

#### Consumer Goods

# Ad-Hoc insights

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# Presentation Overview

- PROBLEM STATEMENT
- GOALS
- AD-HOC QUERY & INSIGHTS
- CONCLUSION

### Problem Statement

Atliq Hardwares, a leading computer hardware producers in India with a growing international presence, has realized the need for better insights to make quicker, data-driven decisions. As part of their strategy to strengthen their data analytics team, the company plans to hire several junior data analysts. Tony Sharma, the Director of Data Analytics, aims to find candidates who excel not only in technical skills but also in communication and interpersonal abilities. To assess both of these qualities, he has decided to conduct a SQL challenge to evaluate the candidates' technical proficiency as well as their ability to approach and solve problems effectively.

## Task

- Reviewed ad-hoc-requests to identify business insights.
- Executed SQL queries using MySQL to address the requests.
- Prepared a presentation to deliver insights to management.

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

	customer	market	region
•	Atliq Exclusive	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



Request 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\_change

#### Output-

	unique_product_2020	unique_product_2021	percentage_chg
•	245	334	36.33

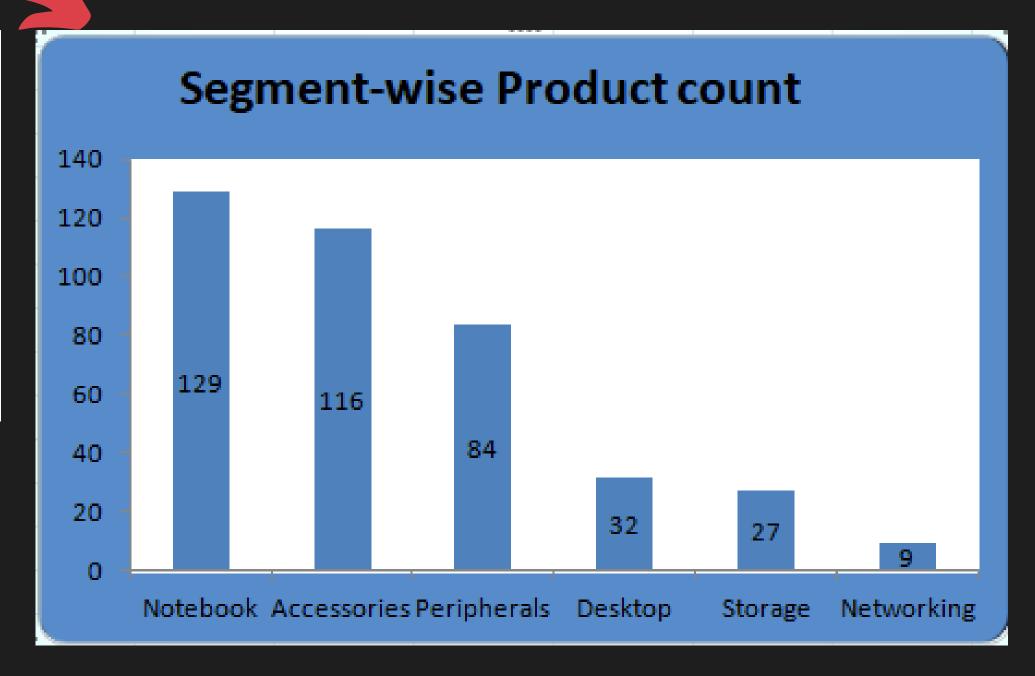
• Unique product increased by 36.33% in 2021.

Request 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

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

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	•	



• The notebook segment leads with 129 unique products, while networking and storage have fewer products, indicating growth opportunities in these areas.

