

Codebasics Challenge 04 (SQL)

Consumer Goods

Insights By

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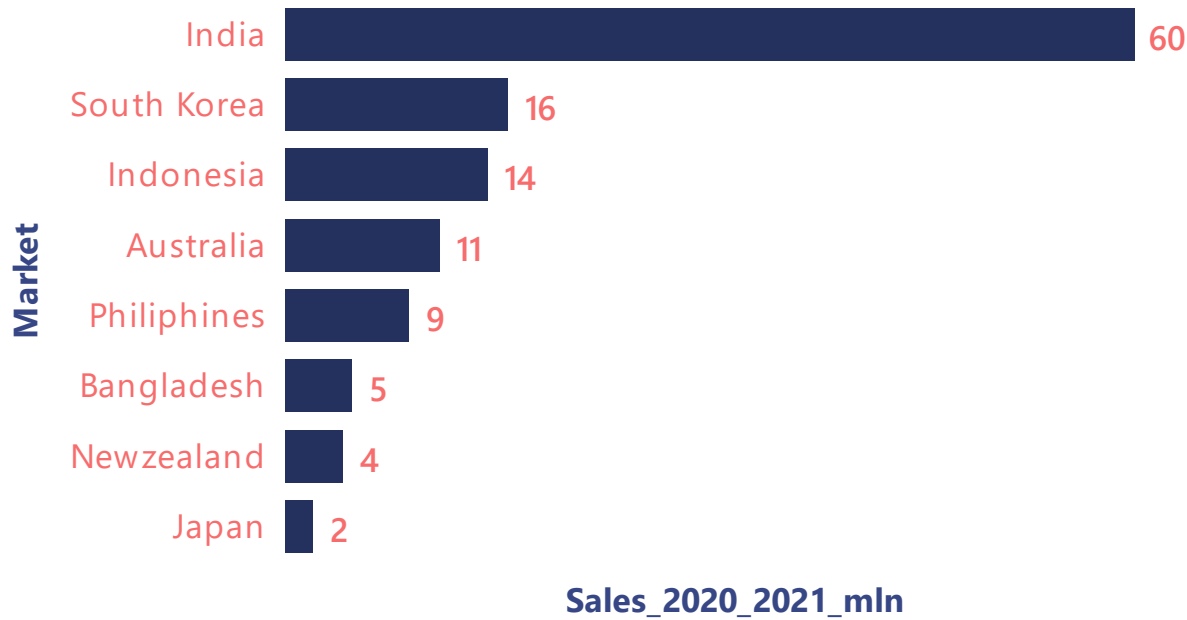
Request 1: Provide the list of markets in which customer "Atliq Exclusive" operates its business in the APAC region.

Market	Sales_2020_2021_mln
India	60
South Korea	16
Indonesia	14
Australia	11
Philiphines	9
Bangladesh	5
Newzealand	4
Japan	2

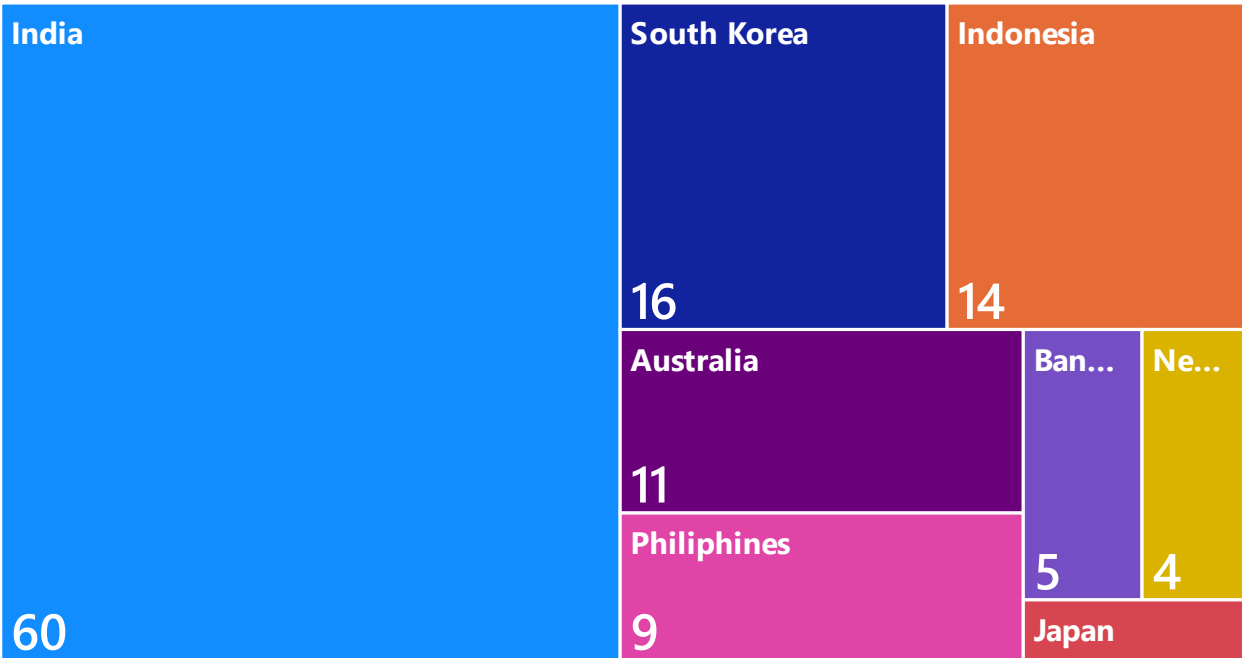
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Atliq Exclusive is present in **8 countries** in the **APAC** region for 2020 and 2021. The **strongest** presence is in **India** with sales of around **60 Million**. The **weakest** presence is in **Japan** with sales of around **2 Million**.

