



# SQL insight Hub:

Finance, Supplychain  
top(product, customer, market)

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# TABLE OF CONTENTS

01

Atliq's Business Model

02

Market and product lines

03

DataModel

04

Problem  
statement,Query,Result

05

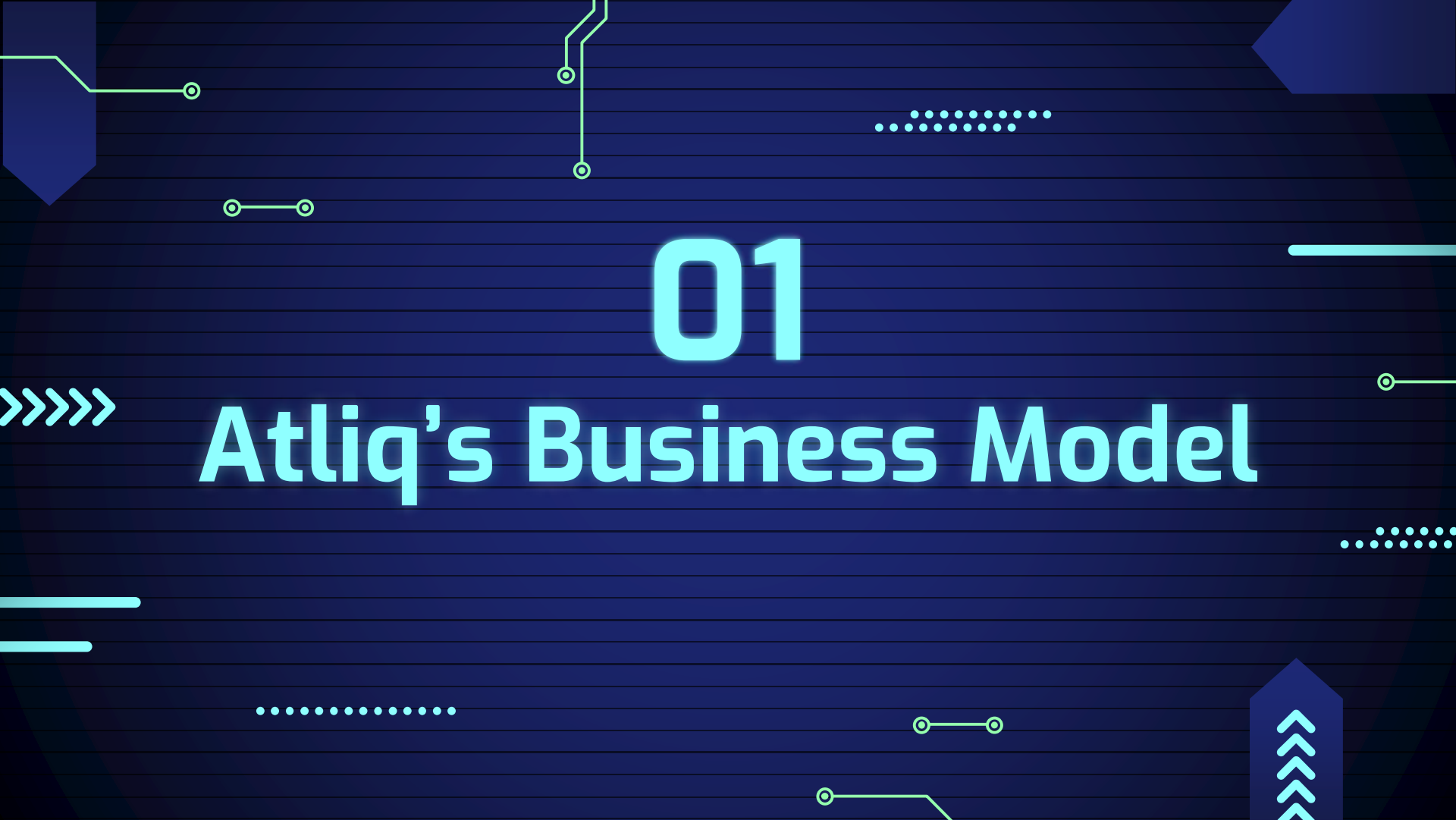
SQL Mastery



01

>>>>>

# Atliq's Business Model





- Atliq manufacturing plant produces hardware devices.
- These devices are sold through brick-and-mortar stores and e-commerce platforms.
- Sales channels include retailers, direct sales, and distributors.
- Large companies and individual consumers purchase Atliq hardware products.



