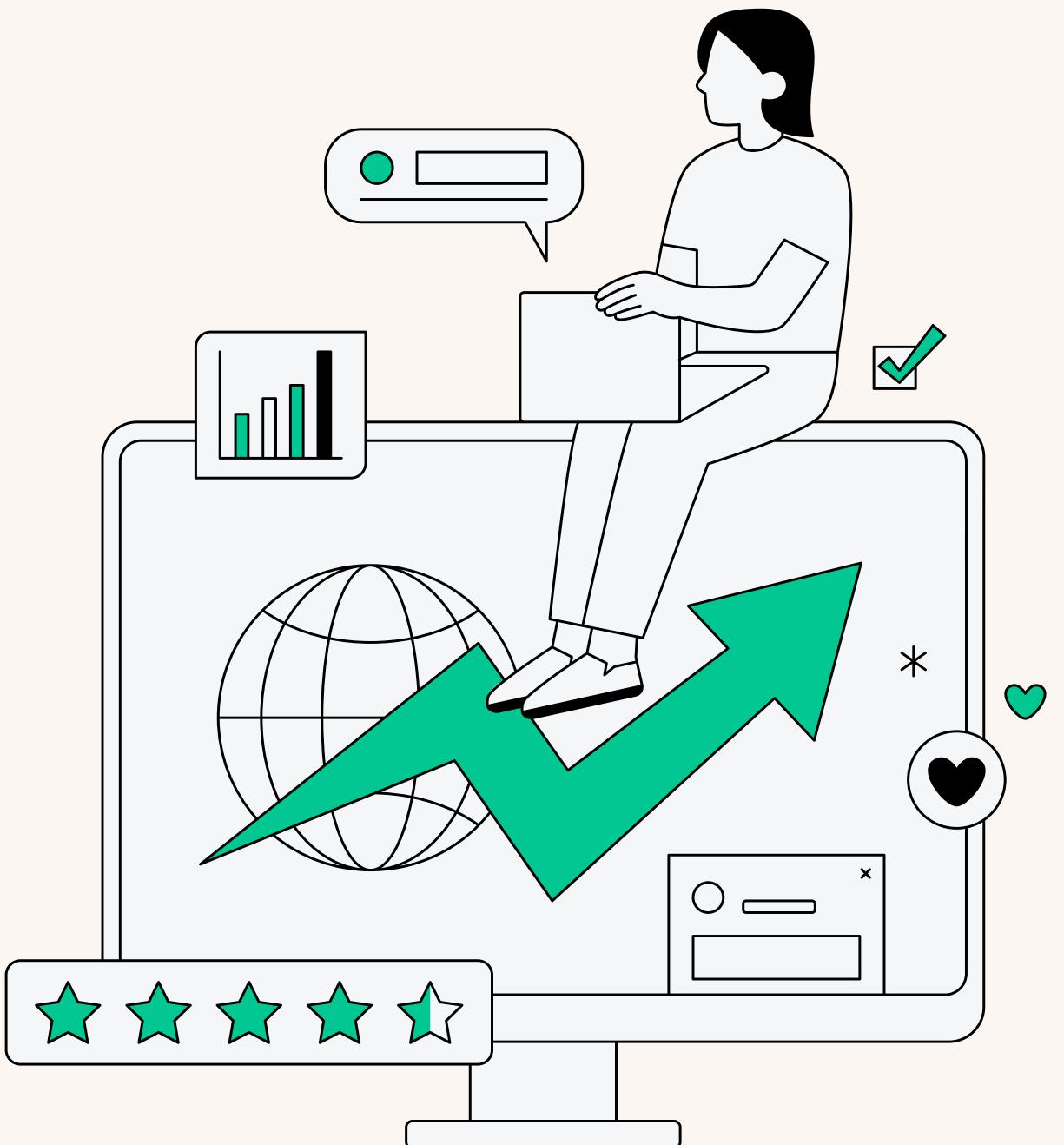


# Consumer Goods Ad-hoc-Insights

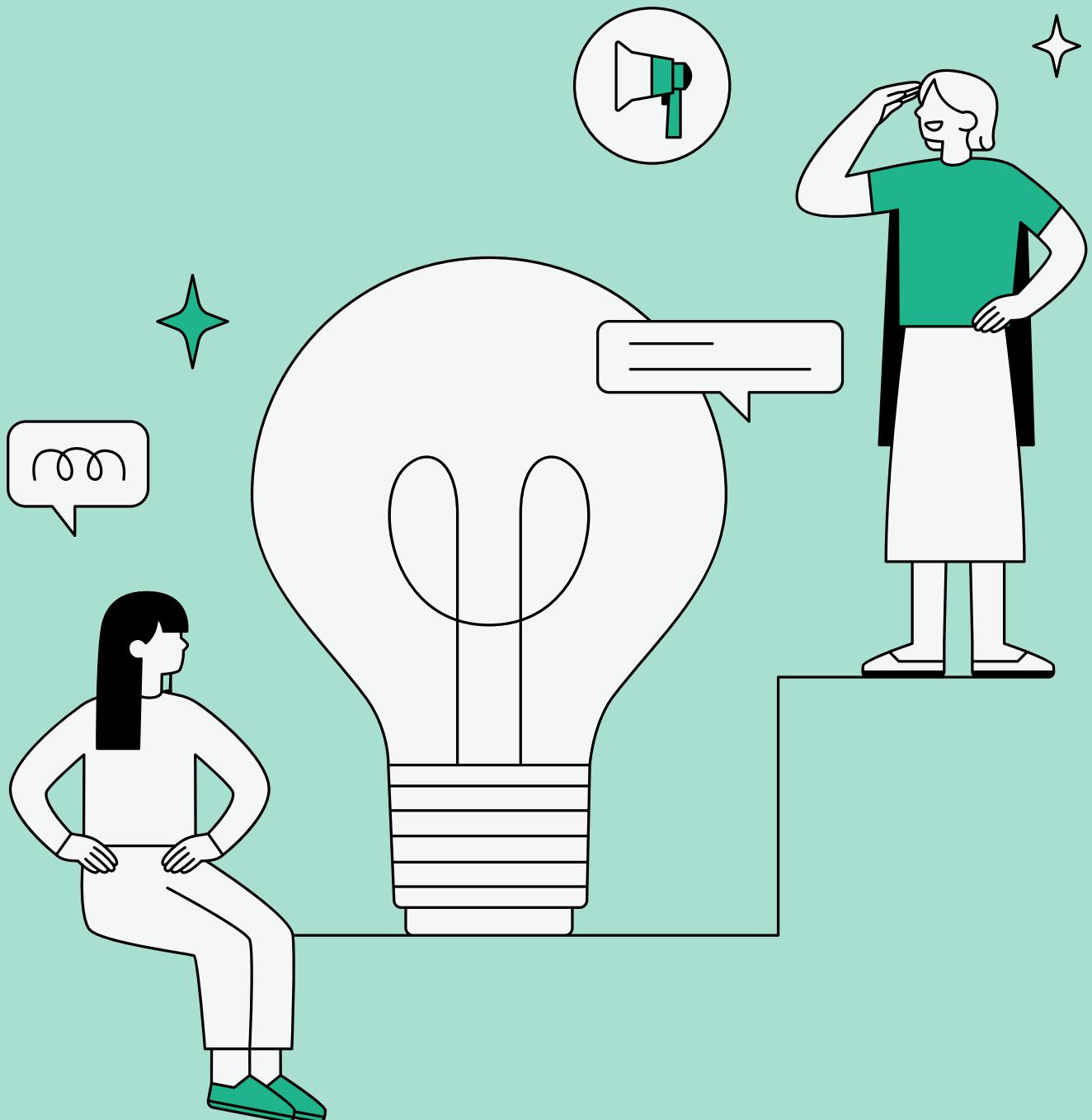


# Problem Statement

An imaginary company called AtliQ Hardware is a consumer goods electronics company with operations in various countries. Their business is growing rapidly and they still rely on Excel files for data analytics. They recently started data analytics in their team but they have realized that they have insufficient insights and asked the junior data analysts in the company to provide 10 Ad-Hoc insights by using SQL based on the request by the management.

