

CONSUMER GOODS AD-HOC INSIGHTS



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INTRODUCTION

Atliq Hardwares (an imaginary company) is one of the leading computer hardware manufacturers in India, with a strong presence in other countries as well.

However, management noticed that they are not getting enough insights to make quick and informed data-driven decisions. They want to add several junior data analysts to their data analytics team. Tony Sharma, their data analytics director, desired to hire someone with both technical and soft skills. As a result, he decided to hold a SQL challenge to help him understand both skills.

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

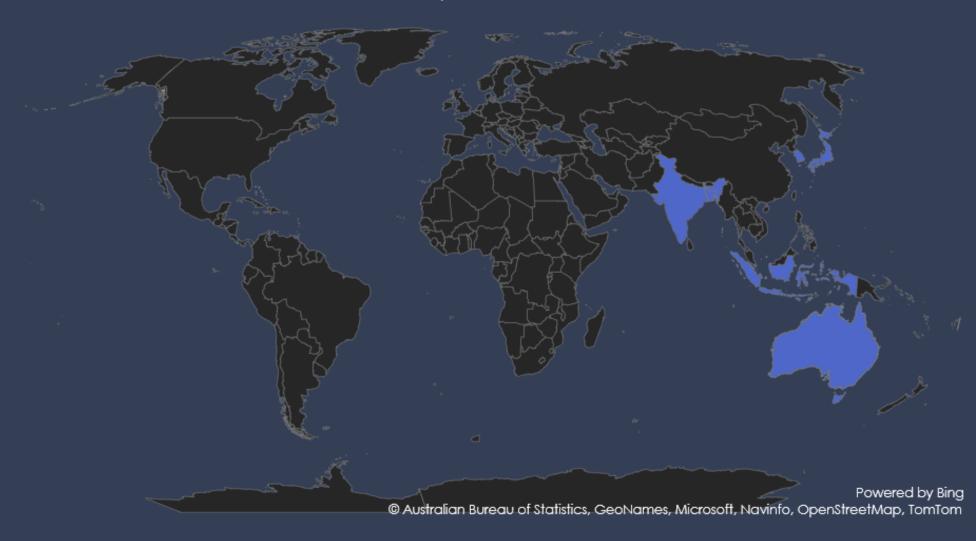
Output:

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



List of markets in APAC region

Atliq Exclusive



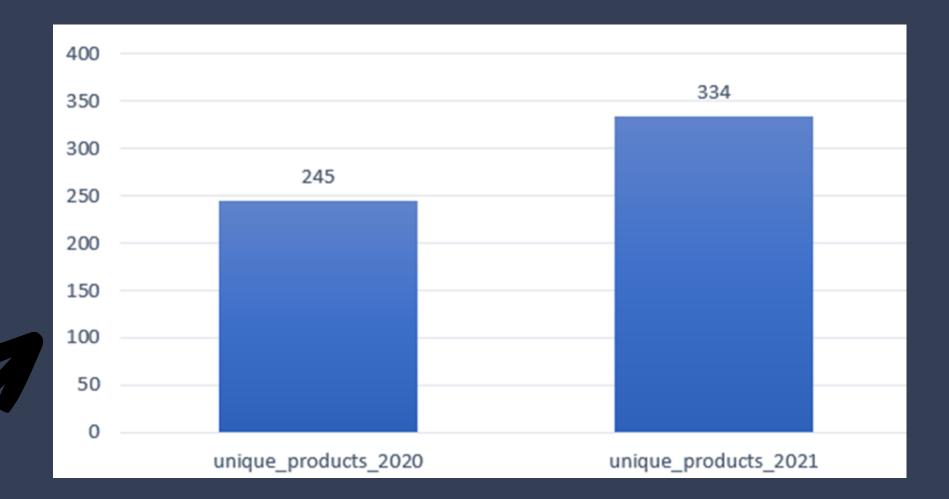
- In the APAC region, Atliq Exclusive operates its business in 8 different countries.
 - The critical reasons for Atliq's Exclusive global expansion are its good service networks, branding and reliability.

- The markets are:
 - India
 - Indonesia
 - Japan
 - Philippines
 - South Korea
 - Australia
 - New Zealand
 - Bangladesh

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.

