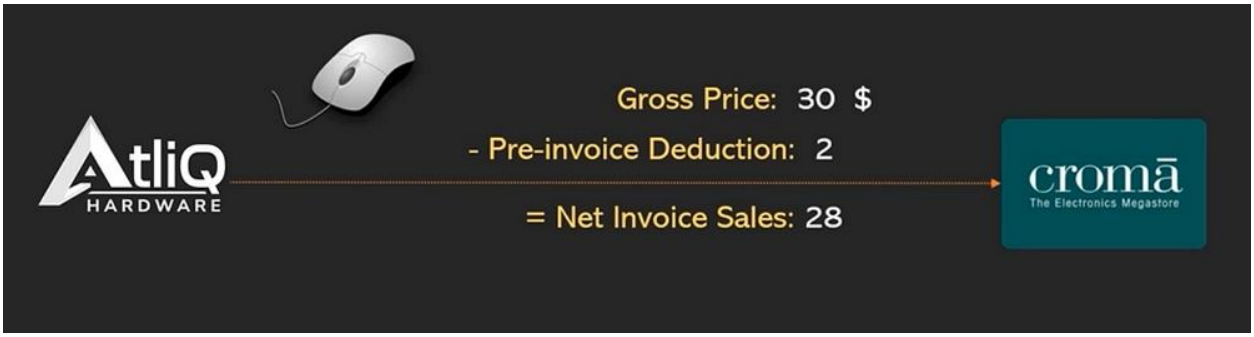


Next up: AtliQ Hardware's financial breakdown.
Let's figure out how AtliQ Hardware makes money!

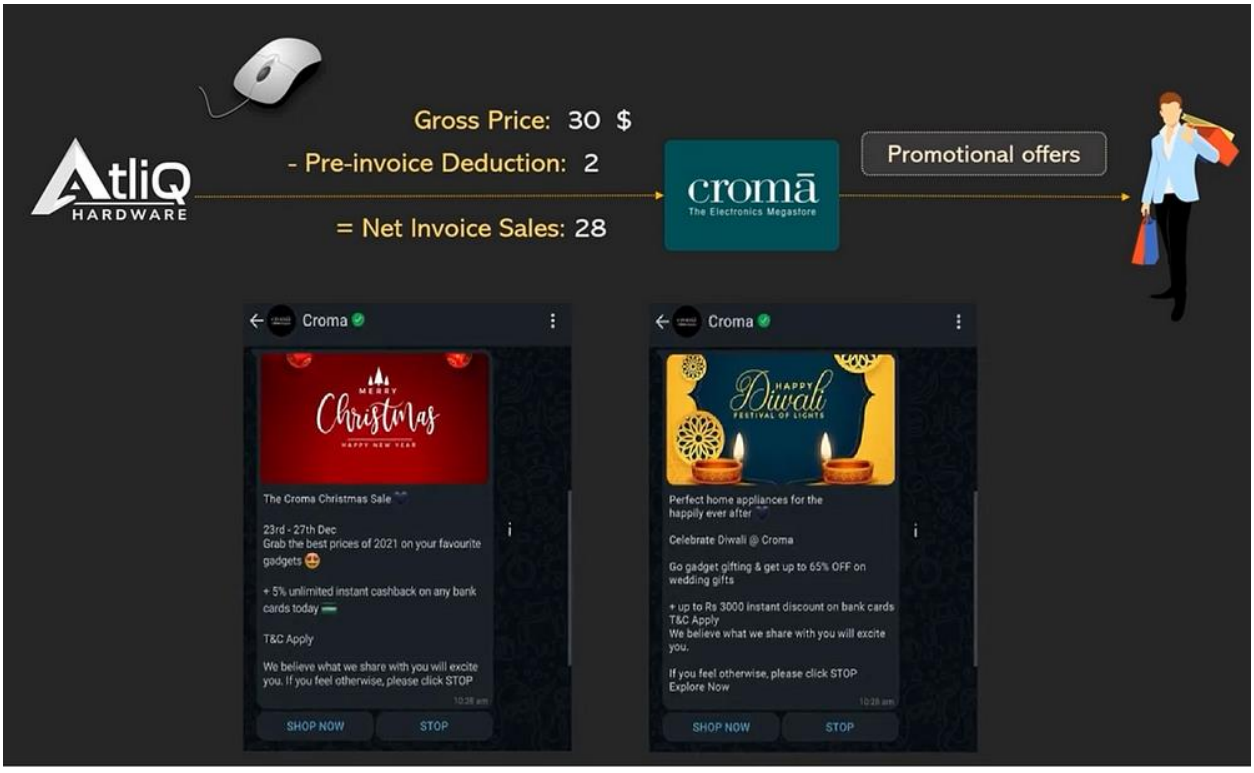
Here's an illustrative example :-
AtliQ sells a mouse to Croma for $30 **gross price.**
That is the base price that AtliQ has set for this particular Mouse.

Now there is some amount that needs to be deducted from this 30$ because AtliQ sets a base gross price of $30 for a mouse sold to Croma.
This is the full price, but Croma gets a special discount at the start of each year based on thier longstanding business relationship and the sales volume generated by the croma store for AtliQ.
This pre-negotiated annual discount made at the beginning of each year is called as **Pre-Invoice Deductions**.

Let’s assume the agreed discount for this mouse is $2, although it’s typically expressed as a percentage.
Therefore, when AtliQ sells this mouse, Croma pays $28 instead of $30 after the deduction.
This $28 is nothing but the **Net Invoice Sales**.