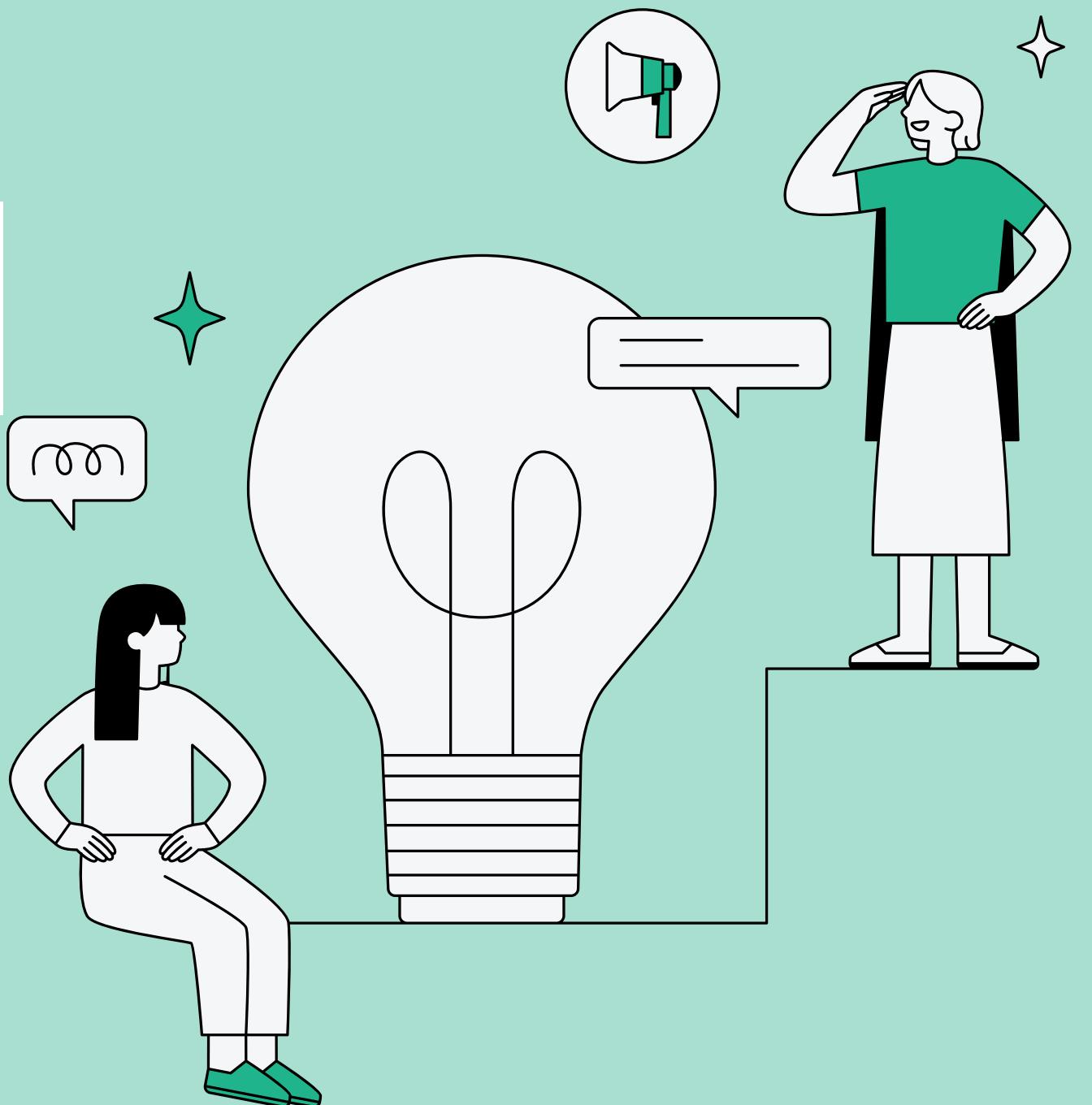
Provide the list of markets in which customer "Atliq Exclusive" operates its business in the APAC region.

market
India
Indonesia
Japan
Philiphines
South Korea
Australia
Newzealand
Bangladesh