Output:

unique_products_2020	unique_products_2021	percentage_chg
245	334	36.3265



In the financial year 2020, the number of unique products was 245 whereas, in the year 2021, it went up to 334

The percentage change in the unique products of 2020 and 2021 is 36.3265 %

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

Output:

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

WISUAL



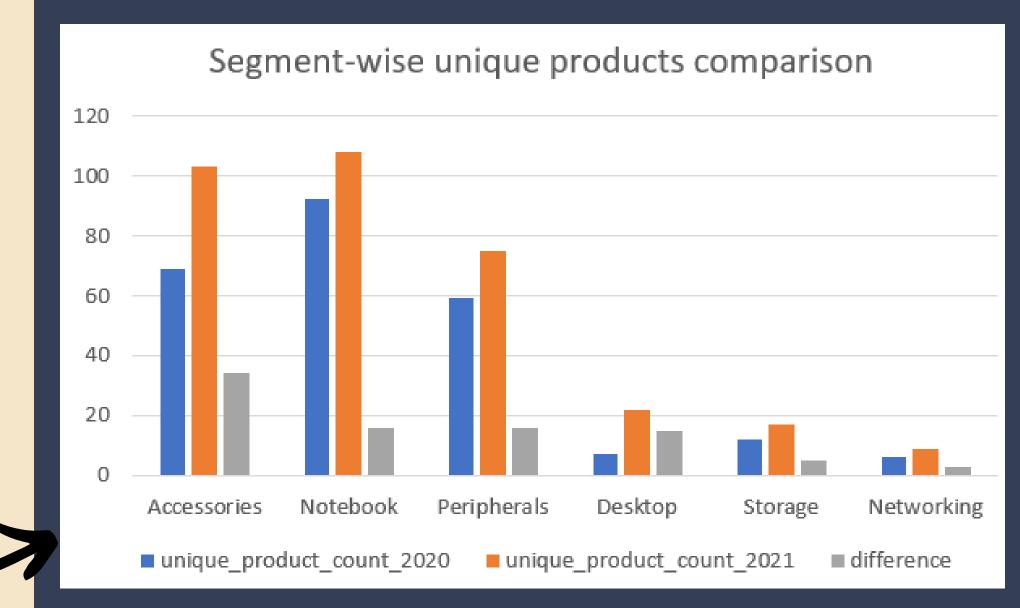
- If we look at the top 3 segments with the highest unique product counts then it is
 - Notebook 129
 - Accessories 116
 - Peripherals 84

- The reason behind the highest unique product count in the notebook & accessories segment can be:
 - Implementation of the latest technology
 - Feasibility for upgradation

Follow-up: 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.

Output:

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



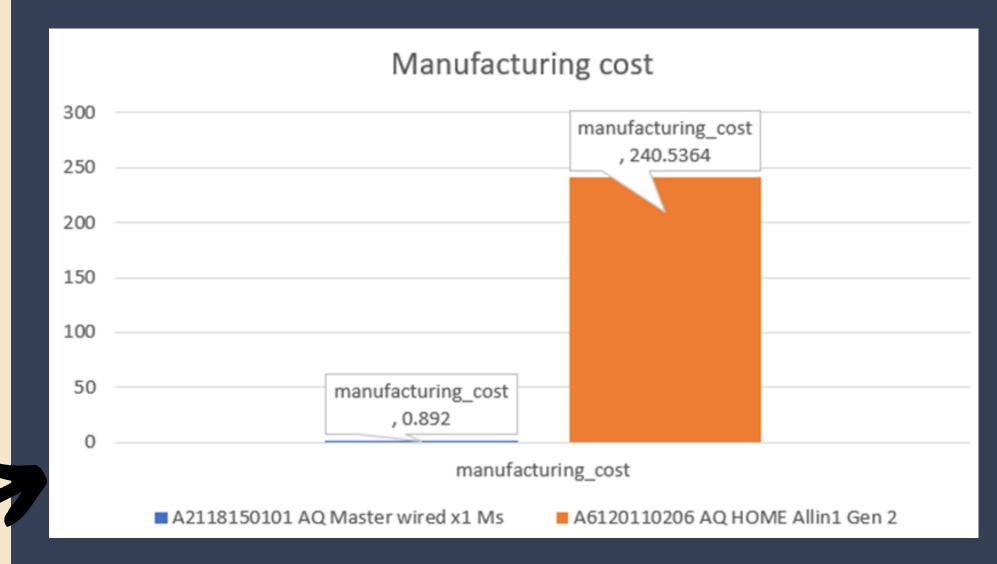
The segment with the highest rise in unique products in 2020 v/s 2021 is Accessories.

The difference between the unique products in the accessories segment of the year 2020 and 2021 is 34.

Get the products that have the highest and lowest manufacturing costs. The final output should contain these fields, product_code product manufacturing_cost

Output:

product_code	product	manufacturing_cost
A2118150101	AQ Master wired x1 Ms	0.8920
A6120110206	AQ HOME Allin 1 Gen 2	240.5364



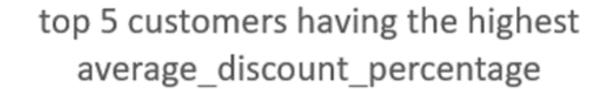
The product AQ Master wired x1 Ms has the lowest manufacturing cost, just Rs. 0.892.

