

## SQL RESUME PROJECT



## CONSUMER GOODS AD-HOC INSIGHTS





## **BUSINESS MODEL**

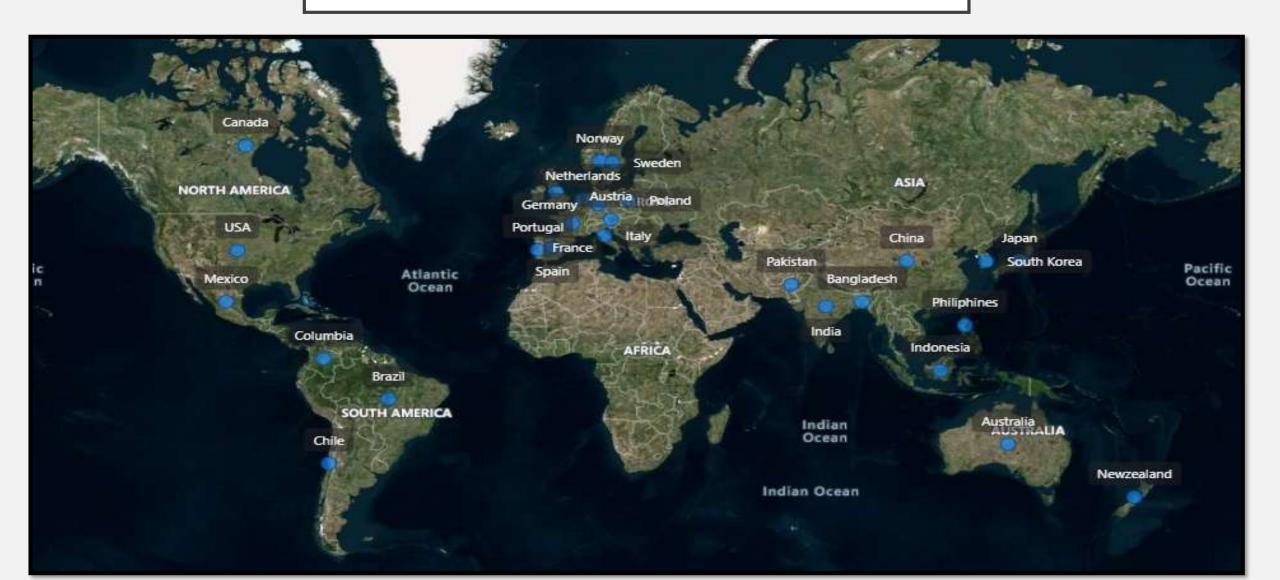
- AtliQ Hardware (imaginary company) is one of the leading computer hardware producers in India and has a significant presence in other countries as well.
- AtliQ Hardware's Fiscal Year:

(September 2019 – August 2020 ) – FY 2020

(September 2020 - August 2021) - FY 2021



## ATLIQ'S MARKET



## **DIVISION - SEGMENT - CATEGORY**

(Peripherals & Accessories)

(Personal Desktop & Notebook)

(Network & Storage)

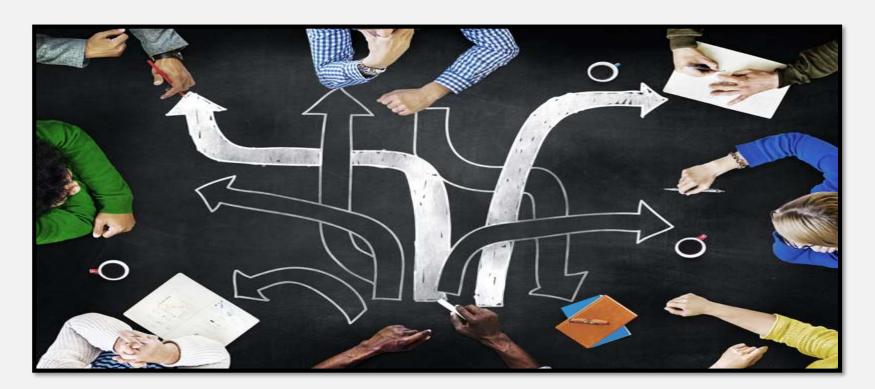
Segment	Category
Accessories	Batteries
Peripherals	Graphic Card
Peripherals	Internal HDD
Accessories	Keyboard
Peripherals	MotherBoard
Accessories	Mouse
Peripherals	Processors

Segment	Category	
Desktop	Business Laptop	
Notebook	Business Laptop	
Notebook	Gaming Laptop	
Desktop	Personal Desktop	
Notebook	Personal Laptop	

Segment	Category
Storage	External Solid State Drives
Storage	USB Flash Drives
Networking	Wi fi extender

## PROBLEM STATEMENT

Management has come to the realization that they lack **adequate insights** necessary for **making informed decisions** quickly and effectively **using data**. Consequently, they are keen on enhancing their data analytics capabilities by expanding their team with the addition of several junior data analysts.