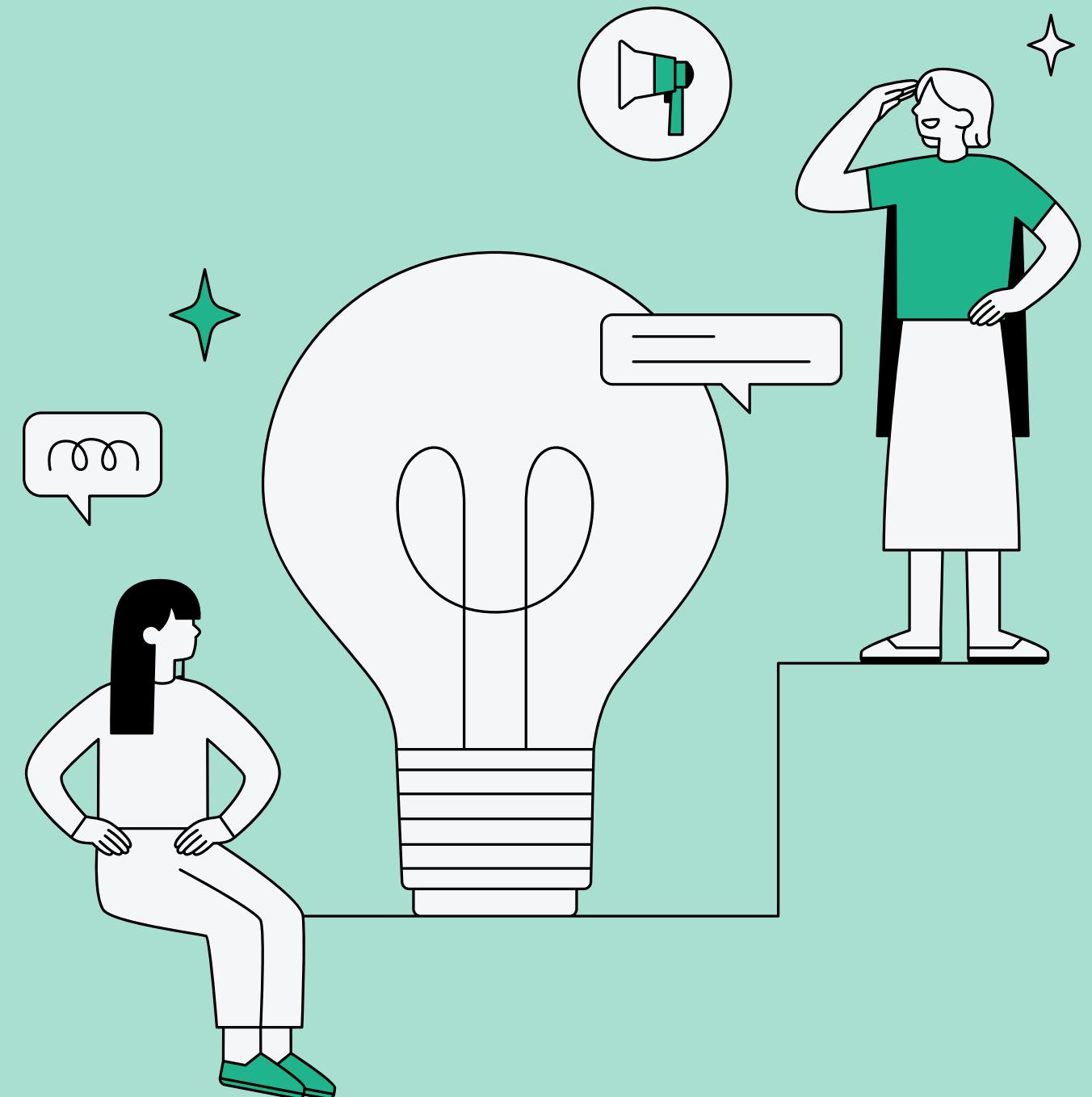
# What is the percentage of unique product increase in 2021 vs. 2020?

	product_count_2021	product_count_2020	chg	chg_pct
▶	334	245	89	36.33



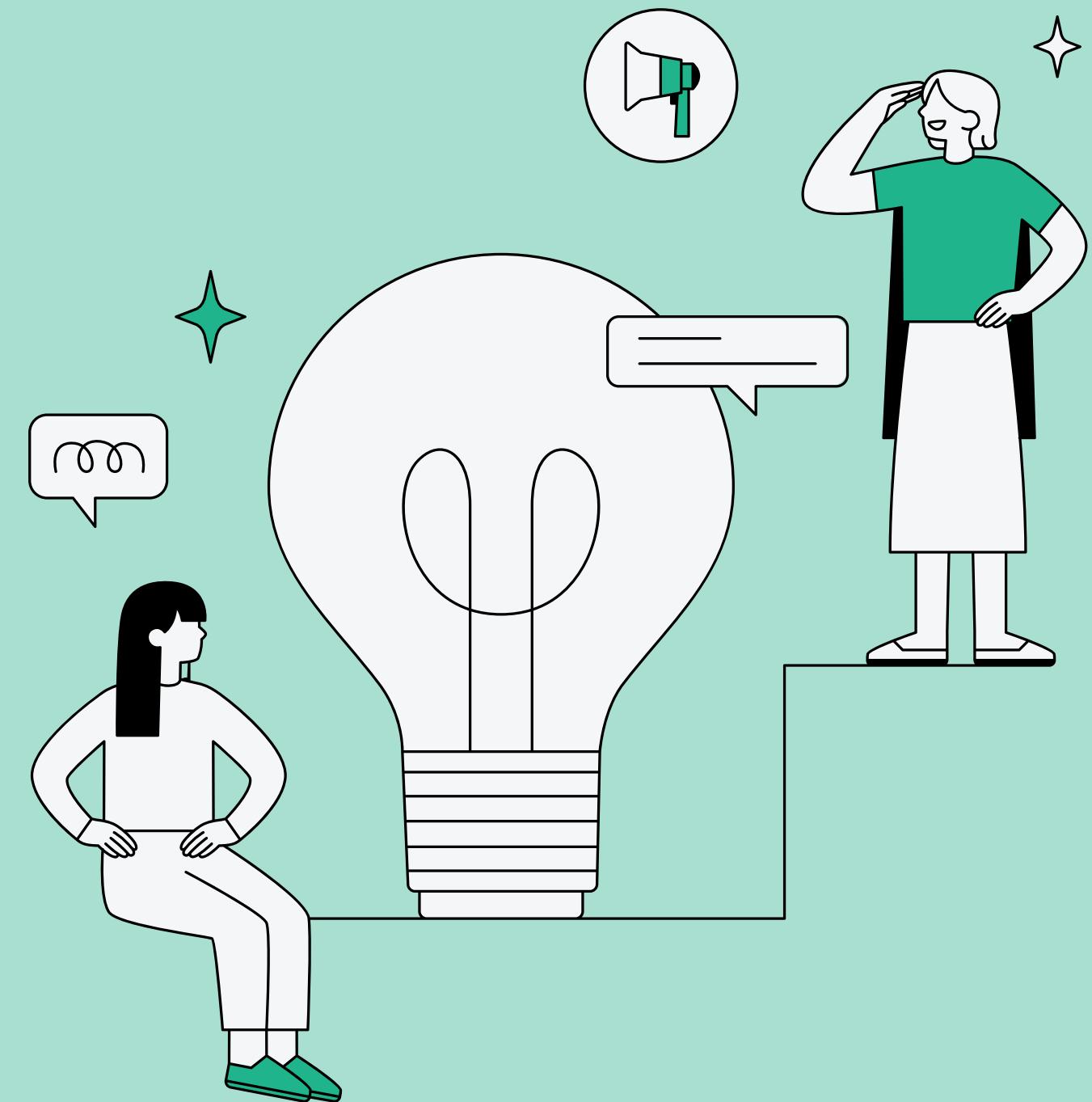
Provide a report with all the unique product counts for each segment and sort them in descending order of product counts.