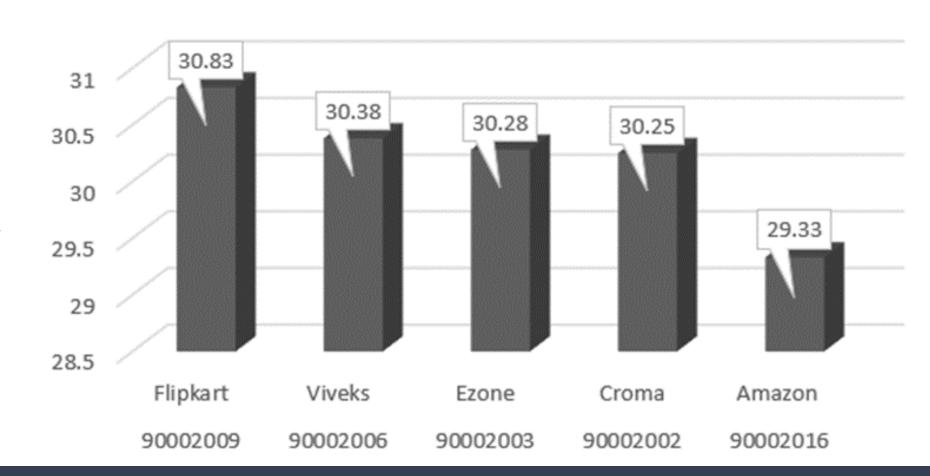
- The product AQ HOME Allin 1 Gen 2 has the highest manufacturing cost, which is Rs. 240.5364
- The key factors contributing to such high manufacturing costs can be:
 - High raw material cost
 - High man power cost

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_percentage

Output:

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





- For the fiscal year 2021, the top 5 customers having the average high pre-invoice discount percentage in the Indian market are:
 - Flipkart
 - Viveks
 - Ezone
 - Croma
 - Amazon

The reason behind this can be better service from these customers and great business potential in their specific area.

Month Year

Get the complete report of the Gross sales amount for the customer "Atliq Exclusive" for each month. This analysis helps to understand low and high-performing months and take strategic decisions. The final report contains these columns: Month Year Gross sales Amount

Gross_sales_amount

Output:

9	2019	4496259.94
10	2019	5135902.52
11	2019	7522892.84
12	2019	4830404.88
1	2020	4740600.31
2	2020	3996228.01
3	2020	378770.94
4	2020	395035.34
5	2020	783813.24
6	2020	1695216.71
7	2020	2551159.42
8	2020	2786648.34
9	2020	12353510.30
10	2020	13218636.80
11	2020	20464999.66
12	2020	12944660.00
1	2021	12399393.60
2	2021	10129736.22
3	2021	12144061.40
4	2021	7312000.26
5	2021	12150225.67
6	2021	9824521.71
7	2021	12092347.03
8	2021	7178707.82



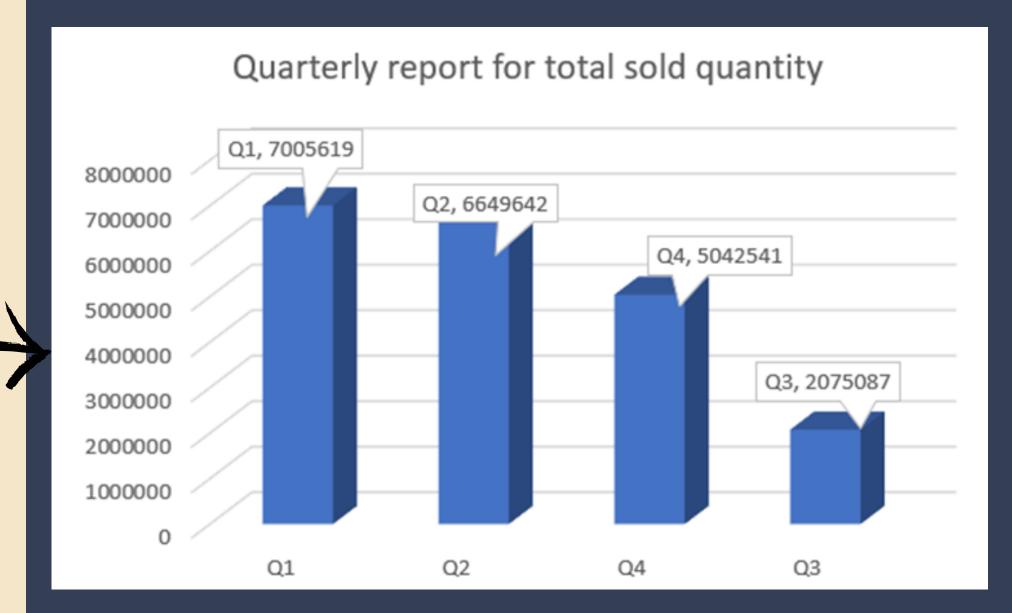
- For the financial year 2019, the low-performing months for Atliq Exclusive are:
 - September
 - December (saw a drop in gross sales amount)
- For the financial year 2020, the low-performing months for Atliq Exclusive are:
 - February (slight drop)
 - March (massive drop due to Covid-19)
 - April (slight increase but sales affected by Covid-19)