## **APPROACH**

• They have assigned us 10 Ad-hoc Requests and tasked us with resolving them using SQL queries. After obtaining the SQL output, we are required to transform it into visualizations and deliver insightful presentations to the Top-Level Management.



### **#TASK I:**

PROVIDE THE LIST OF MARKETS IN WHICH CUSTOMER "ATLIQ EXCLUSIVE" OPERATES ITS BUSINESS IN THE APAC REGION.

## **INSIGHT:**

Australia
Bangladesh
India
Indonesia
Japan
Newzealand
Philiphines

South Korea

The AtliQ Exclusive store runs its business in eight key markets located in the APAC region.



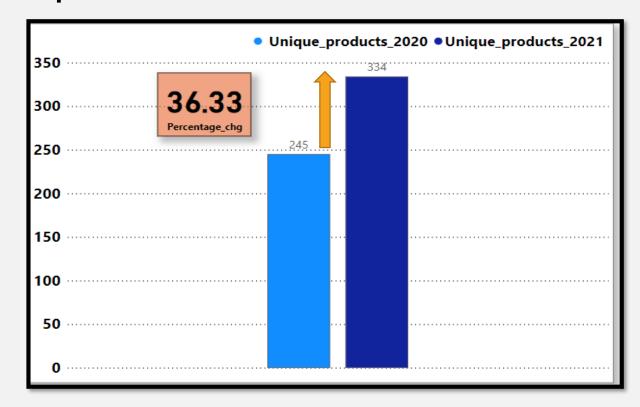
#### **#TASK 2:**

WHAT IS THE PERCENTAGE OF UNIQUE PRODUCT INCREASE IN 2021 VS. 2020? THE FINAL OUTPUT CONTAINS THESE FIELDS, UNIQUE\_PRODUCTS\_2020 UNIQUE\_PRODUCTS\_2021 PERCENTAGE\_CHG?

## **INSIGHT:**

In the fiscal year 2020, there were 245 products. In contrast, in the fiscal year 2021, the number of products increased to 334. This represents a product count increase of 36.33% compared to FY 2020.

Unique_products_2020	Unique_products_2021	Percentage_chg
245	334	36.33



#### **#TASK 3:**

PROVIDE A REPORT WITH ALL THE UNIQUE PRODUCT COUNTS FOR EACH SEGMENT AND SORT THEM IN DESCENDING ORDER OF PRODUCT COUNTS. THE FINAL OUTPUT CONTAINS 2 FIELDS, SEGMENT PRODUCT\_COUNT.

- INSIGHT: The Notebook, Accessories & Peripherals segment has a higher number of products sold.
  - There is a need to boost sales and production in the Desktop, Networking & Storage segments by offering discounts.

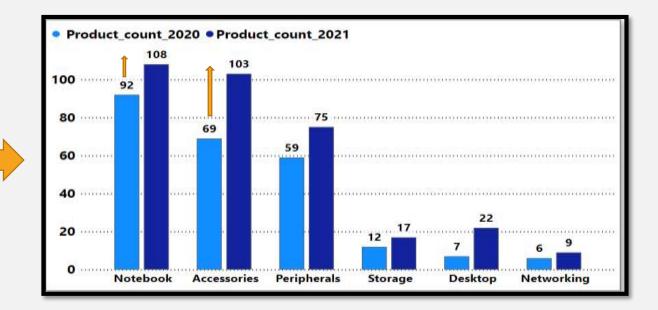
Segment	Product_count ▼	120	129	116	***************	
Notebook	129	100	()		84	Target!!
Accessories	116	80		****	7.1.1	······································
Peripherals	84	60		333	***	) + + + + + + + + + + + + + + + + + + +
Desktop	32	40	(1	1111	110	32 27
Storage	27	20		*11.1	11.0	9
Networking	9	0 200200	Notebook	Accessories	Peripherals Seg	Desktop Storage Networking gment

#### **#TASK 4:**

WHICH SEGMENT HAD THE MOST INCREASE IN UNIQUE PRODUCTS IN 2021 VS 2020? THE FINAL OUTPUT CONTAINS THESE FIELDS, SEGMENT PRODUCT\_COUNT\_2020 PRODUCT\_COUNT\_2021 DIFFERENCE

INSIGHT: - In 2021, the **Accessories** segment experienced the most notable growth in **unique products** compared to 2020, boasting an increase of **34 new products**..