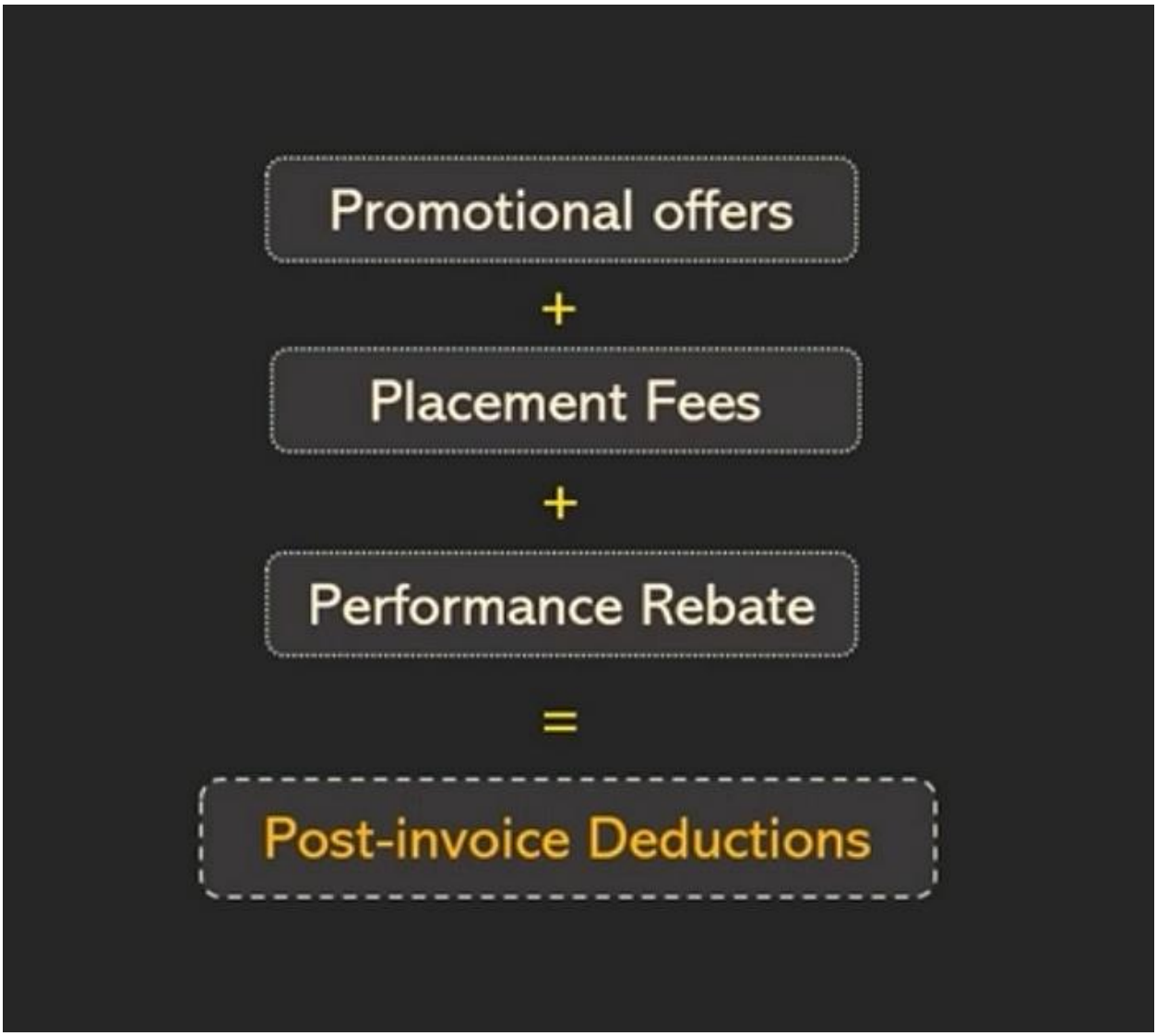
After this process, Croma provides promotional offers to customers, facilitated by AtliQ Hardware.
For instance, during festive seasons like Christmas or Diwali, AtliQ Hardware might suggest a 5% discount for the entire month as a promotional offer that Croma can extend to its consumers.
So that is promotional offer.



Discounts aren’t the only way AtliQ pushes their products.
AtliQ wants their products to stand out, so they sometimes offer stores like Croma this premium discount or a bonus, called a **“placement fees”**, to put them at a prime location in the stores, hoping that this will draw more attention and boost their sales.
This is a strategy to boost sales for AtliQ Hardware, especially considering that Croma may also source hardware from other manufacturers like Dell and HP.
It’s all about getting their products noticed and bought!
This is another way for them to compete with bigger brands and get their products noticed.

Let’s say chroma is pretty good in selling these devices. They generate lot of sales for AliQ Hardware.

So besides discounts like a base price discount, placement fees for prime locations, AtliQ can offer or rewards croma with other incentives or a bonus, called a **“performance rebate”** if the store sells a lot of their products.
Basically, the more devices Croma sells, the more money they get back from AtliQ at the end of the quarter or a month or a year, which benefits both companies in the long run.
It’s like a way of saying “Thank you for being a great sales partner! We appreciate your business!”



After the initial pre-invoice sales price is set, there are 3 types of discounts AtliQ can use to further reduce the cost for stores like Croma.

These 3 types of discounts that we discussed earlier come under the **Post-invoice Deductions**.

Think of post-invoice deductions as adjustments made after the initial sale of a product.

Post-invoice Deductions = festival sales discount or promotional offer discount from the consumer (i.e shoppers) + Platform fee from croma (i.e AtliQ's customer) + Performance Rebates based on how well croma sell (i.e AtliQ's customer).

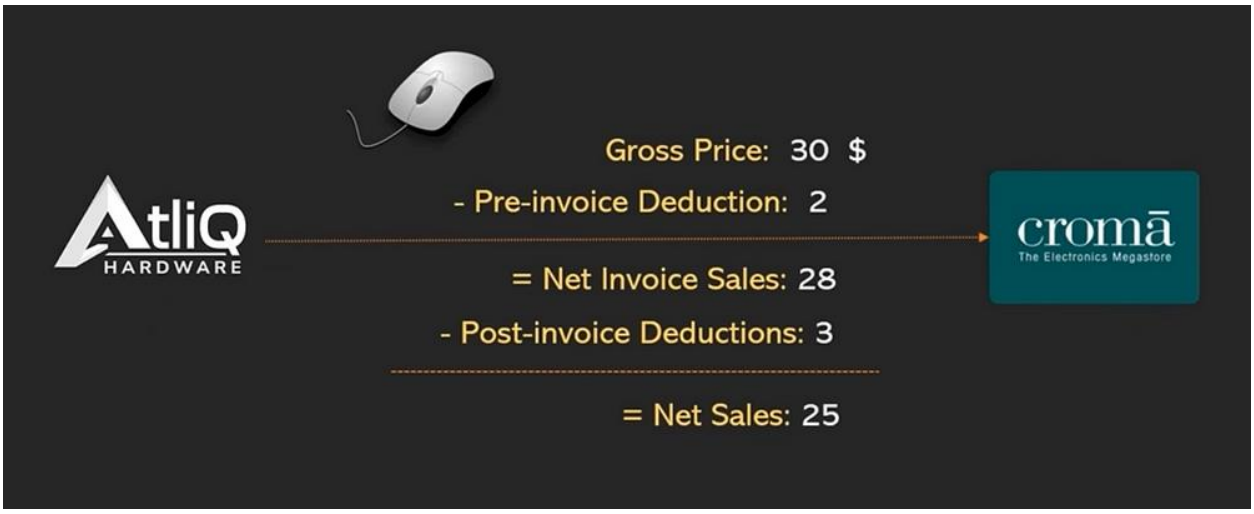
After AtliQ sells a mouse to Croma, there might be some savings and adjustments to the final price.
We call these adjustments "Post-invoice deductions".
All these "Post-invoice deductions" add up to more profit for Croma on each AtliQ device they sell, further reducing the cost, creating a flexible pricing system!
These adjustments can significantly lower the final cost for croma stores and hence AtliQ easily builds loyalty with stores like Croma through post-invoice adjustments.