Atliq Exclusive - Sales in APAC for 2020 & 2021

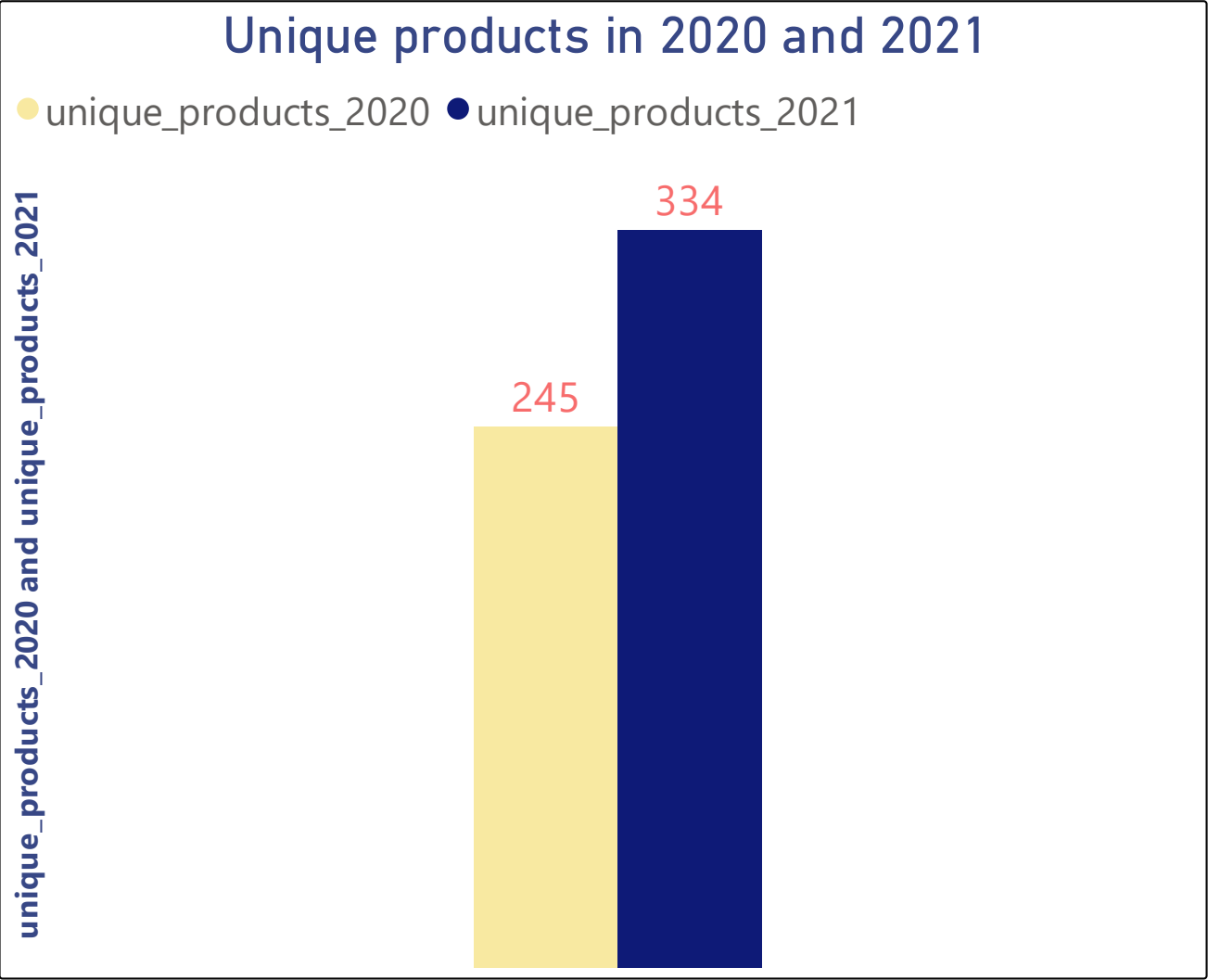


Atliq Exclusive - Sales in APAC for 2020 & 2021



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

unique_products_2020	unique_products_2021	percentage_chg
245	334	36.33