Segment	Product_count_2020	Product_count_2021	Difference
Accessories	69	103	34
Desktop	7	22	15
Networking	6	9	3
Notebook	92	108	16
Peripherals	59	75	16
Storage	12	17	5



### **#TASK 5:**

GET THE PRODUCTS THAT HAVE THE HIGHEST AND LOWEST MANUFACTURING COSTS. THE FINAL OUTPUT SHOULD CONTAIN THESE FIELDS, PRODUCT CODE ,PRODUCT, MANUFACTURING COST.

## **INSIGHT:**

Product_code	Min_And_Max_Product	Segment	Cost_year	Manufacturing_cost ▼
A6121110208	AQ HOME Allin1 Gen 2	Desktop	2022	263.42
A2118150101	AQ Master wired x1 Ms	Accessories	2019	0.87

### HIGHEST MANUFACTURING COST



AQ HOME ALLIN I GEN 2

### **LOWEST MANUFACTURING COST**



AQ MASTER WIRED X I

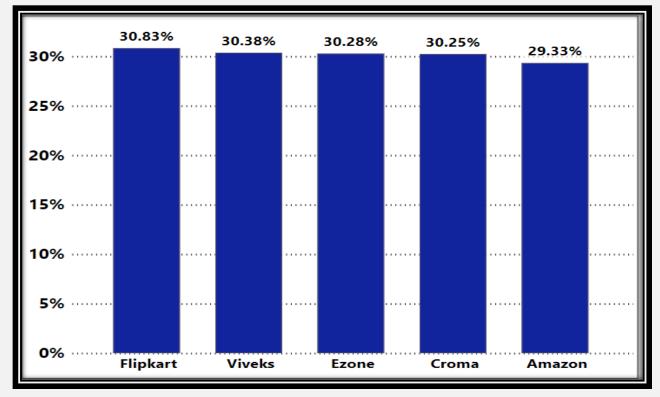
#### #TASK 6:

GENERATE A REPORT WHICH CONTAINS THE TOP 5 CUSTOMERS WHO RECEIVED AN AVERAGE HIGH PRE INVOICE DISCOUNT PCT FOR THE FISCAL YEAR 2021 AND IN THE INDIAN MARKET. THE FINAL OUTPUT CONTAINS THESE FIELDS, CUSTOMER CODE, CUSTOMER AVERAGE DISCOUNT PCT

## **INSIGHT:**

During the **fiscal year 2021**, the top 5 customers were provided with nearly identical preinvoice discount rates. Among these customers, **Flipkart** was granted the **highest discount percentage**, which stood at **30.83%**.

Customer_code	Customer	Average_discount_percentage	
90002009	Flipkart	30.83%	
90002006	Viveks	30.38%	
90002003	Ezone	30.28%	
90002002	Croma	30.25%	
90002016	Amazon	29.33%	

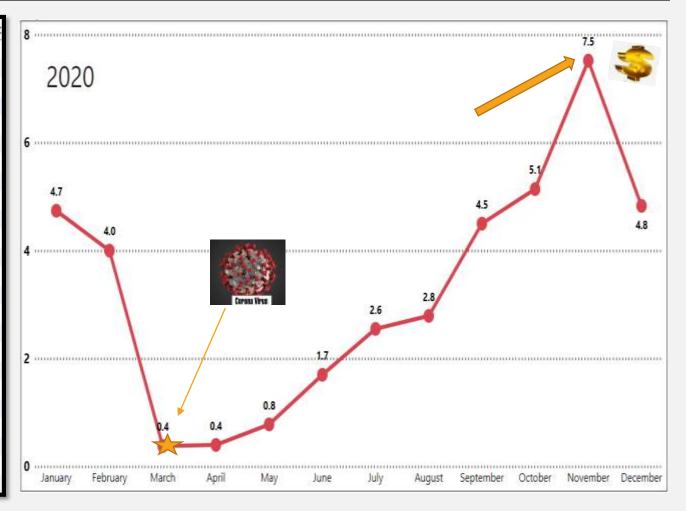


#### **#TASK 7:**

GET THE COMPLETE REPORT OF THE GROSS SALES AMOUNT FOR THE CUSTOMER "ATLIQ EXCLUSIVE" FOR EACH MONTH. THIS ANALYSIS HELPS TO GET AN IDEA OF LOW AND HIGH PERFORMING MONTHS AND TAKE STRATEGIC DECISIONS. THE FINAL REPORT CONTAINS THESE COLUMNS: MONTH YEAR GROSS SALES AMOUNT.