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



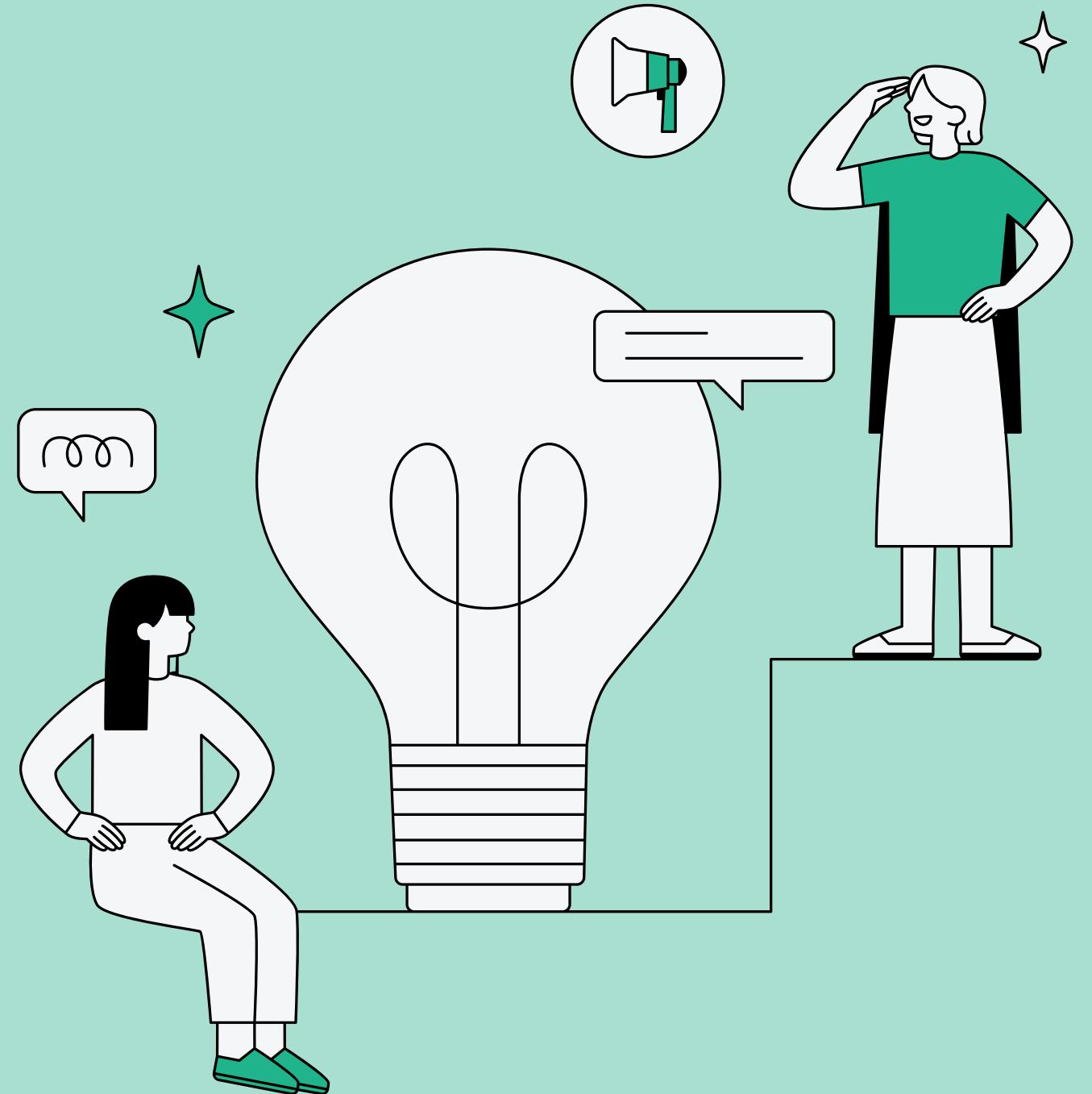
# Follow-up: Which segment had the most increase in unique products in 2021 vs 2020?