So, AtliQ sold mouse to croma for 28$ before **Post-invoice deduction**s.
At the end of the selling period (month or quarter or Year), they decide and come to agreement for **Post-invoice deductions** which amount to $3.

We need to account for those **Post-invoice deductions** (discounts, fees and rebates) to get the **Net Sales**. To figure out **Net Sales**, we must deduct the **Post-invoice deduction** amount from the initial invoiced amount (**Net Invoice Sales**) paid by Croma.

Net Sales actually defines the price of the product after considering all the deductions.
Net Sales = Gross Price — (Pre-invoice deduction + Post-invoice deduction)
Net Sales = (Gross Price — Pre-invoice deduction) — Post-invoice deduction
Net Sales = Net invoice Sales — Post-invoice deduction

So eventually at the end of the day AliQ is selling mouse to croma for $25, which is the revenue of AtliQ Hardware Technologies (**Net Sales**).

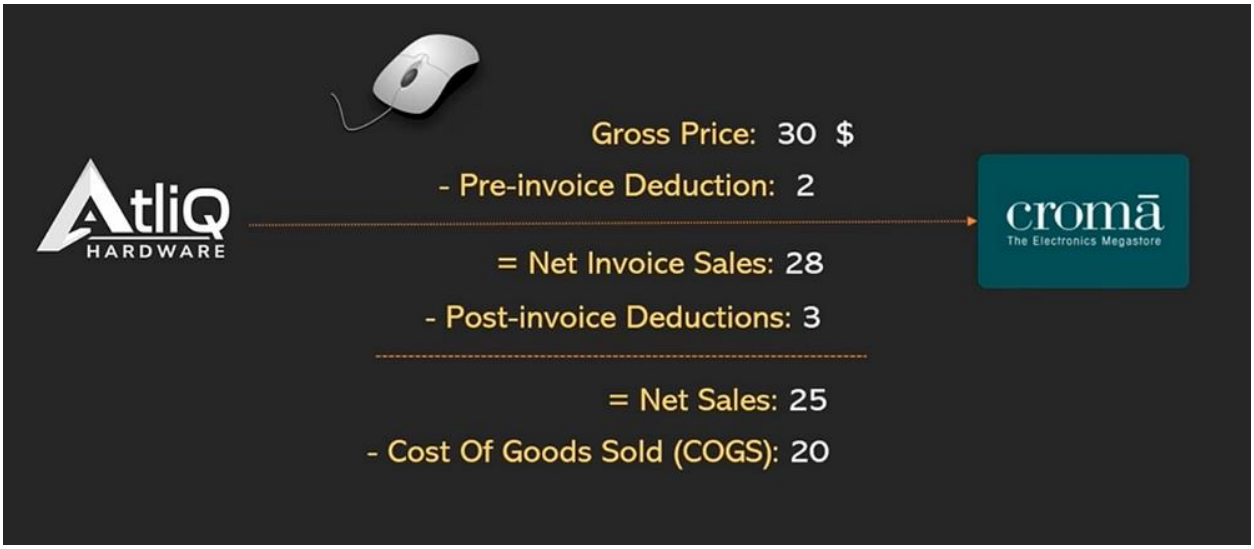


After we cut those extra discounts from the initial invoiced amount (**Net Invoice Sales**) we get **Net Sales** amount.
We now need to deduct the **cost of goods sold(COGS)** which includes the sum of :

1. Manufacturing Cost
2. Freight Cost (Transportation)
3. Other expenses & costs

from the **Net Sales** to get our gross profit.

This tells us how much money we actually earned from selling the mouse to Croma.


AtliQ
HARDWARE
Gross Price: 30 $
- Pre-invoice Deduction: 2
= Net Invoice Sales: 28
- Post-invoice Deductions: 3
= Net Sales: 25
- Cost Of Goods Sold (COGS): 20
croma
The Electronics Megastore

Suppose the **COGS** amount for this mouse is $20.

After deducting the **COGS** amount from **Net sales** we get profit**.**
$20 COGS means AtliQ Hardware earns a profit of $5 per mouse.
That's $5 for each mouse.
This profit is also referred to as **Gross Margin or Gross Margin on Net Sales.**

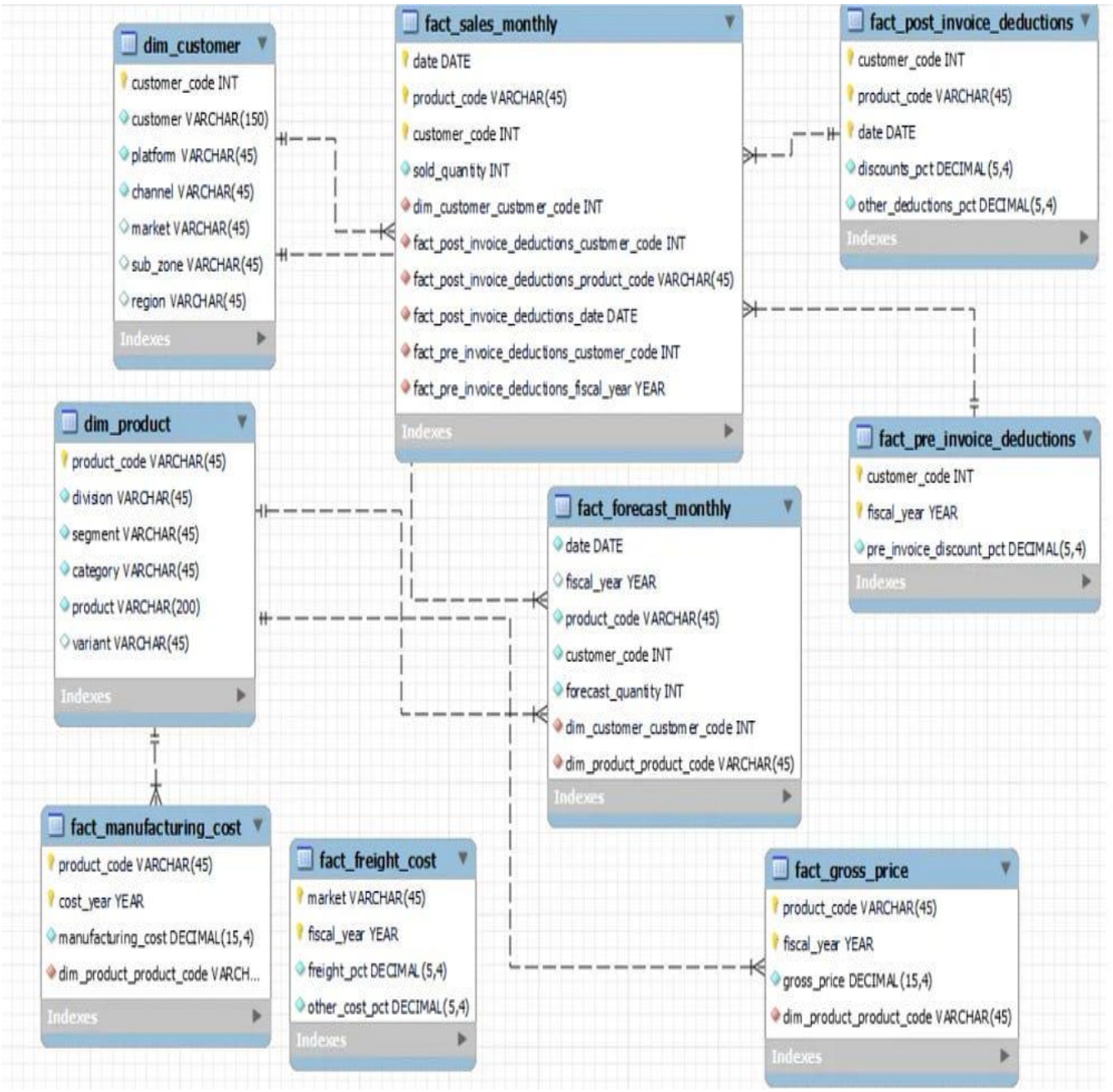
Gross Margin = Net Sales — Cost of Goods sold (COGS)
Gross Margin as % of Net Sales = Gross Margin / Net Sales