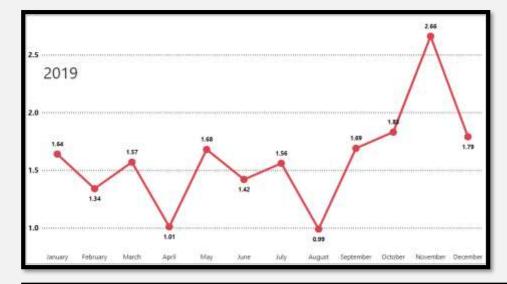
## **INSIGHT:**

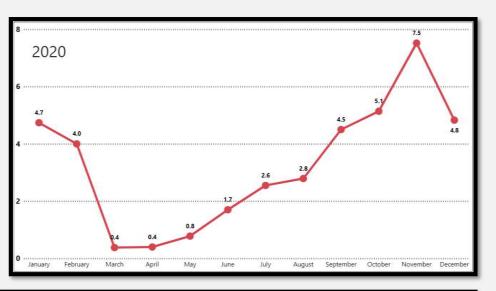
Months	Years	Month_number	Gross_sales_Amt
November	2019	11	2.66
December	2019	12	1.79
January	2020	1	4.74
February	2020	2	4.00
March	2020	3	0.38
April	2020	4	0.40
May	2020	5	0.78
June	2020	6	1.70
July	2020	7	2.55
August	2020	8	2.79
September	2020	9	4.50
October	2020	10	5.14
November	2020	11	7.52
December	2020	12	4.83
January	2021	1	12.40
February	2021	2	10.13
March	2021	3	12.14
April	2021	4	7.31
May	2021	5	12.15
June	2021	6	9.82
July	2021	7	12.09
August	2021	8	7.18
September	2021	9	12.35
October	2021	10	13.22

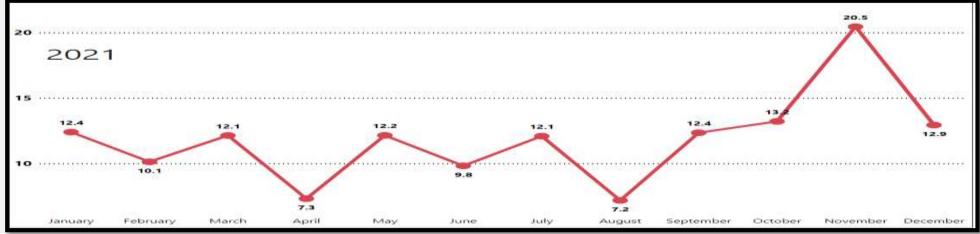


SALES WERE AT THEIR LOWEST IN MARCH 2020 BECAUSE OF COVID. HOWEVER, BY NOVEMBER 2020, THEY HAD BOUNCED BACK AND REACHED A RECORD AROUND 9 MILLION, THE HIGHEST EVER COMPARED TO THE PREVIOUS YEAR.

