

# Atliq Hardware

## AD-HOC insights

Atliq Hardwares (imaginary company) is one of the leading computer hardware producers in India and well expanded in other countries too.

However, the management noticed that they do not get enough insights to make quick and smart data-informed decisions. There are 10 ad hoc requests for which the business needs insights.

Objective- To provide business insights to the top management.

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

	market
▶	India
	Indonesia
	Japan
	Philippines
	South Korea
	Australia
	Newzealand
	Bangladesh

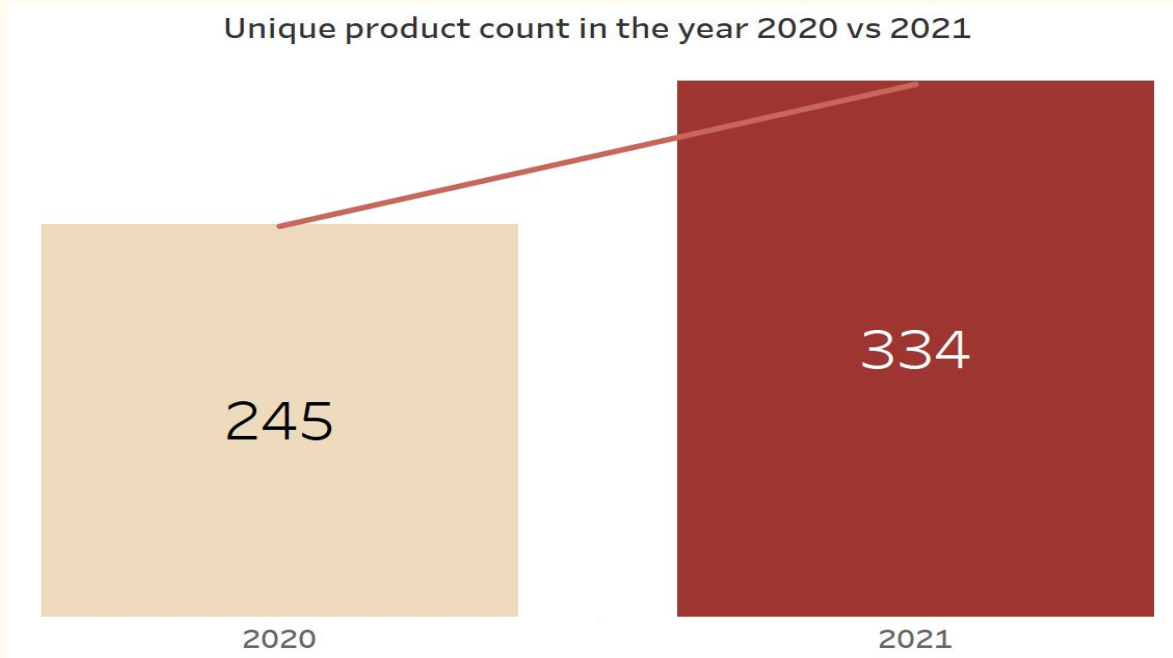
Countries in APAC region where company operates



**Insights-The company operates in 6 asian countries which are India, Indonesia, Japan, Philippines, South Korea,Bangladesh,two countries in oceania continent which are Australia and New Zealand.**

Request-2 What is the percentage of unique product increase in 2021 vs. 2020?

