# AD HOC INSIGHTS TO MANAGEMENT IN CONSUMER DOMAIN

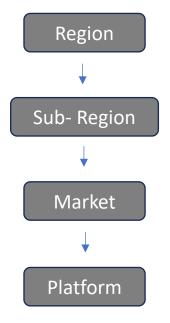
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### **INTRODUCTION**

- Atliq Hardwares (imaginary company) is one of the leading computer hardware producers in India and has expanded well into other countries too.
- The following presentation is a report generated to answer some ad hoc questions requested by the top management of Atliq Hardwares.
- The data report is generated using MySQL and the data visualization is done using Power BI.

# Customer Hierarchy and Product Hierarchy of Atliq Hardwares

## **Customer Hierarchy**



## **Product Hierarchy**



### **INTRODUCTION**

Table: dim\_customer

#### Columns:

 customer\_code
 int UN

 customer
 varchar(150)

 platform
 varchar(45)

 channel
 varchar(45)

 market
 varchar(45)

 sub\_zone
 varchar(45)

 region
 varchar(45)

Table: fact\_gross\_price

#### Columns:

product\_code varchar(45) fiscal\_year year

gross\_price decimal(15,4)
UN

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#### Table:

fact\_manufacturing\_cost

#### Columns:

product\_code varchar(45) cost\_year year manufacturing\_cost UN

Table: fact\_pre\_invoice\_deductions

#### Columns:

customer\_code int UN fiscal\_year year pre\_invoice\_discount\_pct decimal(5,4)

Table: fact\_sales\_monthly

#### Columns:

date date product\_code varchar(45) customer\_code sold\_quantity int UN fiscal\_year year

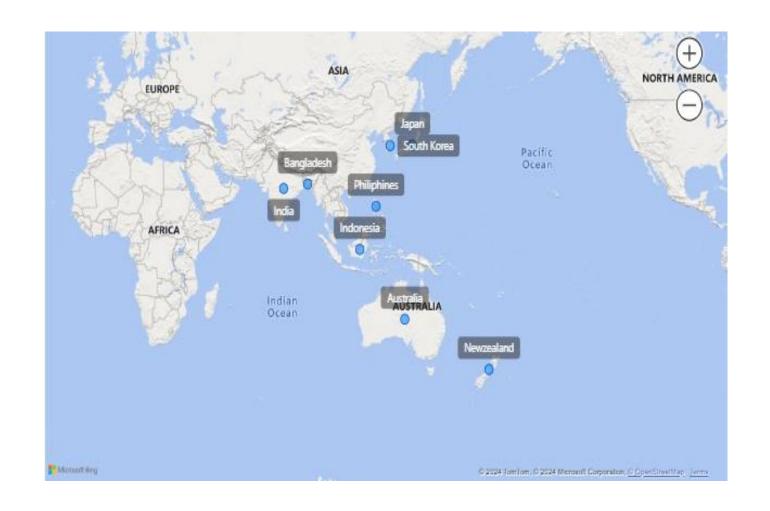
Table: dim\_product

#### Columns:

product\_code division varchar(45) varchar(45) segment varchar(45) varchar(45) product variant varchar(45)

## Provide the list of markets in which customer "Atliq Exclusive" operates its business in the APAC region.

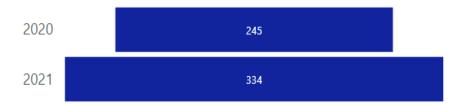
market	region	customer
India	APAC	Atliq Exclusive
Indonesia	APAC	Atliq Exclusive
Japan	APAC	Atliq Exclusive
Philiphines	APAC	Atliq Exclusive
South Korea	APAC	Atliq Exclusive
Australia	APAC	Atliq Exclusive
Newzealand	APAC	Atliq Exclusive
Bangladesh	APAC	Atliq Exclusive



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unique_pro_2020	unique_pro_2021	unique_prod_increase	perc_change
245	334	89	36.3265

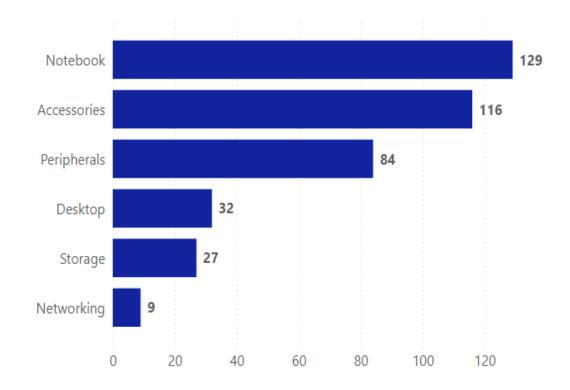
Unique Products in 2020 and 2021



Provide a report with all the unique product counts for each segment and sort them in descending order of product counts.