## **INSIGHT:**



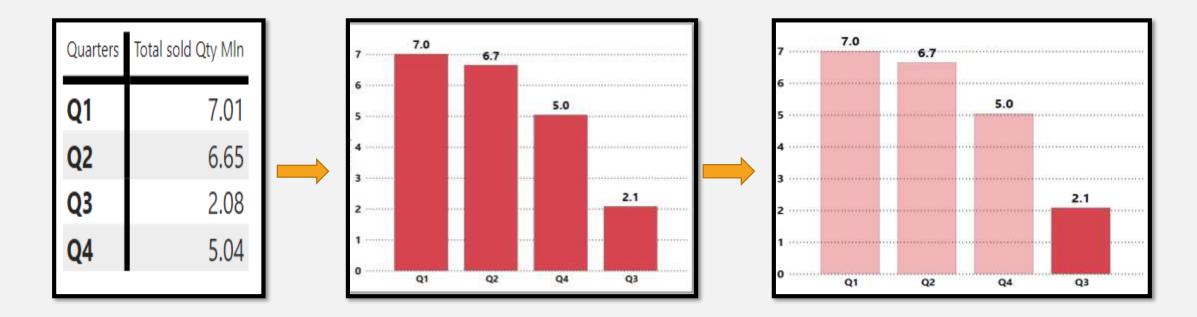




#### **#TASK 8:**

IN WHICH QUARTER OF 2020, GOT THE MAXIMUM TOTAL\_SOLD\_QUANTITY? THE FINAL OUTPUT CONTAINS THESE FIELDS SORTED BY THE TOTAL\_SOLD\_QUANTITY, QUARTER TOTAL\_SOLD\_QUANTITY

INSIGHT: AtliQ Hardwares sold the most in Quarter 1 of 2020 and the least in Quarter 3, which includes the months of March, April, and May. This was when COVID was at its peak.

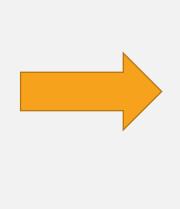


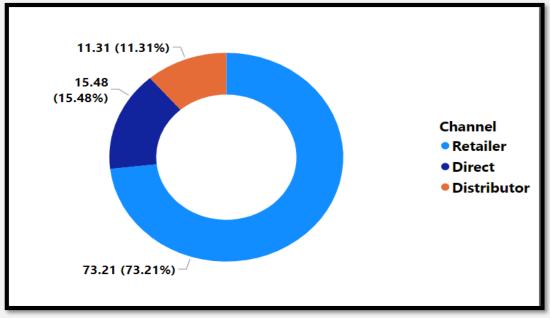
**#TASK 9:** 

WHICH CHANNEL HELPED TO BRING MORE GROSS SALES IN THE FISCAL YEAR 2021 AND THE PERCENTAGE OF CONTRIBUTION? THE FINAL OUTPUT CONTAINS THESE FIELDS, CHANNEL GROSS\_SALES\_MLN PERCENTAGE

INSIGHT: Retailers contribute the most to Gross Sales, making up 73.21% of the total. Distributors and direct sales account for the remaining 26%.

Channel	Gross_sales_mln	Pct_contribution ▼
Retailer	3,708.46	73.21
Direct	784.14	15.48
Distributor	572.86	11.31





#TASK IO:

GET THE TOP 3 PRODUCTS IN EACH DIVISION THAT HAVE A HIGH TOTAL\_SOLD\_QUANTITY IN THE FISCAL\_YEAR 2021? THE FINAL OUTPUT CONTAINS THESE FIELDS - DIVISION, PRODUCT\_CODE, PRODUCT TOTAL\_SOLD\_QUANTITY, RANK\_ORDER.

## **INSIGHT:**

Division	Product_code	Product	Rank_order	Sum of Total_sold_qty
N & S	A6720160103	AQ Pen Drive 2 IN 1	1	701373
N & S	A6818160202	AQ Pen Drive DRC	2	688003
N & S	A6819160203	AQ Pen Drive DRC	3	676245
P & A	A2319150302	AQ Gamers Ms	1	428498
P & A	A2520150501	AQ Maxima Ms	2	419865
P & A	A2520150504	AQ Maxima Ms	3	419471
PC	A4218110202	AQ Digit	1	17434
PC	A4218110208	AQ Digit	3	17275
PC	A4319110306	AQ Velocity	2	17280

- 1.OUR ANALYSIS OF THE NETWORK AND STORAGE DIVISION FOCUSED ON PENDRIVES, A KEY PRODUCT CATEGORY WITHIN THIS DIVISION.
- 2. IN THE PC DIVISION, OUR INVESTIGATION CENTERED ON LAPTOPS, A CORE OFFERING WITHIN THIS DIVISION.
- 3. WITHIN THE PERIPHERALS AND ACCESSORIES DIVISION, WE DELVED INTO THE PERFORMANCE AND TRENDS RELATED TO MICE, AN ESSENTIAL PRODUCT IN THIS DIVISION.

## **INSIGHT:**

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N & S	A6818160202	AQ Pen Drive DRC	2	688003
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(Pen Drive)

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(Laptops)

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P & A	A2520150501	AQ Maxima Ms	2	419865
P & A	A2520150504	AQ Maxima Ms	3	419471

(Mouse)

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