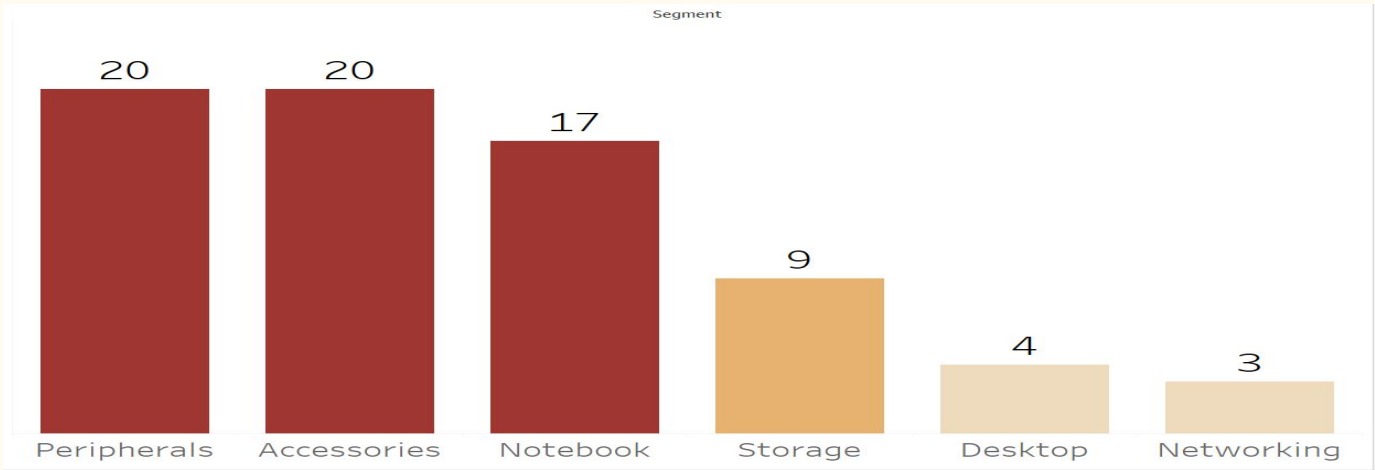
	unique_products_2020	unique_products_2021	percentage_chg
▶	245	334	36.32653



Insights-The total number of unique products produced by the company increased by nearly 36 percent to 334 in the year 2021 from 245 in the year 2020.

**Request 3: Provide a report with all the unique product counts for each segment and sort them in descending order of product counts.**

	segment	product_count
▶	Accessories	20
	Peripherals	20
	Notebook	17
	Storage	9
	Desktop	4
	Networking	3



**Insights- The company predominantly sells products in three categories which are Accessories, Peripherals and Notebook.**

**Request-4: Follow-up: Which segment had the most increase in unique products in 2021 vs 2020?**

	segment	product_count_2020	product_count_2021	difference
▶	Notebook	92	108	16
	Accessories	69	103	34
	Peripherals	59	75	16
	Storage	12	17	5
	Desktop	7	22	15
	Networking	6	9	3

**Insights- In the year 2021,the company focussed the most on the Accessories segment. There was a significant percentage change in the number of products in the Desktop category.**

**Request 5: Get the products that have the highest and lowest manufacturing costs.**

Products which has the highest manufacturing cost

product_code	product	manufacturing_cost
A0118150104	AQ Dracula HDD – 3.5 Inch SATA 6 G...	240.5364
A0219150201	AQ WereWolf NAS Internal Hard Driv...	240.5364
A0219150202	AQ WereWolf NAS Internal Hard Driv...	240.5364
A0220150203	AQ WereWolf NAS Internal Hard Driv...	240.5364
A0320150301	AQ Zion Saga	240.5364
A0321150302	AQ Zion Saga	240.5364
A0321150303	AQ Zion Saga	240.5364
A0418150101	AQ Mforce Gen X	240.5364
A0418150102	AQ Mforce Gen X	240.5364
A0418150103	AQ Mforce Gen X	240.5364

**Request 5: Get the products that have the highest and lowest manufacturing costs.**

Products which have low manufacturing costs

product_code	product	manufacturing_cost
A6319160203	AQ Neuer SSD	0.8920
A6419160301	AQ Clx1	0.8920
A6419160302	AQ Clx1	0.8920
A6419160303	AQ Clx1	0.8920
A6519160401	AQ Clx2	0.8920
A6520160402	AQ Clx2	0.8920
A6520160403	AQ Clx2	0.8920
A6620160501	AQ Clx3	0.8920
A6720160103	AQ Pen Drive 2 IN 1	0.8920
A6818160201	AQ Pen Drive DRC	0.8920
A6818160202	AQ Pen Drive DRC	0.8920
A6819160203	AQ Pen Drive DRC	0.8920
A7118160101	AQ Wi Power Dx1	0.8920
A7119160102	AQ Wi Power Dx1	0.8920
A7119160103	AQ Wi Power Dx1	0.8920
A7219160201	AQ Wi Power Dx2	0.8920