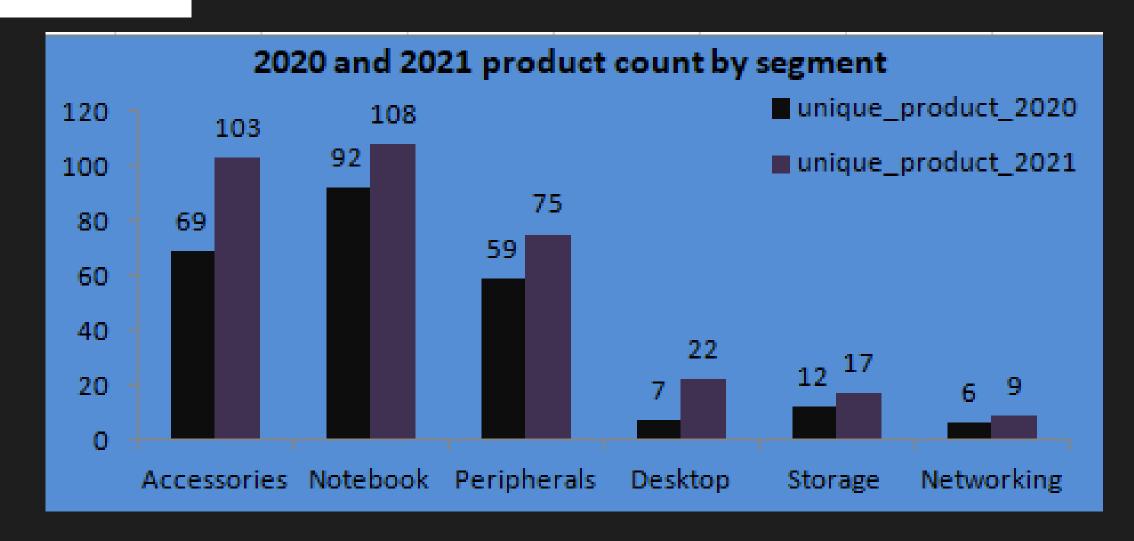
Request 4- Follow-up: Which segment had the most increase in unique products in 2021 vs 2020? The final output contains these fields,

- segment
- product\_count\_2020
- product\_count\_2021
- difference

	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
	-			

	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

• Almost every segment has shown improvement from the previous year, which is a positive indicator, such as accessories and notebooks, with unique product count differences of 34 and 16, respectively. However, networking and storage, with differences of 3 and 5, still need some growth.



Request 5- Get the products that have the highest and lowest manufacturing costs. The final output should contain these fields,

- product\_code
- product
- manufacturing\_cost

	product_code	product	manufacturing_cost
*	A6120110206	AQ HOME Allin1 Gen 2	240.54
	A2118150101	AQ Master wired x1 Ms	0.89

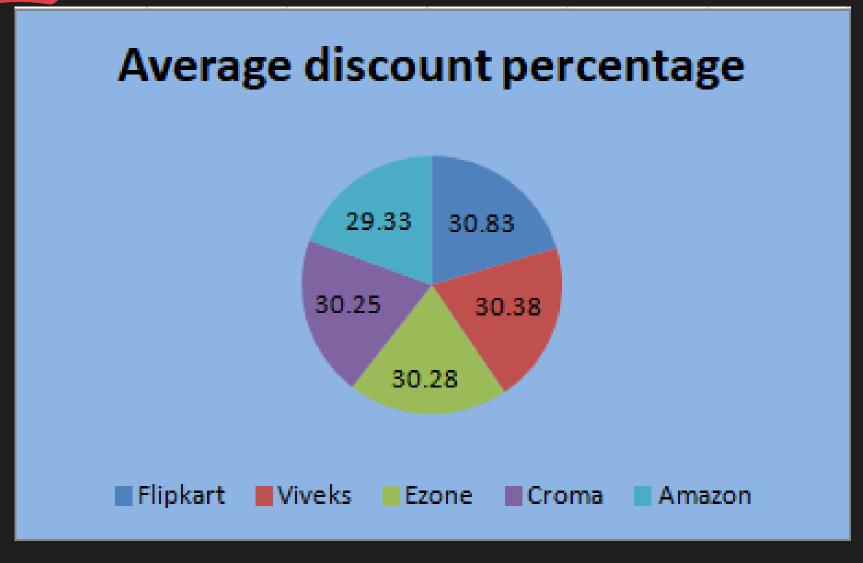
Request 6- Generate a report which contains the top 5 customers who received an average high pre\_invoice\_discount\_pct for the fiscal year 2021 and in the Indian market. The final output contains these fields,