02

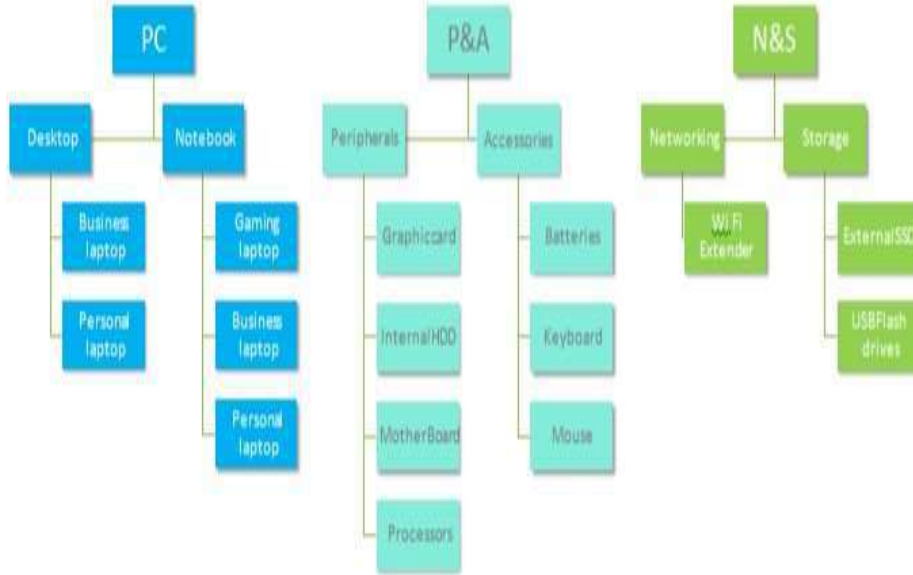
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# Atliq's Market and Product lines

.....

>>>>>

# Product line



# Market







The available data encompasses sales records spanning fiscal years 2020 and 2021, supplemented by various dimension tables such as customer details, product details, and more.

dim_product
product_code VARCHAR(45)
division VARCHAR(45)
segment VARCHAR(45)
category VARCHAR(45)
product VARCHAR(200)
variant VARCHAR(45)

fact_sales_monthly
date DATE
product_code VARCHAR(45)
customer_code INT
sold_quantity INT
fiscal_year YEAR

fact_manufacturing_cost
product_code VARCHAR(45)
cost_year YEAR
manufacturing_cost DECIMAL(15,4)

fact_pre_invoice_deductions
customer_code INT
fiscal_year YEAR
pre_invoice_discount_pct DECIMAL(5,4)

fact_gross_price
product_code VARCHAR(45)
fiscal_year YEAR
gross_price DECIMAL(15,4)

dim_customer
customer_code INT
customer VARCHAR(150)
platform VARCHAR(45)
channel VARCHAR(45)
market VARCHAR(45)
sub_zone VARCHAR(45)
region VARCHAR(45)





04

Problem

statement, query, results

## PROBLEM STATEMENT#1

- Croma india product wise sales report for fiscal year 2021
- The report should have following fields
- Month
- Product name and Variant
- Sold quantity
- Gross price per item
- Gross price Total

## OUTPUT

```
15 WHERE
16     customer_code=90002002 AND
17     get_fiscal_year(s.date)=2021
18 LIMIT 1000000;
19
```

date	product_code	product	variant	sold_quantity	gross_price	gross_price total
2020-09-01	A0118150101	AQ Dracula HDD – 3.5 Inc...	Standard	202	19.0573	3849.57
2020-09-01	A0118150102	AQ Dracula HDD – 3.5 Inc...	Plus	162	21.4565	3475.95
2020-09-01	A0118150103	AQ Dracula HDD – 3.5 Inc...	Premium	193	21.7795	4203.44
2020-09-01	A0118150104	AQ Dracula HDD – 3.5 Inc...	Premium Plus	146	22.9729	3354.04
2020-09-01	A0219150201	AQ WereWolf NAS Interna...	Standard	149	23.6987	3531.11
2020-09-01	A0219150202	AQ WereWolf NAS Interna...	Plus	107	24.7317	2646.24