**Insights- The highest manufacturing cost was 240.5364(347 products) and the lowest is 0.8920(347 products)**

**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.**

	customer_code	customer	average_discount_percentage
►	90002009	Flipkart	29.55
	90002003	Ezone	28.20
	90002004	Vijay Sales	28.12
	90002011	Atliq Exclusive	27.25
	90002006	Viveks	27.18

**Insights-Top 5 customers received on average more than 27% discount with flipkart receiving the highest discount at 29.55%.**

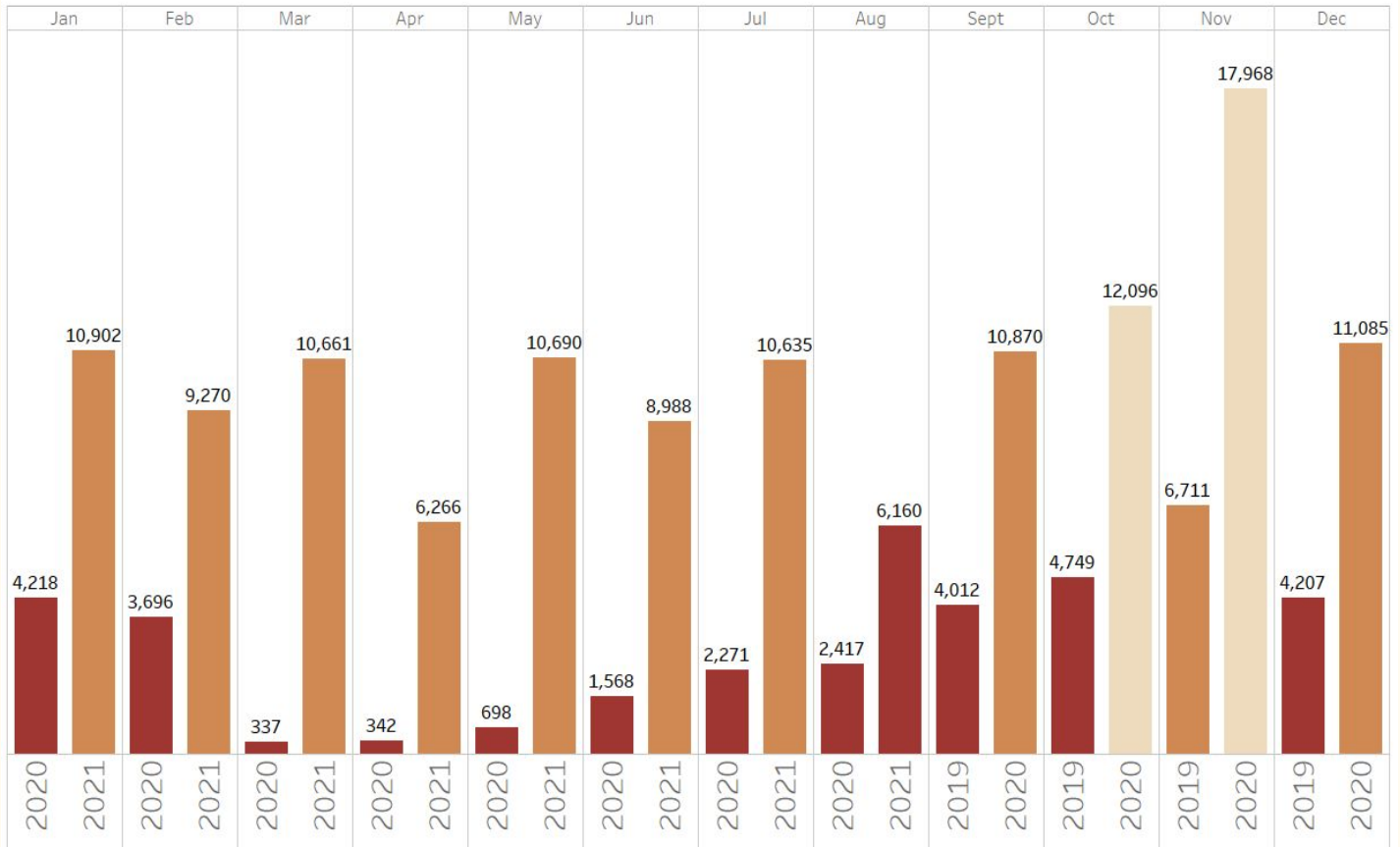


**Request-7: Get the complete report of the Gross sales amount for the customer “Atliq Exclusive” for each month. This analysis helps to get an idea of low and high-performing months and take strategic decisions.**

	Month	Year	Gross sales amount(In thousands)
	1	2020	4218.000500
	1	2021	10901.569040