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Number of unique products in **2020** was **245**.

Number of unique products in **2021** was **334**.

The unique products **increased by 36.33%** in 2021.

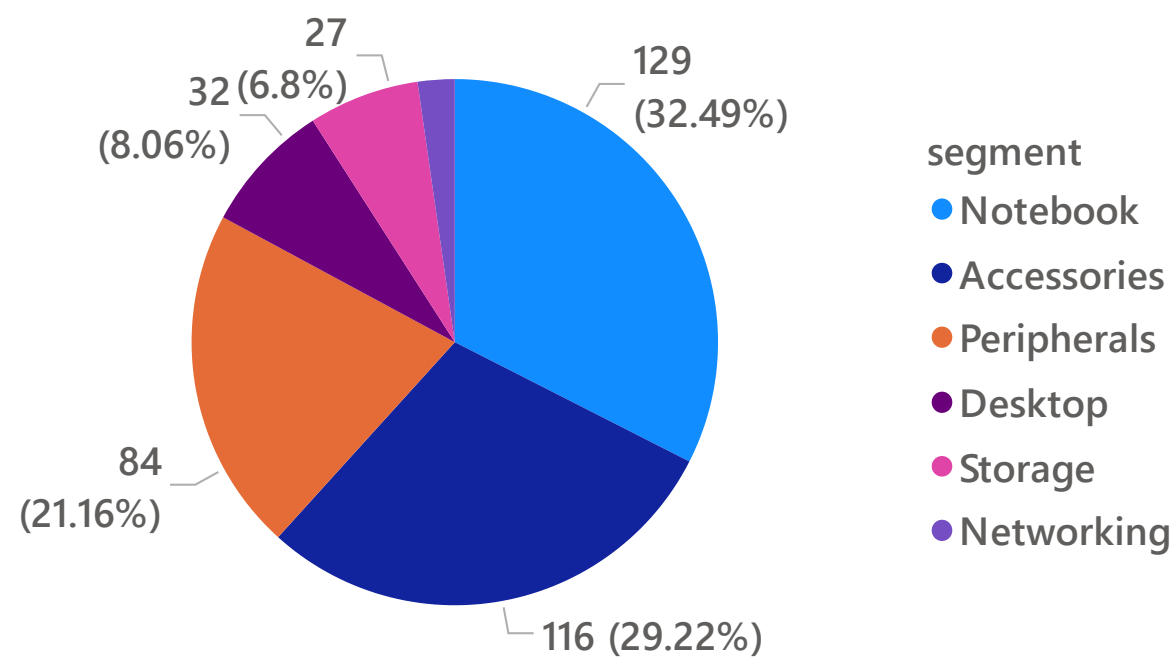
It means the company is building new products.

But, Is this **correlated with sales**?