## SQL Mastery#1

Excel Monthly Sales  
Report

Customer\_code=croma

Market=india

Fiscal\_year=2021

1	date	product_code	sold_quantity	product	variant	gross_price	total_gross_price
2	6/1/2021	A0118150101	205	AQ Dracula HDD	Standard	19.0573	3906.75
3	6/1/2021	A0118150102	78	AQ Dracula HDD	Plus	21.4565	1673.61
4	6/1/2021	A0118150103	48	AQ Dracula HDD	Premium	21.7795	1045.42
5	6/1/2021	A0118150104	126	AQ Dracula HDD	Premium Plus	22.5729	2894.59
6	6/1/2021	A0219150201	40	AQ WereWolf N	Standard	23.6987	947.95
7	6/1/2021	A0219150202	102	AQ WereWolf N	Plus	24.7312	2522.58
8	6/1/2021	A0220150203	31	AQ WereWolf N	Premium	23.6154	732.08
9	6/1/2021	A0320150301	91	AQ Zion Saga	Standard	23.7223	2158.73
10	6/1/2021	A0321150302	70	AQ Zion Saga	Plus	27.1027	1897.19
11	6/1/2021	A0321150303	145	AQ Zion Saga	Premium	28.0059	4060.86
12	6/1/2021	A0418150103	108	AQ Mforce Gen	Standard 3	19.5235	2108.54
13	6/1/2021	A0418150104	76	AQ Mforce Gen	Plus 1	19.9239	1514.22
14	6/1/2021	A0418150105	84	AQ Mforce Gen	Plus 2	20.0766	1686.43
15	6/1/2021	A0418150106	114	AQ Mforce Gen	Plus 3	19.9365	2272.76
16	6/1/2021	A0519150201	58	AQ Mforce Gen	Standard 1	22.3984	1299.11
17	6/1/2021	A0519150202	107	AQ Mforce Gen	Standard 2	24.9298	2667.49
18	6/1/2021	A0519150203	156	AQ Mforce Gen	Standard 3	26.5871	4147.59
19	6/1/2021	A0519150204	78	AQ Mforce Gen	Plus 1	26.1081	2036.43
20	6/1/2021	A0519150205	144	AQ Mforce Gen	Plus 2	29.7008	4276.92
21	6/1/2021	A0519150206	161	AQ Mforce Gen	Plus 3	31.2439	5030.27
22	6/1/2021	A0519150207	126	AQ Mforce Gen	Premium 1	32.4427	4087.78
23	6/1/2021	A0519150208	94	AQ Mforce Gen	Premium 2	30.5816	2874.67

## SQL Mastery#2

Monthly Sales Report

Customer\_code=croma

Market=india

Fiscal\_year=All

Result Grid	Filter Rows
date	monthly_sales
2017-09-01	122407.57
2017-10-01	162687.56
2017-12-01	245673.84
2018-01-01	127574.73
2018-02-01	144799.54
2018-04-01	130643.97

## SQL Mastery#3

Stored procedure:

monthly\_gross\_sales

Input:

Customer\_code

Result:

Monthly\_gross sales for  
all years for  
respective customer

Atliq Exclusive (japan)

date	total_gross_price
2020-09-01	2360682
2020-10-01	3076992
2020-11-01	3976595
2021-01-01	2259784
2021-02-01	2411261
2021-03-01	2395115

Atliq e Store (japan)

date	total_gross_price
2020-09-01	292553
2020-11-01	520459
2020-12-01	520383
2021-01-01	272314
2021-03-01	294075
2021-04-01	296698

## PROBLEM STATEMENT#2

- Top markets,products,customer, for given fiscal year
- Report for top markets
- Report for top customers
- Report for top products