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



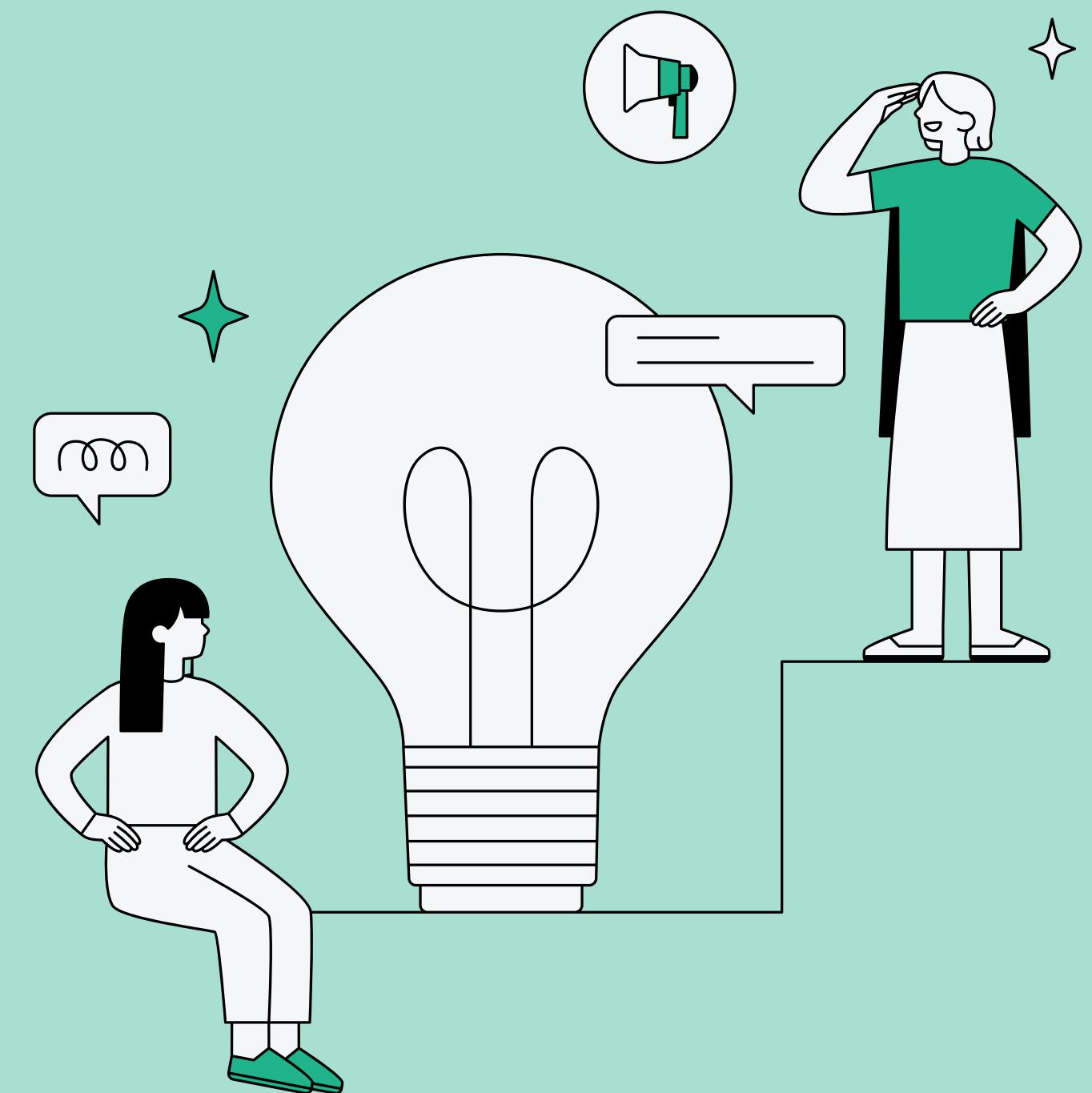
Get the products that have the highest and lowest manufacturing costs.  
The final output should contain these fields

product_code	product	max_manufacturing_cost
A6120110206	AQ HOME Allin1 Gen 2	240.54
A2118150101	AQ Master wired x1 Ms	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.