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

Count of Unique Products by Segment



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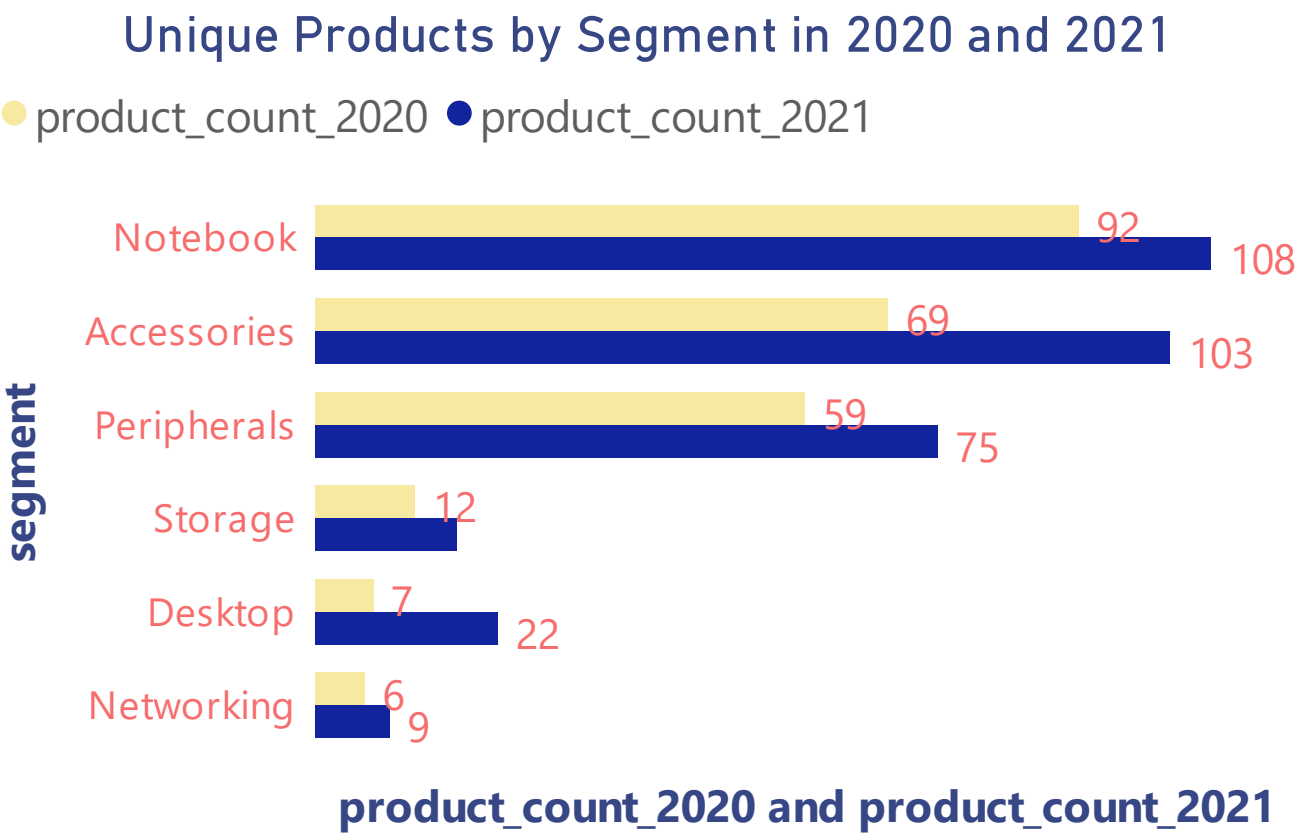
Most of the unique products come from **Notebook** category which is around **32%** of all unique products.

Major unique products come from **3 categories** namely *Notebooks, Accessories, and Peripherals*. This is around **82%** of all the unique products.

Networking has the **least number** of unique products.

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



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The **Accessories** segment had the **maximum increase** in the number of unique products in 2021 i.e **34**, which is around **49% increase**.

In terms of **percentage** however, **Desktop** is the **winner** with more than **~214% increase** in number of unique products.

Notebooks have **minimum increase** in terms of **percentage**, with an increase of only **~17%**.



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

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

AQ Master Wired x1 Ms

0.89

Lowest Manufacturing Cost

AQ Home Allin1 Gen 2

240.54

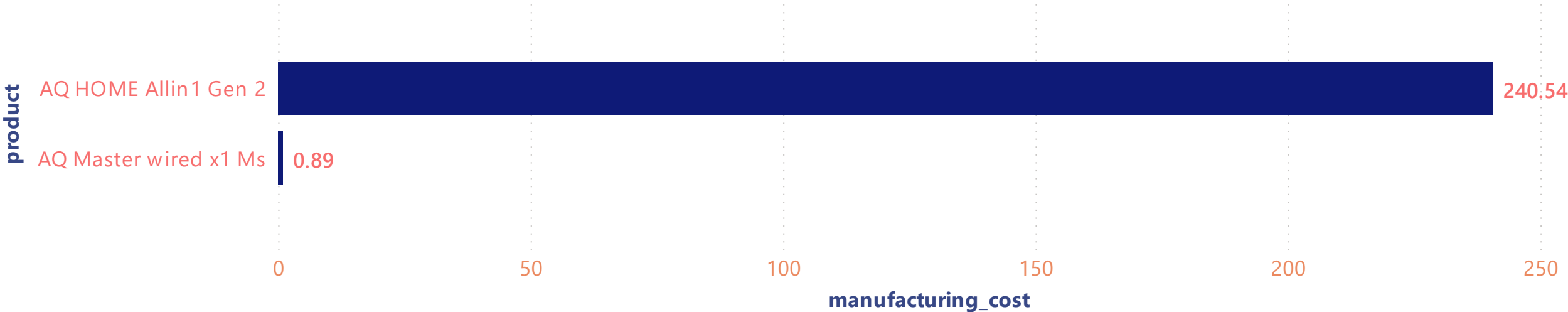
Max of manufacturing_cost

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AQ Master wired x1 Ms has the **lowest** manufacturing cost i.e. **0.89** units.