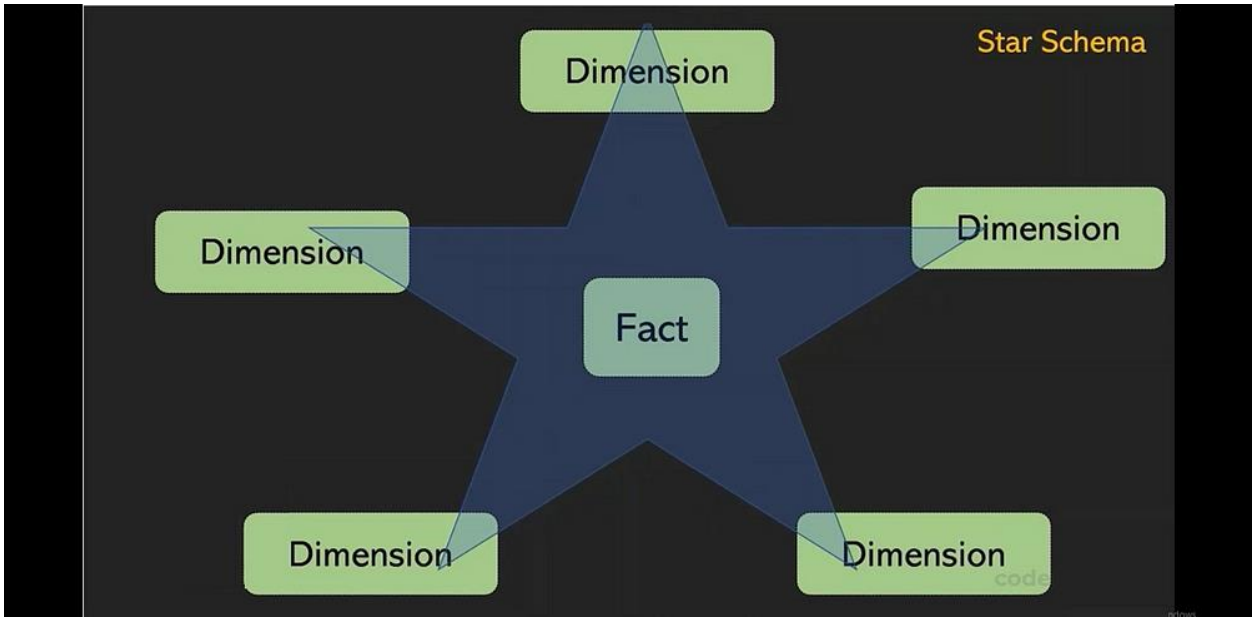
Hence **Gross Margin** comes out as 20% of **Net Sales**
That means AtliQ Hardware make 20% profit on every mouse they sell ($5 profit divided by the $25 sale price), after accounting for the cost of making and shipping them.

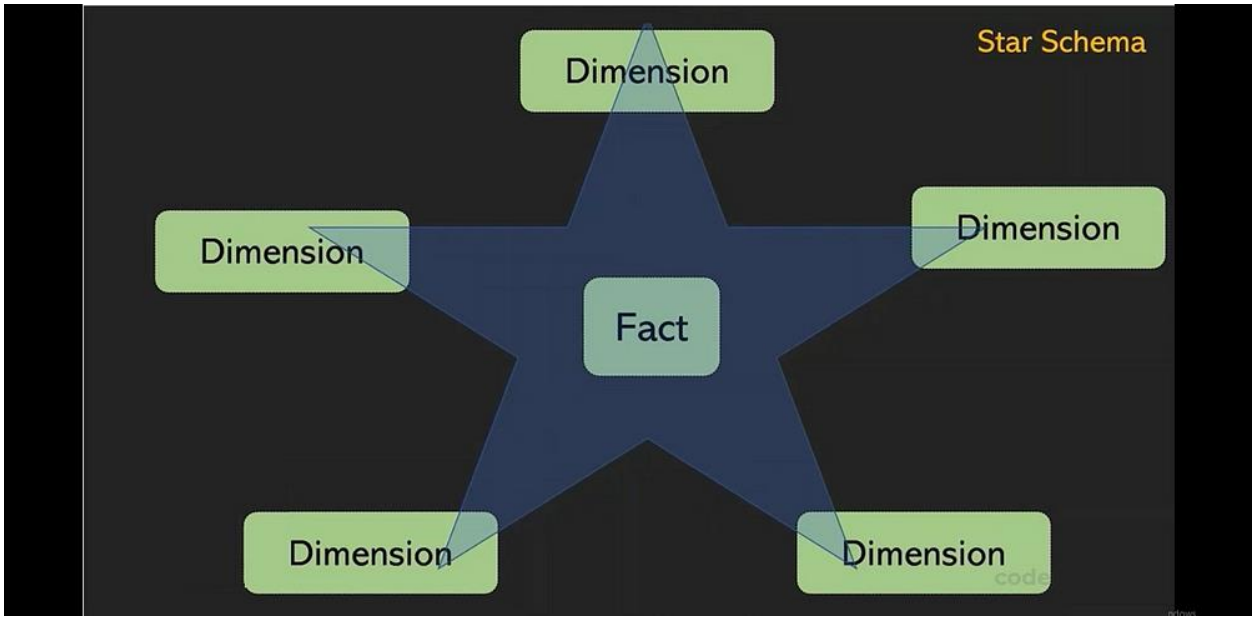
This is a quick summary of Profit and Loss statement.
This summary is about the business model of the AtliQ, now we can move towards the tables.

