# **AtliQ Hardware**

# **Consumer Goods Ad\_Hoc Insights**

**Overview**

AtliQ Hardware is one of the leading computer hardware producers that deals in sales of Computers, it's peripherals & accessories such as PCs, printers, mouse, HDDs etc in India and across the globe via Retail stores such as Croma, BestBuy or e-commerce platforms such as Amazon, Flipkart or through their Direct or through Distributors such as Neptune.

**Problem Statement**

The Management needs sufficient insights to make quick and smart data-informed decisions. They want to expand their data analytics team by adding several junior data analysts. AtliQ’s data analytics director, Tony Sharma, wanted to hire someone who is good at both tech and soft skills. Hence, decided to conduct a SQL challenge through which he will be able to analyze candidates who are good at both the skills.

**Ad - Hoc Requests**

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

1. 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

1. 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

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

product\_code

product

manufacturing\_cost

1. 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

1. 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

1. 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

1. 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

1. 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

**Tools Used**

* MySQL - In addition to basic concepts, I also utilized advanced techniques such as Common Table Expressions (CTEs), complex joins, subqueries, window functions, User-defined functions and various other sophisticated methods.
* Power BI - Visualisation representation of data to understand insights more precisely.
* Canva - For presentation.

**Key Insights**

* AtliQ Exclusive operates its business in 8 major markets in the APAC region, among which India has the most Customers.
* A 36.33% increase in unique products can significantly enhance a company's competitive edge. It likely means the company has been innovating and diversifying its offerings, which can attract more customers and meet a wider range of needs.
* Notebook, Accessories and Peripherals make up over 80% of the Unique Products whereas Desktop, Storage and Networking have fewer products with less than 20% of total Products.
* The Accessories segment saw the largest increase in unique products followed by Notebook, Peripherals and Desktop. Storage and Networking experienced smaller increases compared to other segments.
* The AQ HOME Allin1 Gen 2 (Personal Desktop) has the Highest Manufacturing Cost of $240.54. The AQ Master Wired x1 (Mouse) has the lowest manufacturing cost of $0.89.
* Among Top 5 Indian Customers, the Highest and Lowest Average Pre-Invoice Discount Percentage was given to Flipkart (30.83%) and Amazon (29.33%) respectively for FY 2021.
* AtliQ Exclusive, Lowest Gross sales (0.77M) were recorded in the month of March 2020 possibly due to the initial impact of the first wave of COVID, however, company rebounded soon and achieved its highest ever gross sales (32.25M) for these 2 years in the month of November 2020.
* For FY 2020, Quarter1 stands out by recording the highest units sold (7M), whereas Quarter3 faded away by recording the lowest units sold (2.1M).
* For FY 2021, the Retailer channel was a major contributor to the company's gross sales, making up 73.22% of the total. In contrast, the Distributor channel made the smallest contribution at 11.31%.
* The Top 3 best-selling products for each Division with highest sold quantity for FY 2021...

N & S - Different Variants of Pen Drive

P & A - Variants of Mouse

PC - Variants of Laptop.

**Recommendations**

**Digital Marketing:** Invest in content marketing, social media, and online advertising to increase brand visibility.

**Competitive Pricing:** Ensure pricing is competitive within the market while maintaining profitability.

**Channel Partner Management:** Build strong relationships with channel partners and provide them with the necessary support and incentives.

**Incentive Programs:** Develop incentive programs to motivate the sales team to achieve and exceed targets.

**Customer Feedback:** Implement a system to collect and analyze customer feedback for continuous product improvement.

**Exceptional Service:** Ensure excellent customer service throughout (before and after sales) the entire customer journey.

**Loyalty Programs:** Implement loyalty programs to retain existing customers and encourage repeat purchases.