- customer\_code
- customer
- average\_discount\_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
	-		

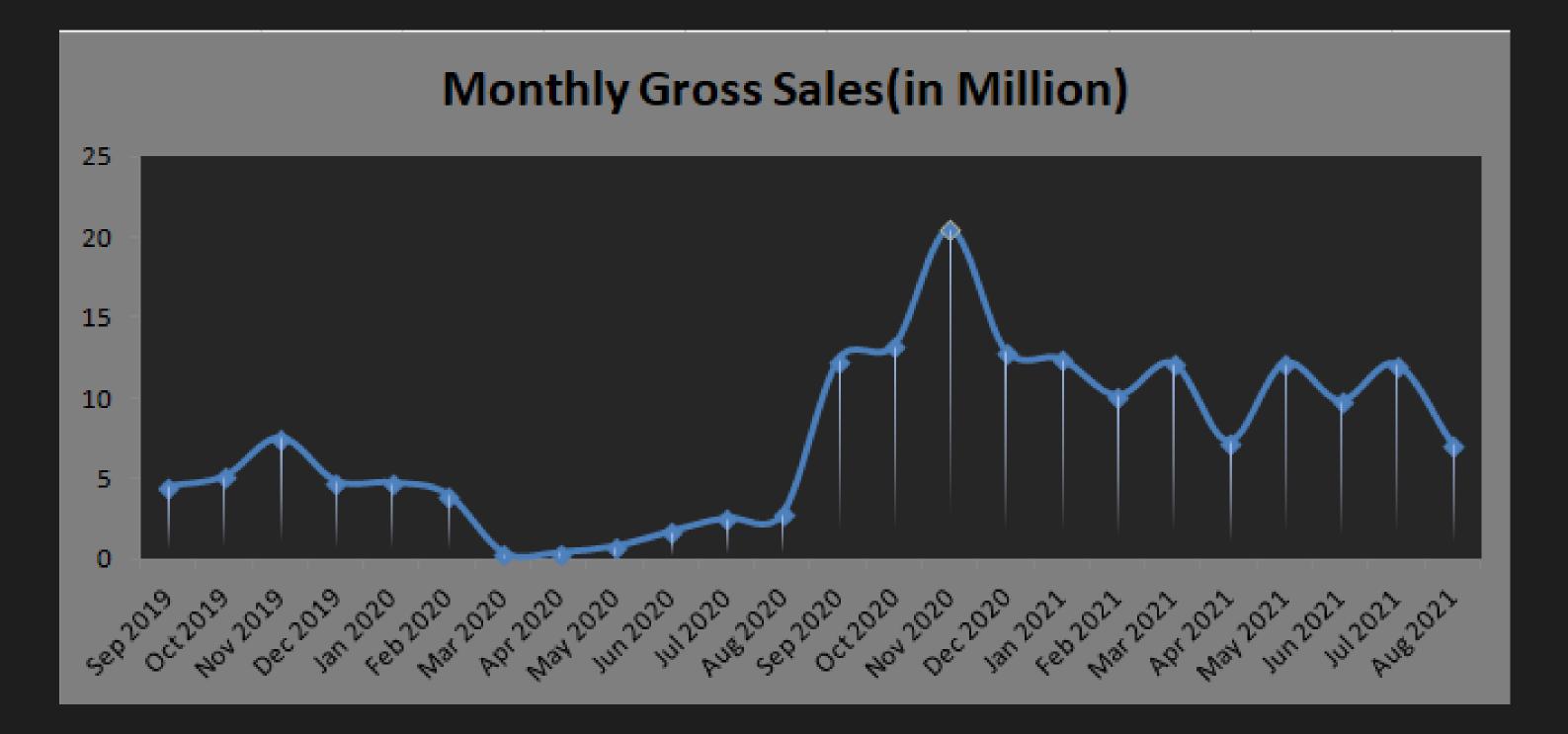
 Very small variation in discount percentages, indicating a uniform pricing strategy.