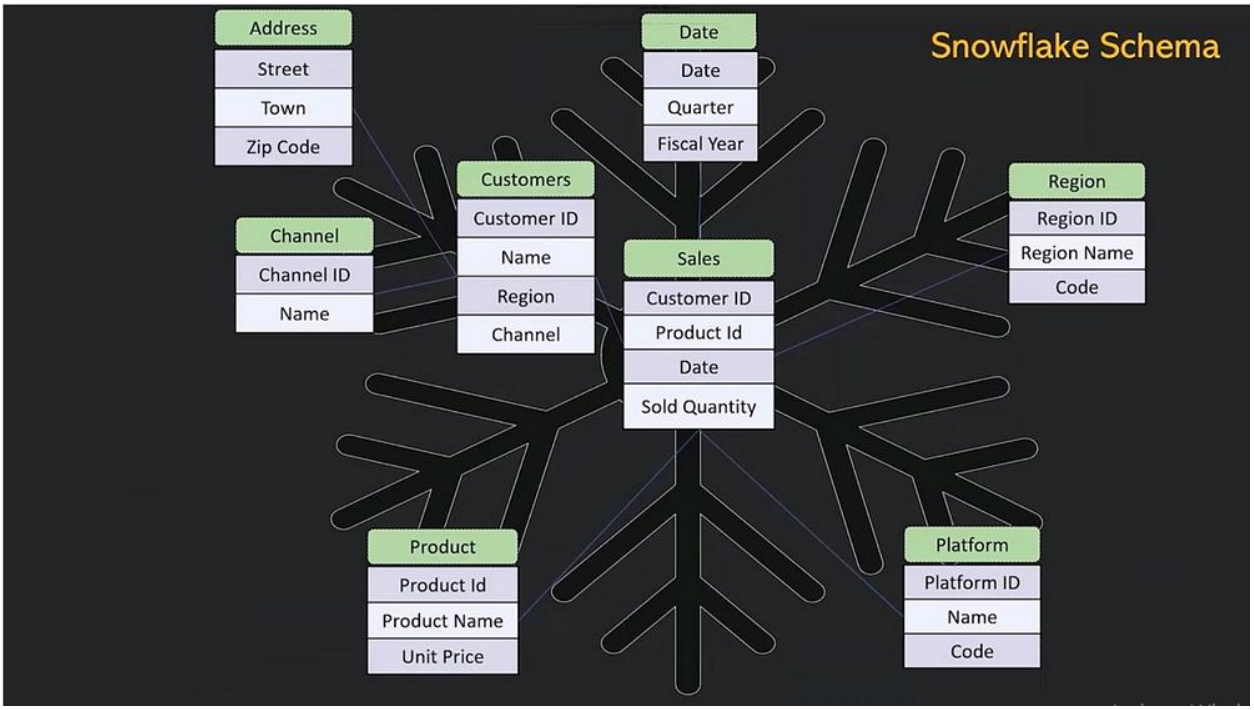
AtliQ's Technologies Database details :

Let’s explore the schema structure of AtliQ hardware to gain a deeper understanding of AtliQ hardware.
An Entity Relationship Diagram (ERD) will visually showcase the connections between different tables, making it easier to grasp the data organization.


dim_customer
customer_code INT
customer VARCHAR(150)
platform VARCHAR(45)
channel VARCHAR(45)
market VARCHAR(45)
sub_zone VARCHAR(45)
region VARCHAR(45)
Indexes
fact_sales_monthly
date DATE
product_code VARCHAR(45)
customer_code INT
sold_quantity INT
dim_customer_customer_code INT
fact_post_invoice_deductions_customer_code INT
fact_post_invoice_deductions_product_code VARCHAR(45)
fact_post_invoice_deductions_date DATE
fact_pre_invoice_deductions_customer_code INT
fact_pre_invoice_deductions_fiscal_year YEAR
Indexes
fact_post_invoice_deductions
customer_code INT
product_code VARCHAR(45)
date DATE
discounts_pct DECIMAL(5,4)
other_deductions_pct DECIMAL(5,4)
Indexes
dim_product
product_code VARCHAR(45)
division VARCHAR(45)
segment VARCHAR(45)
category VARCHAR(45)
product VARCHAR(200)
variant VARCHAR(45)
Indexes
fact_pre_invoice_deductions
customer_code INT
fiscal_year YEAR
pre_invoice_discount_pct DECIMAL(5,4)
Indexes
fact_forecast_monthly
date DATE
fiscal_year YEAR
product_code VARCHAR(45)
customer_code INT
forecast_quantity INT
dim_customer_customer_code INT
dim_product_product_code VARCHAR(45)
Indexes
fact_manufacturing_cost
product_code VARCHAR(45)
cost_year YEAR
manufacturing_cost DECIMAL(15,4)
dim_product_product_code VARCH...
Indexes
fact_freight_cost
market VARCHAR(45)
fiscal_year YEAR
freight_pct DECIMAL(5,4)
other_cost_pct DECIMAL(5,4)
Indexes
fact_gross_price
product_code VARCHAR(45)
fiscal_year YEAR
gross_price DECIMAL(15,4)
dim_product_product_code VARCHAR(45)
Indexes


Star Schema
Dimension
Dimension
Dimension
Fact
Dimension
Dimension


Star Schema
Dimension
Dimension
Dimension
Fact
Dimension
Dimension



AtliQ Technology initiates its business/financial year in September in the month of September by every year, aligning with high sales and the festive season lasting from September to December.

This fiscal year runs from September to August.

