AtliQ Hardware

Consumer Goods Ad-Hoc Insights

AtliQ Hardware

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Introduction

- **Atliq Hardwares** is a top computer hardware producer in India, with a global presence.
- Management identified a **lack of quick, data-informed insights** for smart decision-making.
- To address this, the company aims to grow its **data analytics** team by hiring junior analysts.
- Tony Sharma, the Data Analytics Director, seeks candidates with **strong technical (SQL) and soft skills.**
- A SQL challenge was designed to evaluate candidates' **technical proficiency and communication skills** through real business requests.

Objectives of the Project

- Solve 10 **ad-hoc** business requests for Atliq Hardwares using **SQL**.
- Provide actionable **insights** for top management decision-making.
- Demonstrate **technical and analytical** skills.
- Deliver a creative and concise **presentation** with strong communication.

AtliQ's Product Lines

Categories

Segments

Divisions

Database Schema :

Tools Used :

- **MySQL**
- **PowerBI**

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AtliQ Market Reach

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

Query Output:

market
India
Indonesia
Japan
Philiphines
South Korea
Australia
Newzealand

Insights :

AtliQ Hardware has its presence in 8 countries in the Asia - Pacific region.

What is the percentage of unique product increase in 2021 vs. 2020?

Query Output:

	unique_products_2020	unique_products_2021	percentage_chg
▶	245	334	36.3265

Insights

The unique product lines increased by **33.36%** from 2020 to 2021, indicating significant growth and diversification.

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

Query Output:

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

Insights

This analysis shows a focus on **notebooks**, **accessories** and **peripherals** with **83 %** of the total product lines and limited presence in **desktops**,**storage** and **networking**.

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

Query Output:

segment	product_count_2020	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

Insights

- Accessories saw an increase of **49.28%** and highest increase 34 in product count, rising from 69 in 2020 to 103 in 2021.
- Desktop product count experienced a significant surge of **214.29%**, growing from 7 in 2020 to 22 in 2021.
- Notebook products had a modest increase of **17.39%**, going from 92 in 2020 to 108 in 2021.

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

Query Output:

	product_code	Product	manufacturing_cost
▶	A6120110206	AQ HOME Allin1 Gen 2(Plus 3)	240.5364
	A2118150101	AQ Master wired x1 Ms(Standard 1)	0.8920

Insights

Highest Manufacturing Cost:
AQ HOME Allin1 Gen 2 (Plus 3) – **$240.54**

Lowest Manufacturing Cost:
AQ Master wired x1 Ms (Standard 1) – **$0.89**

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.

Query Output:

customer_code	customer	average_discount_percentage
90002009	Flipkart	30.8300
90002006	Viveks	30.3800
90002003	Ezone	30.2800
90002002	Croma	30.2500
90002016	Amazon	29.3300

Insights

- The data indicates that Flipkart is the customer receiving the highest discount in the Indian market **30.83 %**, which might suggest a strong negotiation power or volume of purchases.
- The close percentages among the top four customers (ranging from **30.3% to 30.8%**) show a competitive discounting environment in the Indian market.

Get the complete report of the Gross sales amount for the customer “Atliq Exclusive” for each month .

Query Output:

month	Year	fiscal_year	gross_sales
September	2019	2020	4.496 M
October	2019	2020	5.136 M
November	2019	2020	7.523 M
December	2019	2020	4.830 M
January	2020	2020	4.741 M
February	2020	2020	3.996 M
March	2020	2020	0.379 M
April	2020	2020	0.395 M
May	2020	2020	0.784 M
June	2020	2020	1.695 M
July	2020	2020	2.551 M
August	2020	2020	2.787 M
September	2020	2021	12.354 M
October	2020	2021	13.219 M
November	2020	2021	20.465 M
December	2020	2021	12.945 M
January	2021	2021	12.399 M
February	2021	2021	10.130 M
March	2021	2021	12.144 M
April	2021	2021	7.312 M
May	2021	2021	12.150 M
June	2021	2021	9.825 M
July	2021	2021	12.092 M
August	2021	2021	7.179 M

Insights

- Revenue increased by **299.87%** from 2020 to 2021
- Gross sales in 2021 saw a significant increase from 2020, with November rising from 7.523 M to 20.465 M **(172.91%).**
- Sales in March 2021 surged to 12.144 M from just 0.379 M in March 2020, a **3,105.80%** increase.
- The dip in March ,April,May 2020 is due to the Global Pandemic **COVID-19.**

In which quarter of 2020, got the maximum total_sold_quantity?

Query Output:

	Quarter	Total_Quantity
▶	Q1	7005619
	Q2	6649642
	Q3	2075087
	Q4	5042541

Insights

- **Q1** leads with the highest sales **7.006M** total quantity sold.
- **Q3** experiences a substantial drop in sales by approximately **68.8%** from Q2.
- **Q4** sees a notable rebound, increasing sales by around **143.4%** from Q3.
- Overall, the year 2020 shows resilience despite the Q3 dip, with Q1 and Q2 contributing significantly to a strong annual performance.

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

Query Output:

channel	gross_sales_mln	percentage
Direct	257.53	15.47
Retailer	1219.08	73.23
Distributor	188.03	11.30

Insights

- **Retailer Channel** leads with the highest sales, contributing **73.23%** of the total, indicating it is the primary driver of revenue.
- **Direct Channel** accounts for **15.47%** of sales, showing a significant, though smaller, role compared to retailers.
- **Distributor Channel** contributes **11.30%** to sales, suggesting it plays a more limited role in overall revenue generation.

Get the Top 3 products in each division that have a high total_sold_quantity in the fiscal_year 2021?

Query Output:

	division	product_code	Product	total_sold_quantity	rnk
▶	N & S	A6720160103	AQ Pen Drive 2 IN 1(Premium)	701373	1
	N & S	A6818160202	AQ Pen Drive DRC(Plus)	688003	2
	N & S	A6819160203	AQ Pen Drive DRC(Premium)	676245	3
	P & A	A2319150302	AQ Gamers Ms(Standard 2)	428498	1
	P & A	A2520150501	AQ Maxima Ms(Standard 1)	419865	2
	P & A	A2520150504	AQ Maxima Ms(Plus 2)	419471	3
	PC	A4218110202	AQ Digit(Standard Blue)	17434	1
	PC	A4319110306	AQ Velocity(Plus Red)	17280	2
	PC	A4218110208	AQ Digit(Premium Misty Green)	17275	3

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Insights

- AQ Pen Drive 2 IN 1(**Variant :Premium**) is the top performer overall, with the highest total sold quantity of **701,373** units, reflecting strong demand in the "N & S" division.
- AQ Gamers Ms(**Variant:Standard 2**) leads in the "P & A" division with **428,498** units sold, suggesting its popularity and effectiveness in that market segment.
- **PC division** products have significantly lower sales volumes compared to other divisions.

Thank You