	2	2020	3695.895230
	2	2021	9270.415880
	3	2020	336.744550
	3	2021	10661.281920
	4	2020	342.123090
	4	2021	6266.149600
	5	2020	698.112730
	5	2021	10689.797610
	6	2020	1567.687010
	6	2021	8987.986580
	7	2020	2271.093540
	7	2021	10635.176050
	8	2020	2416.590860
	8	2021	6160.076430
	9	2019	4012.487690
	9	2020	10869.658010
	10	2019	4749.395020
	10	2020	12095.691690
	11	2019	6711.392970
	11	2020	17968.218860
	12	2019	4207.418850
	12	2020	11085.195180

**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.**

Sales by month

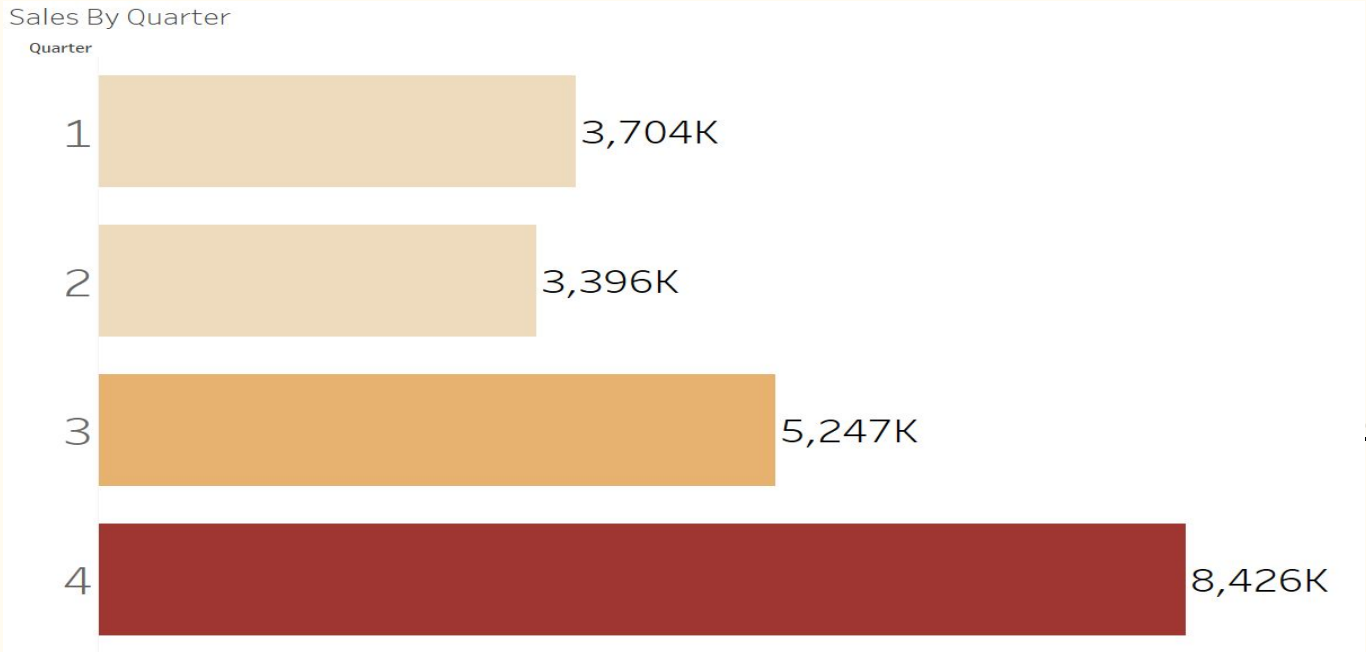


**Insights- There was a significant increase in sales every year from 2019 to 2021. The last three months of the year October, November and December had the highest sales for the company.**

Request-8: In which quarter of 2020, got the maximum total\_sold\_quantity?