- For the financial year 2021, the low-performing months for Atliq Exclusive are:
 - February (slight drop)
 - April (higher drop)
 - June (slight drop)
 - August (higher drop)
- Low-performing months can happen due to demand-supply issues.

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

Output:

quarter	total_sold_quantity
Q1	7005619
Q2	6649642
Q4	5042541
Q3	2075087



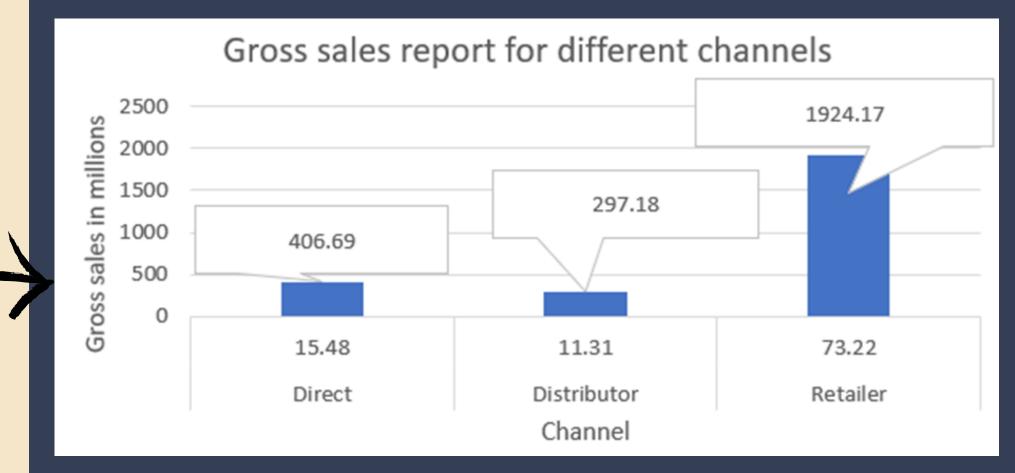
- Quarter 1 of the financial year 2020, had the maximum total sold quantity.
- The huge sales in quarter 1 can be because of the festive season in different markets globally and maintaining a great supply chain management to meet the demand of the customers.

Quarter 1 according to Atliq Hardwares includes September, October & November.

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

Output:

channel	gross_sales_mln	percentage
Retailer	1924.17	73.22
Direct	406.69	15.48
Distributor	297.18	11.31



The retailer channel contributes to the highest gross sales (in millions) with a contribution of 73.22%

- A few reasons why retailer channel is dominating in the gross sales are because:
 - vast product availability
 - resource management is perfect

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

Output:

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

VISUAL



INSIGHTS

The most sold quantity for the top 3 products is from N & S division.





The key insights from this presentation are:

- There are 8 markets in which Atliq Exclusive operates in the APAC region.
- The percentage change in the unique products of the financial year 2020 and 2021 is 36.3265 %
- If we look at the top 3 segments with the highest unique product counts then it is Notebook 129, Accessories 116 and Peripherals 84
- The segment with the highest rise in unique products in 2020 v/s 2021 is Accessories.
- The product AQ Master wired x1 Ms has the lowest manufacturing cost, just Rs. 0.892 and AQ HOME Allin 1 Gen 2 has the highest manufacturing cost, which is Rs. 240.5364
- For the fiscal year 2021, the top 5 customers having the average high preinvoice discount percentage in the Indian market are Flipkart, Viveks, Ezone, Croma and Amazon
- For the financial year 2019, the low-performing months for Atliq Exclusive are September & December, for 2020 it is February, March and April and lastly for 2021, it is February, April, June and August.
- Quarter 1 of the financial year 2020, had the maximum total sold quantity.
- The retailer channel contributes to the highest gross sales (in millions) with a contribution of 73.22%
- The most sold quantity for the top 3 products is from N & S division.



THAIK YOU