AQ HOME Allin1 Gen 2 has the **highest** manufacturing cost i.e. **240.54** units.

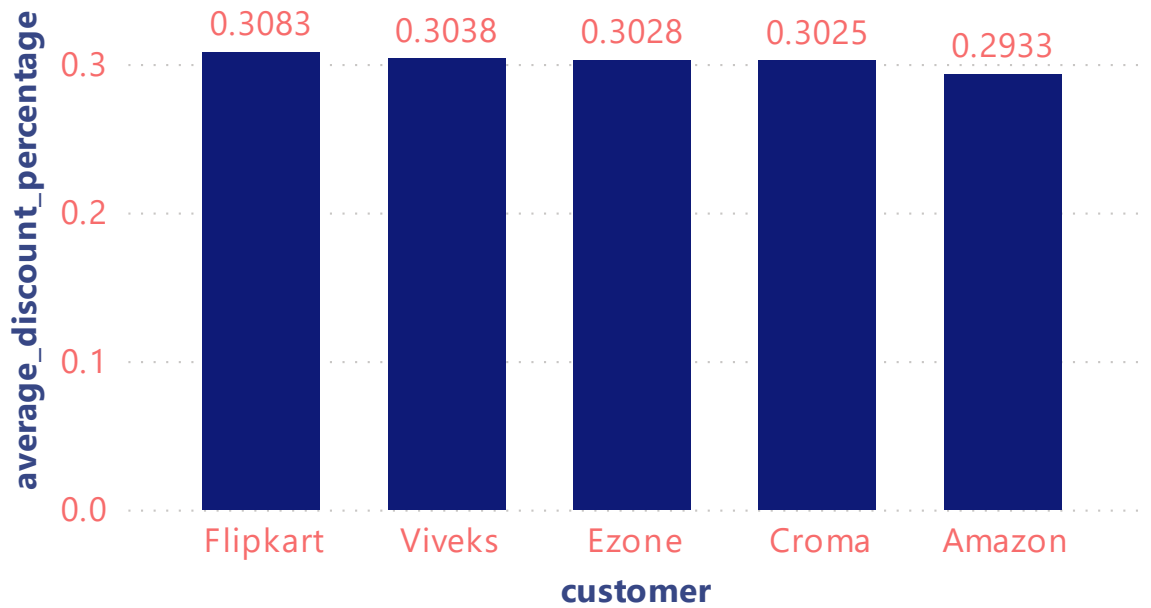
Products Having Highest and Lowest Manufacturing Cost



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 marketing costs.

customer_code	customer	average_discount_percentage
90002009	Flipkart	0.31
90002006	Viveks	0.30
90002003	Ezone	0.30
90002002	Croma	0.30
90002016	Amazon	0.29

Top 5 customers in Indian market according to discount in fiscal year 2021



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In 2021, the companies that were given most pre invoice discount are **Flipkart, Viveks, Ezone, Croma, and Amazon** respectively.

The discount given to these companies is **almost same** and lies **around 0.3%**.