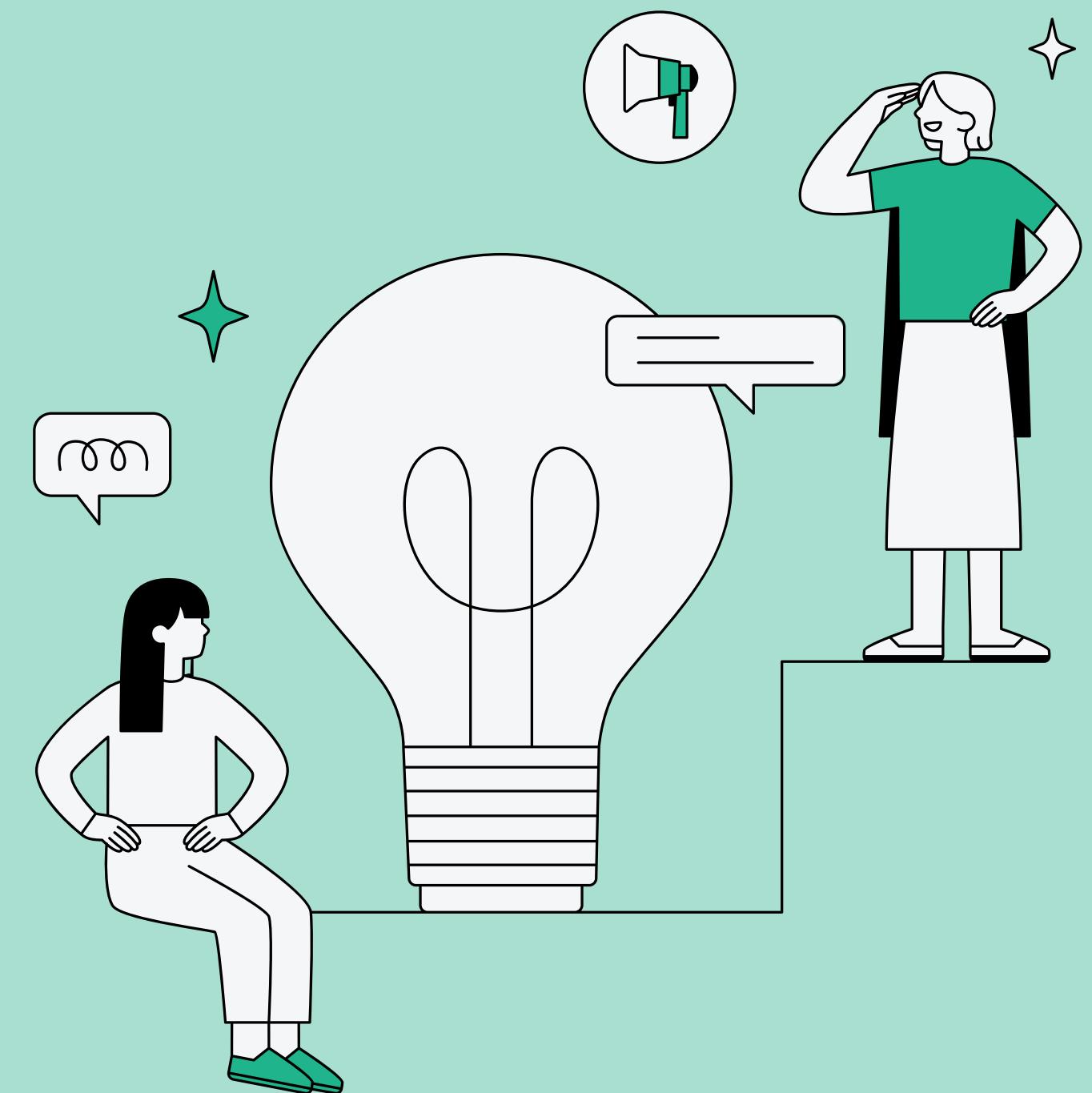
customer	customer_code	fiscal_year	avg_pre_invoice_discount	market
Flipkart	90002009	2021	30.83	India
Viveks	90002006	2021	30.38	India
Ezone	90002003	2021	30.28	India
Croma	90002002	2021	30.25	India
Amazon	90002016	2021	29.33	India



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.