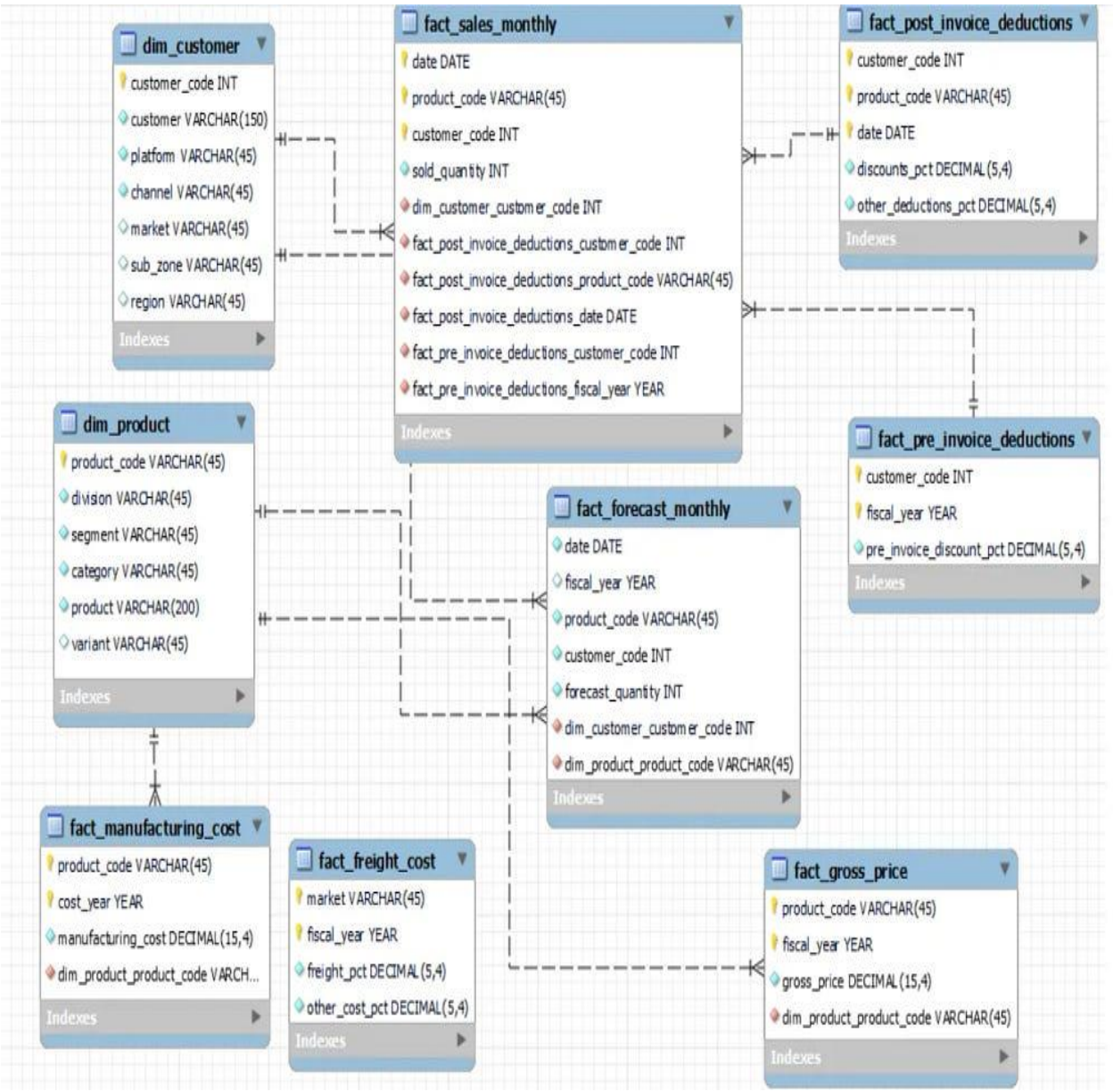
All analyses conducted will be based on that particular fiscal year timeframe, ensuring consistency and relevance.


Calendar Year 2021
Calendar Year 2022
1
12
1
12
Jan
...
Aug
Sep
Oct
Nov
Dec
Jan
...
Aug
Sep
Oct
Nov
Dec
9
8
9
Fiscal Year 2022
Fiscal Year 2023

Task-1

Q1) Create a database named as SupplyChainFinanceManagement

Q2) Create Nine tables which is given below along with there Columns name in the given image



1. **dim_customer** (describe about the customer information who have interacted with AtliQ hardware.
   You can analyze customer demographics, buying behavior, frequency of purchases)

2.**dim_product** (describe about the products offered by AtliQ hardware.
You can analyze product popularity, sales trends, pricing strategies, and product categories that perform well.)

3. **fact_forecast_monthly** (describe the AtliQ's monthly sales prediction information or forecast data like all the estimated quantity of products that we are expecting in the coming future so that we can manage the inventory properly)

4. **fact_freight_cost** (describe about the AtliQ's transportation information for all fiscal years and markets.)

5. **fact_gross_price** (describe the gross price for each unique product that AtliQ sells for a given fiscal year.)

6. **fact_manufacturing_cost** (describe about AtliQ's product manufacturing information related to COGS amount [summation of Manufacturing Cost, Freight Cost (Transportation),Other Cost] that needs to be deducted from net sales)

7.**fact_post_invoice_deductions** (describe about AtliQ's post-invoice-deduction information related to post invoice amount that needs to be deducted for per product when we get the net sales.)

8. **fact_pre_invoice_deductions** (describe about AtliQ's pre-invoice-deduction amount(which is basically the yearly discount agreements made at the beginning of each financial year) that needs to be deducted from the gross sales)

9. **fact_sales_monthly** (describe the AtliQ's monthly sales transaction information which aggregates sales data, summarizing revenue generated from each transaction)

Task-2

Q1) After creating the tables insert the given records which is in the below image in respective tables:

Customer Table

dim_customer table

customer_code	customer	platform	channel	market	sub_zone	region
70020104	Atliq e Store	E-Commerce	Direct	Austria	NE	EU
70021096	Atliq e Store	E-Commerce	Direct	United Kingd...	NE	EU
70022084	Atliq Exclusive	Brick & Mortar	Direct	USA	NA	NA
70022085	Atliq e Store	E-Commerce	Direct	USA	NA	NA
70023031	Atliq Exclusive	Brick & Mortar	Direct	Canada	NA	NA
70023032	Atliq e Store	E-Commerce	Direct	Canada	NA	NA
70026206	Atliq e Store	E-Commerce	Direct	Mexico	LATAM	LATAM
70027208	Atliq e Store	E-Commerce	Direct	Brazil	LATAM	LATAM
80001019	Neptune	Brick & Mortar	Distributor	China	ROA	APAC
80006154	Synthetic	Brick & Mortar	Distributor	Philiphines	ROA	APAC
80006155	Novus	Brick & Mortar	Distributor	Philiphines	ROA	APAC

CoachX LIVE

fact_freight_cost table

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

market	fiscal_year	freight_pct	other_cost_pct
Germany	2020	0.0226	0.0060
Germany	2021	0.0226	0.0060
Germany	2022	0.0226	0.0060
India	2018	0.0244	0.0026
India	2019	0.0219	0.0057
India	2020	0.0309	0.0029
India	2021	0.0309	0.0029
India	2022	0.0309	0.0029
Indonesia	2018	0.0190	0.0042
Indonesia	2019	0.0187	0.0052
Indonesia	2020	0.0195	0.0023