## OUTPUT

Result Grid			Filter Rows:	Export
	market	net_sales_mln		
▶	India	210.67		
	USA	132.05		
	South Korea	64.01		
	Canada	45.89		
	United Kingdom	44.73		

customer	net_sales_mln
▶ Amazon	30.00
Atliq Exclusive	23.98
Flipkart	12.96
Electricalsociety	12.31
Propel	11.86

product	net_sales_mln
▶ AQ Dracula HDD – 3.5 Inc...	210.67
AQ Dracula HDD – 3.5 Inc...	132.05
AQ Dracula HDD – 3.5 Inc...	64.01

# SQL Mastery#1

Stored procedure:

**Top Market** by Net Sales

Input:

Fiscal\_year

Top\_n

2020

market	net_sales_mln
India	64.73
USA	46.35
South Korea	22.38
Philippines	17.45
Canada	15.87

2019

market	net_sales_mln
India	37.77
USA	16.16
South Korea	15.69
Philippines	6.95
Canada	5.85



## SQL Mastery#2

Stored procedure:

**Top Customer** by NetSales

Input:

Fiscal\_year

Top\_n

2020

	customer	net_sales_mln
▶	Amazon	12.68
	Atliq Exclusive	6.03
	Flipkart	5.61
	Ebay	4.70
	Atliq e Store	4.57

2019

	customer	net_sales_mln
	Amazon	5.67
	Atliq Exclusive	4.19
	Flipkart	2.38
	Electricalsocity	2.17
	Vijay Sales	2.12





2020

2019

## SQL Mastery#3

Stored procedure:

**Top Product** by netsales

Input:

Fiscal\_year

Top\_n

Result Grid		Filter Rows:	Export:	Wrap Cell Content
	product	net_sales_mln		
▶	AQ Dracula HDD – 3.5 Inc...	64.73		
	AQ Dracula HDD – 3.5 Inc...	46.35		
	AQ Dracula HDD – 3.5 Inc...	22.38		

product	net_sales_mln
▶ AQ Dracula HDD – 3.5 Inc...	37.77
AQ Dracula HDD – 3.5 Inc...	16.16
AQ Dracula HDD – 3.5 Inc...	15.69



## PROBLEM STATEMENT#3

- Forecast Accuracy for all customers for a given fiscal year
- The report should have the following fields
- Customer code,Name,Market
- Total sold quantity
- Total Forecast Quantity
- Net Error
- Absolute error
- Forecast Accuracy %

## OUTPUT

customer_code	customer_name	market	total_sold_qty	total_forecast_qty	net_error	net_error_pct	abs_error
90025209	Electricalsbea Stores	Columbia	13178	15428	2065	13.4	8051
90013120	Coolblue	Italy	109547	133532	23944	17.9	70378
70010048	Atliq e Store	Bangladesh	119439	142010	22547	15.9	75645
90023027	Costco	Canada	236189	279962	43760	15.6	149274
70027208	Atliq e Store	Brazil	33713	47321	13342	28.2	25398

# SQL Mastery#1

Stored procedure:

**Forecast Accuracy report  
for all customer**

Input:

Fiscal\_year

2020

customer_code	customer_name	market	total_sold_qty	total_forecast_qty	net_error	net_error_pct	abs_error
90020101	Euronics	Austria	1796	2727	469	17.2	1187
90020100	Nova	Austria	1942	3000	552	18.4	1312
90020099	Integration Stores	Austria	1843	2961	580	19.6	1304
90020097	Atlas Stores	Austria	1889	2778	484	17.4	1232
90025209	Electricalsbea Stores	Columbia	1811	3312	910	27.5	1512

2019

customer_code	customer_name	market	total_sold_qty	total_forecast_qty	net_error	net_error_pct	abs_error	abs_e
90008166	Sound	Australia	65007	80832	15822	19.6	39282	48.60
90017049	Premium Stores	Portugal	9622	12472	2755	22.1	6147	49.29
90002007	Girias	India	192001	241442	49441	20.5	119811	49.62
90002011	Atliq Exclusive	India	192674	237954	45280	19.0	119194	50.09
90017051	Forward Stores	Portugal	10127	13676	3466	25.3	6916	50.57