Request 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

	month	year	gross_sales_amount_inmillion
<b>•</b>	September	2019	4.50
	October	2019	5.14
	November	2019	7.52
	December	2019	4.83
	January	2020	4.74
	February	2020	4.00
	March	2020	0.38
	April	2020	0.40
	May	2020	0.78
	June	2020	1.70
	July	2020	2.55
	August	2020	2.79
	September	2020	12.35
	October	2020	13.22
	November	2020	20.46
	December	2020	12.94
	January	2021	12.40
	February	2021	10.13
	March	2021	12.14
	April	2021	7.31
	May	2021	12.15
	June	2021	9.82
	July	2021	12.09
	•	2021	7.18
	August	2021	7.10



- Gross Sales peaked in October 2020 (13.22M), November 2020 (20.46M), and January 2021 (12.4M).
- The lowest Gross sales were in March 2020 (0.38M), indicating a slowdown.
- There were strong sales in late 2020 and mid-2021.

Request 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

<ul> <li>Q1 7005619</li> <li>Q2 6649642</li> <li>Q3 2075087</li> </ul>		quarter	total_sold_quantity
_	<b>&gt;</b>	Q1	7005619
Q3 2075087		Q2	6649642
		Q3	2075087
Q4 5042541		Q4	5042541

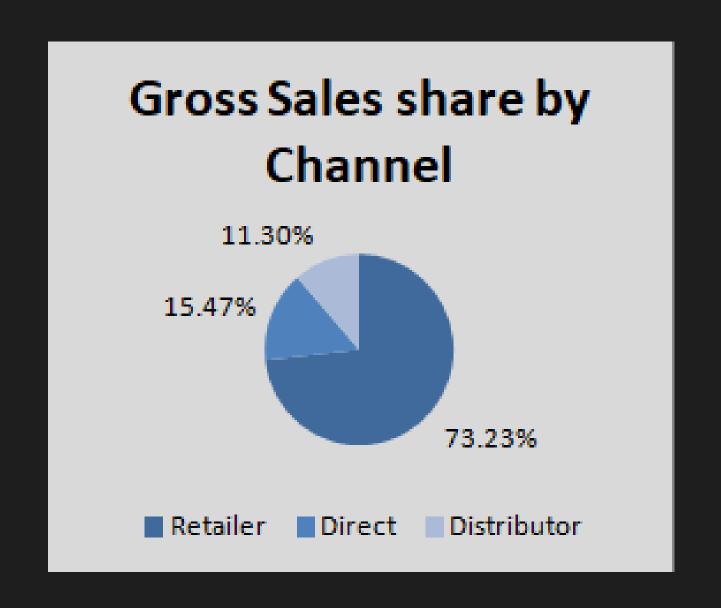
- Quarter 3 (March, April, May) had the lowest quantity sold, with 2M units.
- Quarter 1 (September, October, November) had the highest quantity sold, with 7M units.

Request 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

#### Output-

	channel	gross_sales_million	percentage_share
•	Retailer	1219.08	73.23
	Direct	257.53	15.47
	Distributor	188.03	11.30



• The retailer channel had the highest percentage share of gross sales at 73.23%, while the distribution channel had the lowest percentage share at 11.30% in 2021.

Request 10 -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

	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
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- N & S show the highest demand, mainly in storage devices.
- Accessories perform strongly in P & A.
- PC sales are significantly lower, suggesting a niche market or weak demand.