Forecast Monthly

fact_forecast_monthly table

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

date	fiscal_year	product_code	customer_code	forecast_quantity
2017-09-01	2018	A0118150101	70002017	18
2017-09-01	2018	A0118150101	70002018	11
2017-09-01	2018	A0118150101	70003181	9
2017-09-01	2018	A0118150101	70003182	6
2017-09-01	2018	A0118150101	70006157	5
2017-09-01	2018	A0118150101	70006158	6
2017-09-01	2018	A0118150101	70007198	4
2017-09-01	2018	A0118150101	70007199	7
2017-09-01	2018	A0118150101	70008169	7
2017-09-01	2018	A0118150101	70008170	8
2017-09-01	2018	A0118150101	70011193	5

Gross Price Table

fact_gross_price table

Result Grid | Filter Rows: | Edit: | Export/Import:

product_code	fiscal_year	gross_price
A0118150101	2018	15.3952
A0118150101	2019	14.4392
A0118150101	2020	16.2323
A0118150101	2021	19.0573
A0118150102	2018	19.5875
A0118150102	2019	18.5595
A0118150102	2020	19.8577
A0118150102	2021	21.4565
A0118150103	2018	19.3630
A0118150103	2019	19.3442
A0118150103	2020	22.1317

Manufacturing cost Table

fact_manufacturing_cost table

Result Grid | Filter Rows: | Edit: | Export/Import:

product_code	cost_year	manufacturing_cost
A0118150101	2018	4.6190
A0118150101	2019	4.2033
A0118150101	2020	5.0207
A0118150101	2021	5.5172
A0118150102	2018	5.6036
A0118150102	2019	5.3235
A0118150102	2020	5.7180
A0118150102	2021	6.2835
A0118150103	2018	5.9469
A0118150103	2019	5.5306
A0118150103	2020	6.3264

Post-invoice deductions

fact_post_invoice_deductions table

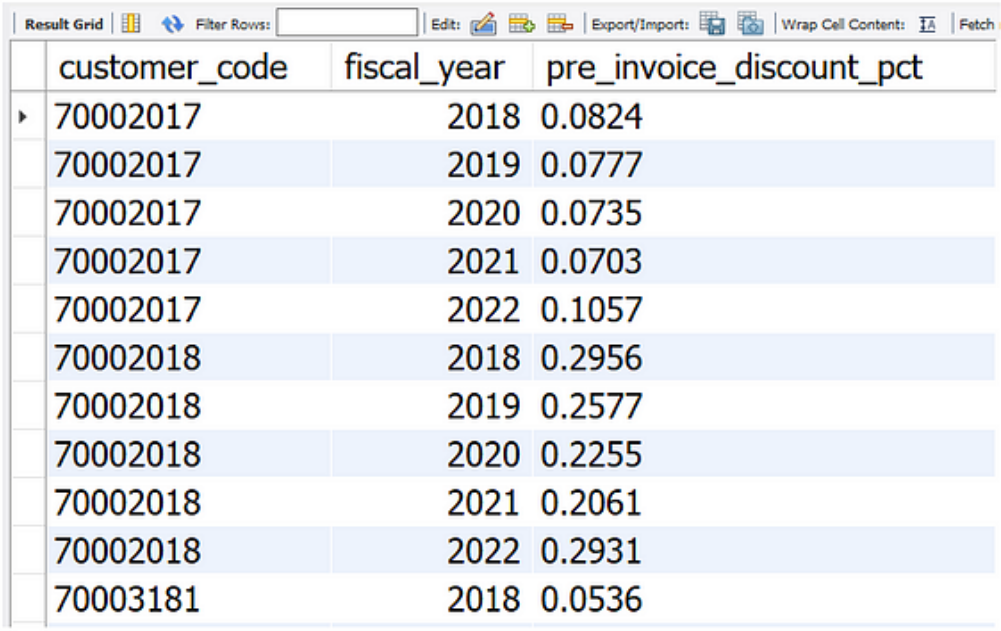
customer_code	product_code	date	discounts_pct	other_deductions_pct
70002017	A0118150101	2017-09-01	0.2660	0.0719
70002017	A0118150101	2017-10-01	0.3090	0.0976
70002017	A0118150101	2017-11-01	0.3313	0.0752
70002017	A0118150101	2018-01-01	0.2958	0.0720
70002017	A0118150101	2018-02-01	0.3208	0.0793
70002017	A0118150101	2018-03-01	0.2635	0.1007
70002017	A0118150101	2018-05-01	0.2231	0.0820
70002017	A0118150101	2018-06-01	0.3020	0.0791
70002017	A0118150101	2018-07-01	0.3123	0.0929
70002017	A0118150101	2018-09-01	0.1530	0.1288
70002017	A0118150101	2018-10-01	0.1363	0.1542

Product Table

dim_product table

product_code	division	segment	category	product	variant
A1919150403	P & A	Peripherals	MotherBoard	AQ MB Lito	Plus 2
A1920150404	P & A	Peripherals	MotherBoard	AQ MB Lito	Premium
A2020150501	P & A	Peripherals	MotherBoard	AQ MB Lito 2	Standard
A2020150502	P & A	Peripherals	MotherBoard	AQ MB Lito 2	Plus 1
A2021150503	P & A	Peripherals	MotherBoard	AQ MB Lito 2	Plus 2
A2021150504	P & A	Peripherals	MotherBoard	AQ MB Lito 2	Premium
A2118150101	P & A	Accessories	Mouse	AQ Master wired x1 Ms	Standard 1
A2118150102	P & A	Accessories	Mouse	AQ Master wired x1 Ms	Standard 2
A2118150103	P & A	Accessories	Mouse	AQ Master wired x1 Ms	Plus 1
A2118150104	P & A	Accessories	Mouse	AQ Master wired x1 Ms	Plus 2
A2118150105	P & A	Accessories	Mouse	AQ Master wired x1 Ms	Premium 1

fact_pre_invoice_deductions table


Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: | Fetch

customer_code	fiscal_year	pre_invoice_discount_pct
70002017	2018	0.0824
70002017	2019	0.0777
70002017	2020	0.0735
70002017	2021	0.0703
70002017	2022	0.1057
70002018	2018	0.2956
70002018	2019	0.2577
70002018	2020	0.2255
70002018	2021	0.2061
70002018	2022	0.2931
70003181	2018	0.0536

Monthly Sales Table

fact_sales_monthly table

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: | Fetch rows:

date	product_code	customer_code	sold_quantity
2017-09-01	A0118150101	70002017	51
2017-09-01	A0118150101	70002018	77
2017-09-01	A0118150101	70003181	17
2017-09-01	A0118150101	70003182	6
2017-09-01	A0118150101	70006157	5
2017-09-01	A0118150101	70006158	7
2017-09-01	A0118150101	70007198	29
2017-09-01	A0118150101	70007199	34
2017-09-01	A0118150101	70008169	22
2017-09-01	A0118150101	70008170	5
2017-09-01	A0118150101	70011193	10

Task-3

Q1) Assume calendar_date is '2023-07-15'. Apply the function to this date and explain what value it will return as the fiscal year.