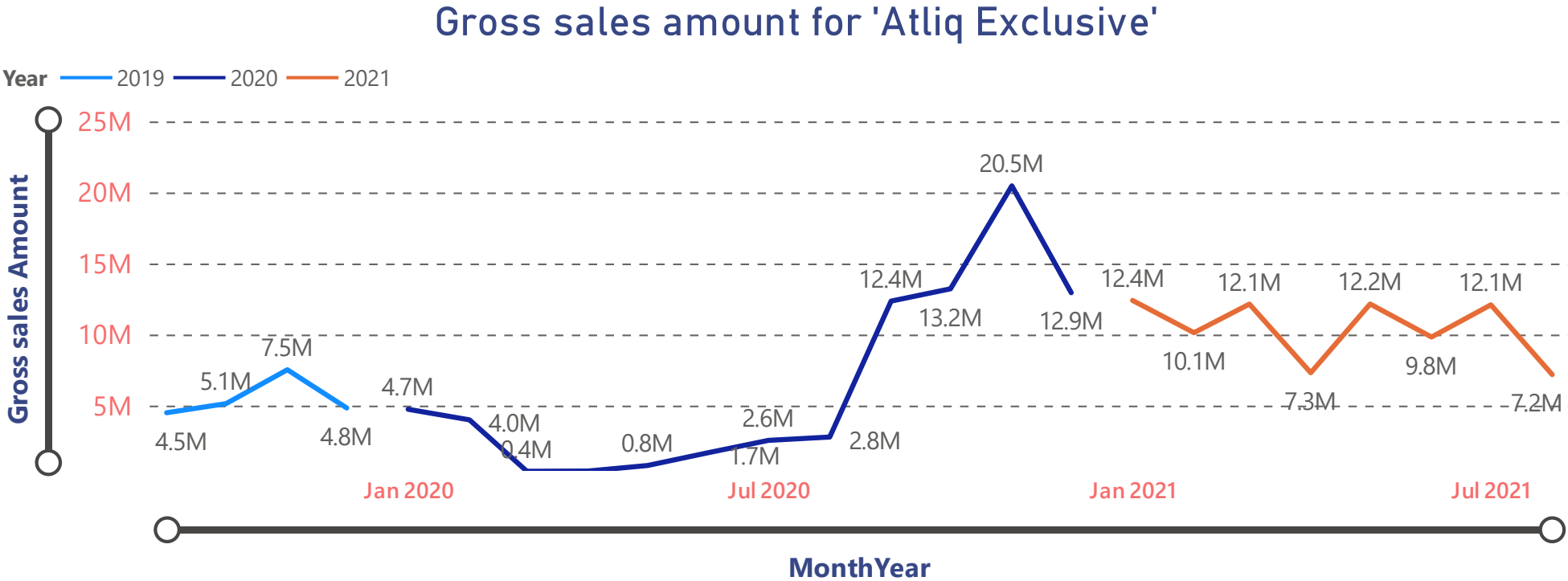
We need to check how much they have made in 2021 from our company. This will guide us for our **discount policy**.

Request 7: Get the complete report of the Gross sales amount for the customer “Atliq Exclusive” for each month .

Month	Year	Gross sales Amount
11	2020	20464999
10	2020	13218636
12	2020	12944660
1	2021	12399393
9	2020	12353510
5	2021	12150225
3	2021	12144061
7	2021	12092346
2	2021	10129736
6	2021	9824521
11	2019	7522893
4	2021	7312000
8	2021	7178708
10	2019	5135902
12	2019	4830405
1	2020	4740600
9	2019	4496260
2	2020	3996228
8	2020	2786648
7	2020	2551159
6	2020	1695217
5	2020	783813
4	2020	395035
3	2020	378771

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In **November** 2019 and 2020, sales **amount increased**. we need to check this pattern.
Similarly, we need to **check** whether sales always **decrease in February**.
In **2021**, from January to August (available data), there is an **alternate increase and decrease** in sales. We need to **check** if it is coincidence or any other thing.



Request 8: In which quarter of 2020, got the maximum total_sold_quantity?

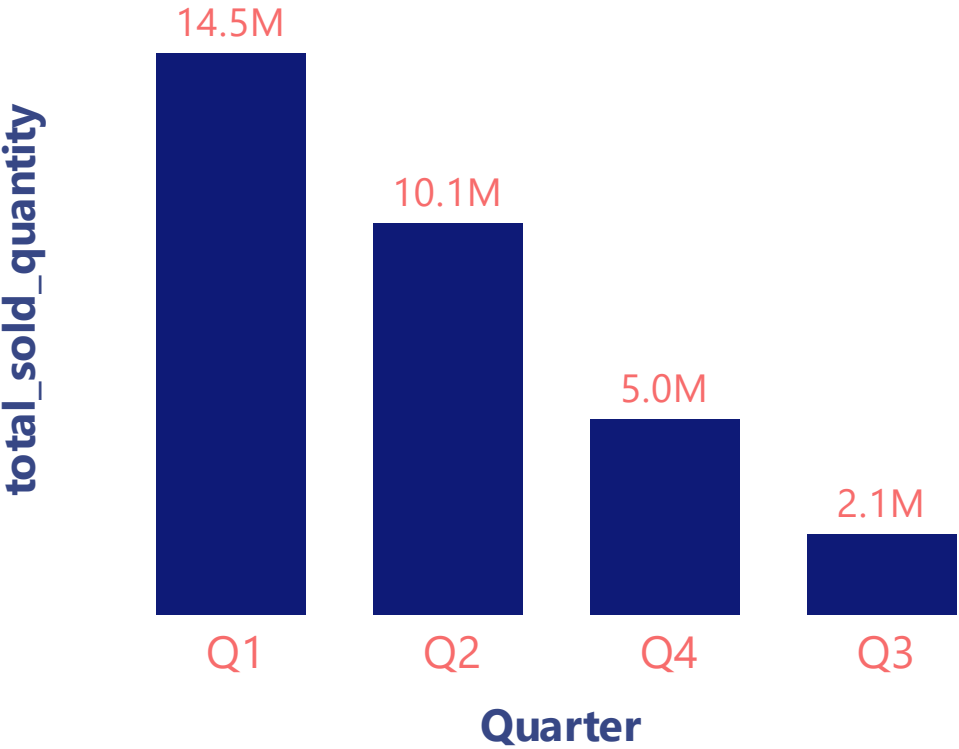
Quarter	total_sold_quantity
Q1	14476194
Q2	10091151
Q3	2075087
Q4	5042541