Quarter	total_sold_quantity
1	3704398
2	3395899
3	5246770
4	8425822

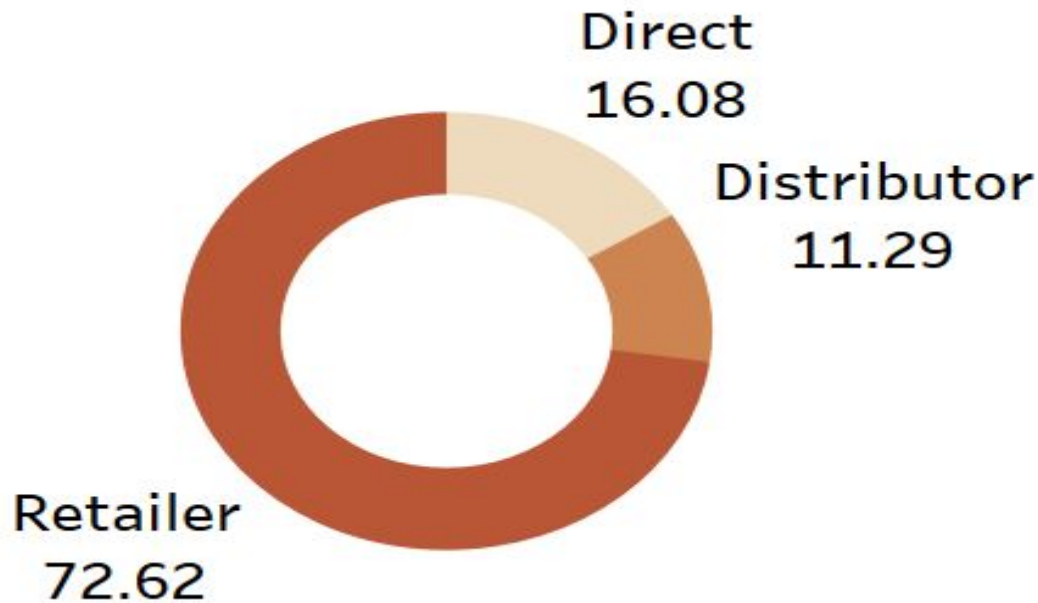
Sales By Quarter



**4**

**Request-9: Which channel helped to bring more gross sales in the fiscal year 2021 and the percentage of contribution?**

	channel	gross_sales_mln	percentage
▶	Direct	353963852.27	16.08
	Distributor	248465233.77	11.29
	Retailer	1598155959.40	72.62



**Insights- Approximately three-fourth of the total sales amount was earned through the Retailers only.**

**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 product total\_sold\_quantity rank\_order**

	division	product_code	product	total_quantity	rank_order
▶	N & S	A7219160201	AQ Wi Power Dx2	275328	1
	N & S	A7220160203	AQ Wi Power Dx2	277299	2
	N & S	A7321160301	AQ Wi Power Dx3	281363	3
	P & A	A3920150304	AQ LION x3	33523	1
	P & A	A3718150102	AQ LION x1	34022	2
	P & A	A3718150105	AQ LION x1	34080	3
	PC	A6018110106	AQ Home Allin1	2281	1
	PC	A6119110202	AQ HOME Allin1 Gen 2	2285	2
	PC	A6119110204	AQ HOME Allin1 Gen 2	2286	3

**Insights- AQ Wi Power Dx2 is the most popular product from the N & S division, AQ LION x3 is the most popular product coming from P & A and AQ Home Allin1 is the highest selling product coming from PC division.**