Q2) Analyzing Gross Sales: Monthly Product Transactions Report

Write a Query for making report on monthly product transactions, including details such as date, product code, product name, variant, sold quantity, gross price, and gross price total. The query should involves joining several tables and filtering results based on customer code and fiscal year.

Task-4

Sales Trend Analysis:

Query the fact_monthly_sales table to identify the monthly sales trend for each product. How do the sales volumes fluctuate over time?

Customer Segmentation:

Utilizing the dim_customer table, segment customers based on their purchasing behavior. Which customer segments contribute the most to sales revenue?

Product Performance Comparison:

Compare the performance of products in terms of sales quantity and revenue generated. Which products are the top performers, and which ones need improvement?

Market Expansion Opportunities:

Analyze the fact_forecast_monthly table to identify potential market expansion opportunities. Which markets show the highest forecasted demand growth?

Cost Analysis:

Calculate the total manufacturing cost for each product and compare it with the gross price to determine profitability. Which products have the highest profit margins?

Discount Impact Analysis:

Assess the impact of pre-invoice discounts on sales revenue. How do varying discount levels affect overall revenue and customer retention?

Market-specific Freight Costs:

Determine the average freight costs for different markets over the years. Are there any noticeable trends or outliers in freight expenses?

Seasonal Sales Patterns:

Explore the fact_monthly_sales table to identify seasonal sales patterns. How do sales volumes vary throughout the year, and are there any recurring trends?

Customer Loyalty Analysis:

Analyze customer purchase frequency and retention rates over time. Which customers exhibit the highest levels of loyalty, and how can their behavior be leveraged for targeted marketing campaigns?

Forecast Accuracy Evaluation:

Evaluate the accuracy of sales forecasts by comparing forecasted quantities with actual sales data. Are there any significant discrepancies, and how can forecast models be improved?

Channel Performance Assessment:

Compare sales performance across different sales channels (e.g., E-Commerce vs. Brick & Mortar). Which channels are most effective in driving sales, and are there any opportunities for optimization?

Geographical Sales Distribution:

Analyze sales distribution across different geographical regions. How does sales performance vary by region, and are there any emerging markets worth focusing on?

Customer Acquisition Cost Analysis:

Calculate the customer acquisition cost (CAC) for each market and channel. Which acquisition channels provide the highest return on investment (ROI), and where should resources be allocated for customer acquisition?

Product Mix Optimization:

Determine the optimal product mix based on sales volume, profitability, and market demand. How can product portfolios be adjusted to maximize overall revenue?

Customer Lifetime Value Calculation:

Calculate the customer lifetime value (CLV) for each customer segment. Which segments are the most valuable in terms of long-term revenue generation?

Inventory Management Analysis:

Analyze inventory turnover rates and identify slow-moving or obsolete products. How can inventory management practices be optimized to reduce carrying costs and improve cash flow?

Competitor Benchmarking:

Compare sales performance with competitors in the same market segments. How does your company's market share and growth rate compare to industry benchmarks?

Price Elasticity Estimation:

Assess the price elasticity of demand for different product categories. How sensitive are sales volumes to changes in product prices, and what pricing strategies can be implemented to maximize revenue?

Customer Satisfaction Analysis:

Utilize customer feedback data to assess overall satisfaction levels and identify areas for improvement. How do customer satisfaction scores correlate with sales performance?

Marketing Campaign Effectiveness:

Evaluate the effectiveness of marketing campaigns in driving sales and brand awareness. Which campaigns have yielded the highest return on investment, and how can future campaigns be optimized for better results?

Task-5

1. Define a user-defined function to calculate the total forecasted quantity for a given product and fiscal year.

2. Write a query to find the customers who made purchases exceeding the average monthly sales quantity across all products.

3. Create a stored procedure to update the gross price of a product for a specific fiscal year.

4. Implement a trigger that automatically inserts a record into the audit log table whenever a new entry is added to the sales table.

5. Use a window function to rank products based on their monthly sales quantity, partitioned by fiscal year.

6. Utilize the STRING_AGG function to concatenate the names of all customers who purchased a specific product within a given timeframe.

7. Develop a user-defined function that calculates the total manufacturing cost for a product over a specified range of years, using a subquery to retrieve the necessary data.

8. Design a stored procedure to insert new records into the sales table and use a trigger to enforce constraints on the quantity sold, ensuring it doesn't exceed the available inventory.

9. Apply the LEAD or LAG function to compare monthly sales quantities of a product with the previous month's sales.

10. Create a query to identify the top-selling products in each market based on their total sales quantity, utilizing subqueries and window functions.

11. Develop a user-defined function to calculate the total freight cost for a product based on its market and fiscal year. Then, integrate this function into a stored procedure to update the overall cost.

12. Write a trigger that automatically updates the inventory count in the product table whenever a new sale is recorded, utilizing inbuilt functions to perform the calculation.

13. Implement a trigger to enforce referential integrity, ensuring that only products listed in the product table can be added to the sales table, utilizing subqueries to validate the data.

14. Design a stored procedure to generate a report showing the month-over-month growth rate of sales for each product, using window functions to calculate the percentage change.

15. Develop a user-defined function to calculate the average discount percentage given to customers for a

specific product, utilizing inbuilt functions to aggregate and analyze the data.

16. Write a query to identify the customers who made the highest total purchases in each region, using subqueries and window functions to perform the analysis.

17. Create a stored procedure to calculate the total revenue generated from sales for a given period, using inbuilt functions to handle date manipulation and aggregation.

18. Implement a trigger to automatically update the forecasted quantity in the forecast table whenever a new product is added to the product table, utilizing a user-defined function to calculate the forecast.

19. Develop a trigger to identify outliers in the monthly sales data and flag them for further investigation, leveraging window functions to detect deviations from the expected sales patterns.

20. Write a query to retrieve the products with the highest average gross price across all fiscal years, using subqueries and inbuilt functions to perform the analysis

Task-6

Aanalyze the monthly forecast accuracy for a specific product over multiple fiscal years.

Question:

Write a SQL query that calculates the forecast accuracy for a given product over different fiscal years.

Utilize Pivot table functionality to present the forecast quantity and actual sold quantity side by side for each month within a fiscal year.

Calculate forecast accuracy as the percentage of actual sold quantity compared to forecast quantity.

Interpret the results to identify months with high or low forecast accuracy and provide possible reasons for the discrepancies.

Include considerations for handling missing or incomplete data in the analysis.

Submission Guidelines

Format: PowerPoint or PDF
Length: 1-20 slides.
Sections: Introduction, Key Findings, Actionable, Methodologies , Approaches, Insights, Conclusions

Tools and Technologies :

SQL / MS-SQL SERVER

Deadline:

Submit your report and presentation within 21 Days from the day you will start.

**********Thank You**********