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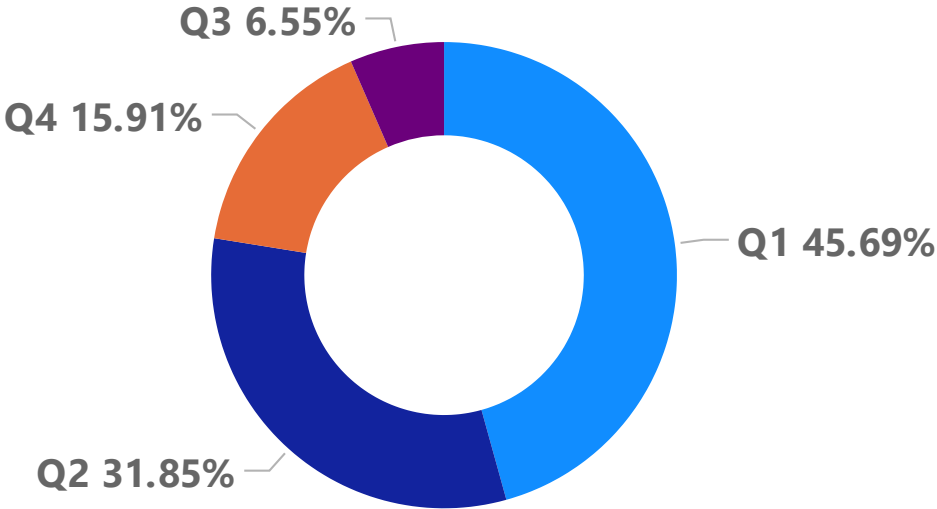
The **quarter 1** in 2020 contributed **most sales** which is **~46%** of the sold products for that year.

The **quarter 3** contributed **least** with **~7%** of sales in 2020.

Total sold quantity by quarter for fiscal year 2020



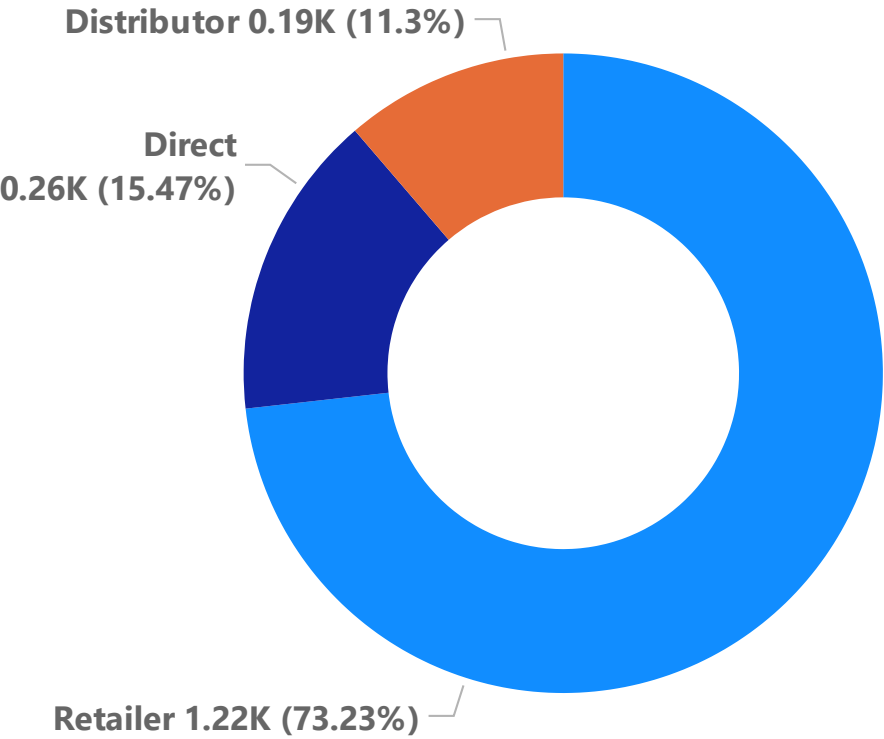
Total sold quantity by quarter for fiscal year 2020