segment	no_of_products
Notebook	129
Accessories	116
Peripherals	84
Desktop	32
Storage	27
Networking	9

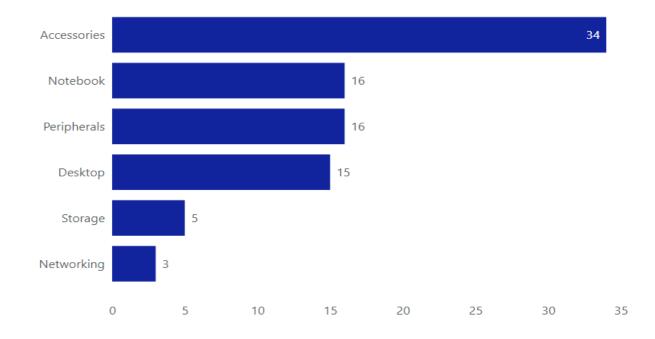
### Number of unique products by Segment



## Which segment had the most increase in unique products in 2021 vs 2020?

segment	unique_product_count_2020	unique_product_count_2021	difference
Accessories	69	103	34
Notebook	92	108	16
Peripherals	59	75	16
Desktop	7	22	15
Storage	12	17	5
Networking	6	9	3

Increase in unique products from 2020 to 2021 by Segment



# Get the products that have the highest and lowest manufacturing costs.

product_code	product	highest_and_lowest_manufacturing_costs
A6120110206	AQ HOME Allin1 Gen 2	240.5364
A2118150101	AQ Master wired x1 Ms	0.8920

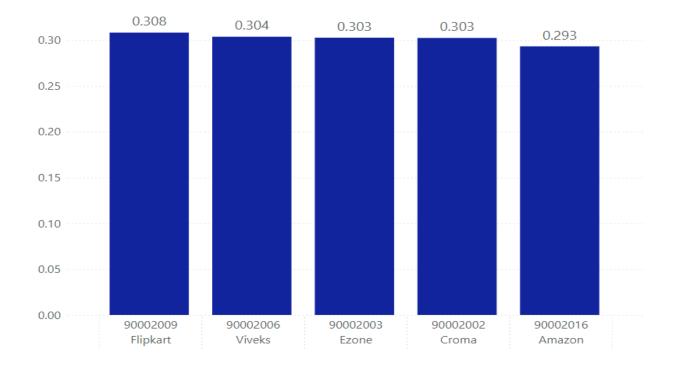
### Products with Highest and Lowest Manufacturing Costs

AQ HOME Allin1 Gen 2	A6120110206	240.54
Product	Product Code	Manufacturing Cost
AQ Master wired x1 Ms	A2118150101	0.89
Product	Product Code	Manufacturing Cost

Generate a report which contains the top 5 customers who received an average high Pre Invoice Discount Percentage for the fiscal year 2021 and in the Indian market.

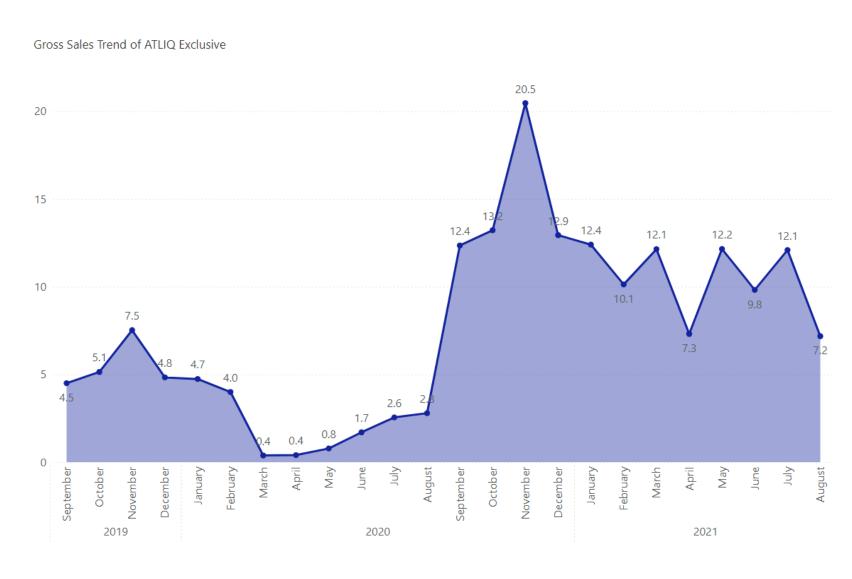
customer_code	customer	avg_pre_inv_disc
90002009	Flipkart	0.30830000
90002006	Viveks	0.30380000
90002003	Ezone	0.30280000
90002002	Croma	0.30250000
90002016	Amazon	0.29330000