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
Retailer	1,219.08	73.23
Direct	257.53	15.47
Distributor	188.03	11.30

Gross Sales by Channel for Fiscal Year 2021



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The **Major gross sales** amount in 2021 came from **Retail** channel. It amounts around **1219 million** rupees which is **~73%** of all the gross sales.

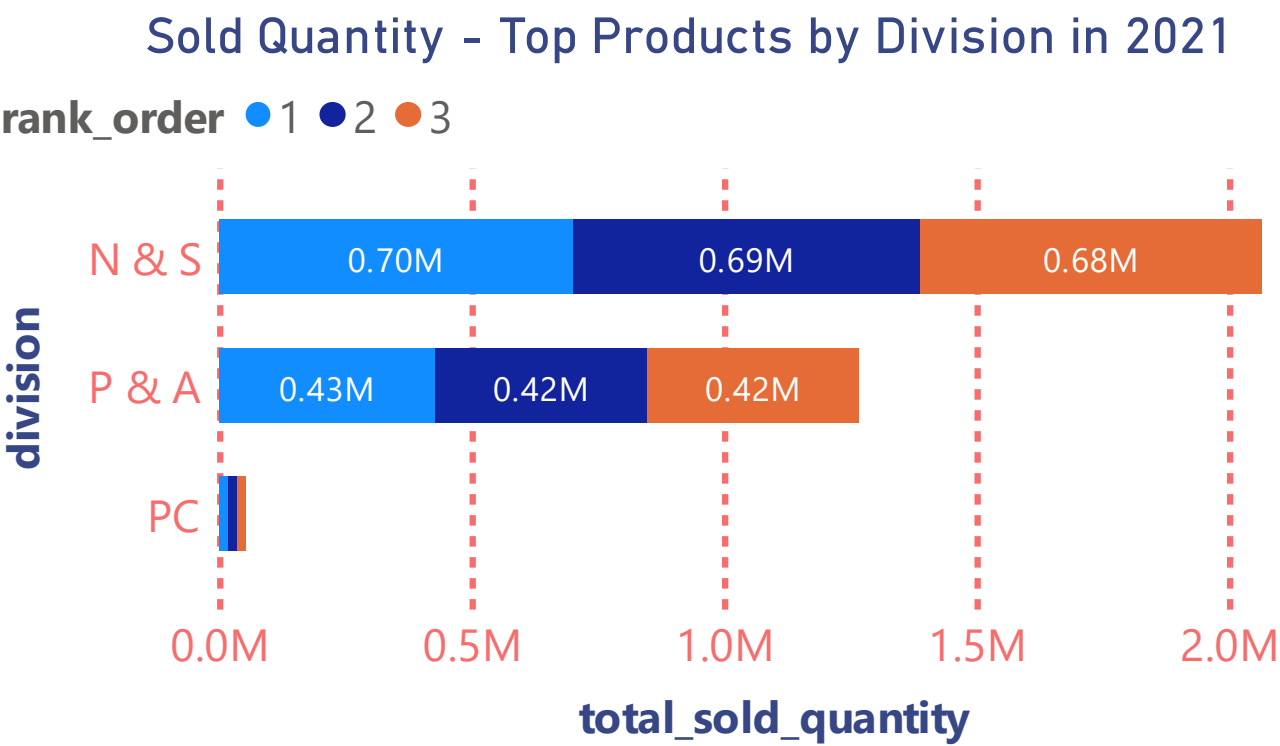
The **distributors** have **least contributed** to gross sales with **11.3%**.

How can we increase the sales through Direct and Distributor channel?

Should we think on our **business model**?

Request 10: Get the Top 3 products in each division that have a high total_sold_quantity in the fiscal_year 2021?

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	A4218110208	AQ Digit	17275	3
PC	A4319110306	AQ Velocity	17280	2



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The **N&S** division seems to have the **most sold products** than other divisions.

The quantity of **top 3** products sold in **N&S** is **more than 2 million**.

The **Pen Drives** seem to be **most sold** products.

The **combined sale of the top 3** products in **PC** division is **not even close** to the even the **3rd most** sold product in **other divisions**.