Top 5 - Pre Invoice Discount in India in 2021



## Get the complete report of the Gross sales amount for the customer "Atliq Exclusive" for each month.

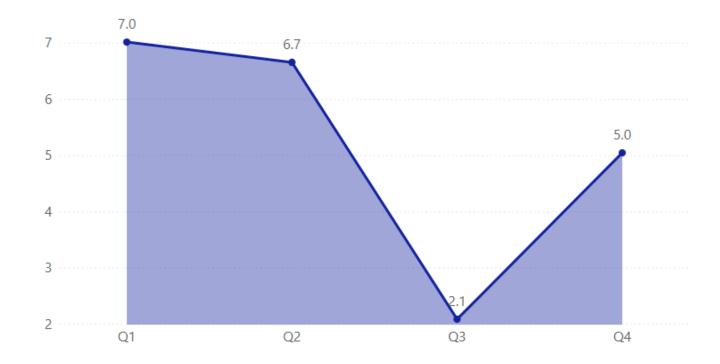
date	fiscal_year	gross_sales_amount_in_millions
2019-09-01	2020	4.50
2019-10-01	2020	5.14
2019-11-01	2020	7.52
2019-12-01	2020	4.83
2020-01-01	2020	4.74
2020-02-01	2020	4.00
2020-03-01	2020	0.38
2020-04-01	2020	0.40
2020-05-01	2020	0.78
2020-06-01	2020	1.70
2020-07-01	2020	2.55
2020-08-01	2020	2.79
2020-09-01	2021	12.35
2020-10-01	2021	13.22
2020-11-01	2021	20.46
2020-12-01	2021	12.94
2021-01-01	2021	12.40
2021-02-01	2021	10.13
2021-03-01	2021	12.14
2021-04-01	2021	7.31
2021-05-01	2021	12.15
2021-06-01	2021	9.82
2021-07-01	2021	12.09
2021-08-01	2021	7.18



# In which quarter of 2020, got the maximum Total Sold Quantity?

fiscal_quarter	total_sold_quantity_mil
Q1	7.01
Q2	6.65
Q4	5.04
Q3	2.08

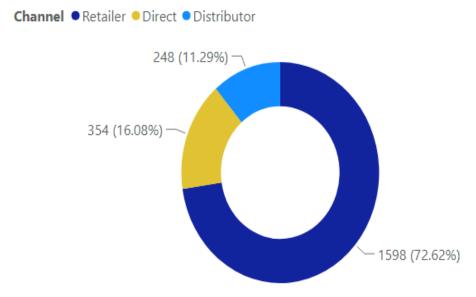
Total Sold Quanity by Quarter in 2020



## Which channel helped to bring more gross sales in the fiscal year 2021 and the percentage of contribution?

channel	gross_sales_mil	gross_sales_pct
Direct	353.96	16.084777
Distributor	248.47	11.291063
Retailer	1598.16	72.624160

Gross Sales share by Channel in 2021



## Get the Top 3 products in each division that have a high Total Sold Quantity in the Fiscal Year 2021.

division	product	product_code	total_sold_quantity	den_rnk
N&S	AQ Pen Drive 2 IN 1	A6720160103	701373	1
N&S	AQ Pen Drive DRC	A6818160202	688003	2
N & S	AQ Pen Drive DRC	A6819160203	676245	3
P&A	AQ Gamers Ms	A2319150302	428498	1
P&A	AQ Maxima Ms	A2520150501	419865	2
P&A	AQ Maxima Ms	A2520150504	419471	3
PC	AQ Digit	A4218110202	17434	1
PC	AQ Velocity	A4319110306	17280	2
PC	AQ Digit	A4218110208	17275	3

Top 3 Products by Total Sold quantity in each Divison