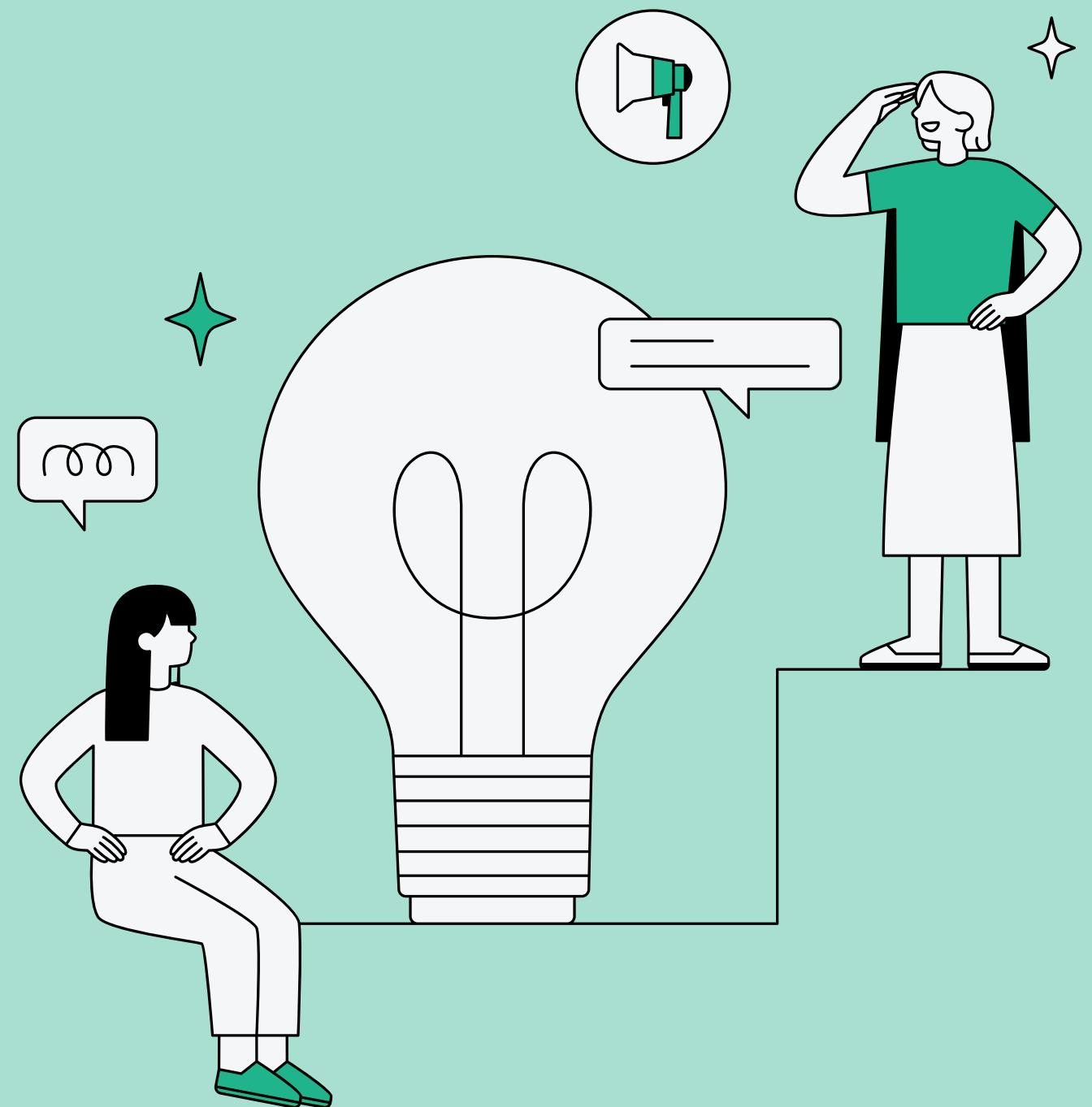
month	year	gross_sales
September	2020	4496259.94
October	2020	5135902.52
November	2020	7522892.84
December	2020	4830404.88
January	2020	4740600.31
February	2020	3996228.01
March	2020	378770.94
April	2020	395035.34
May	2020	783813.24
June	2020	1695216.71
July	2020	2551159.42
August	2020	2786648.34

month	year	gross_sales
September	2021	12353510.30
October	2021	13218636.80
November	2021	20464999.66
December	2021	12944660.00
January	2021	12399393.60
February	2021	10129736.22
March	2021	12144061.40
April	2021	7312000.26
May	2021	12150225.67
June	2021	9824521.71
July	2021	12092347.03
August	2021	7178707.82



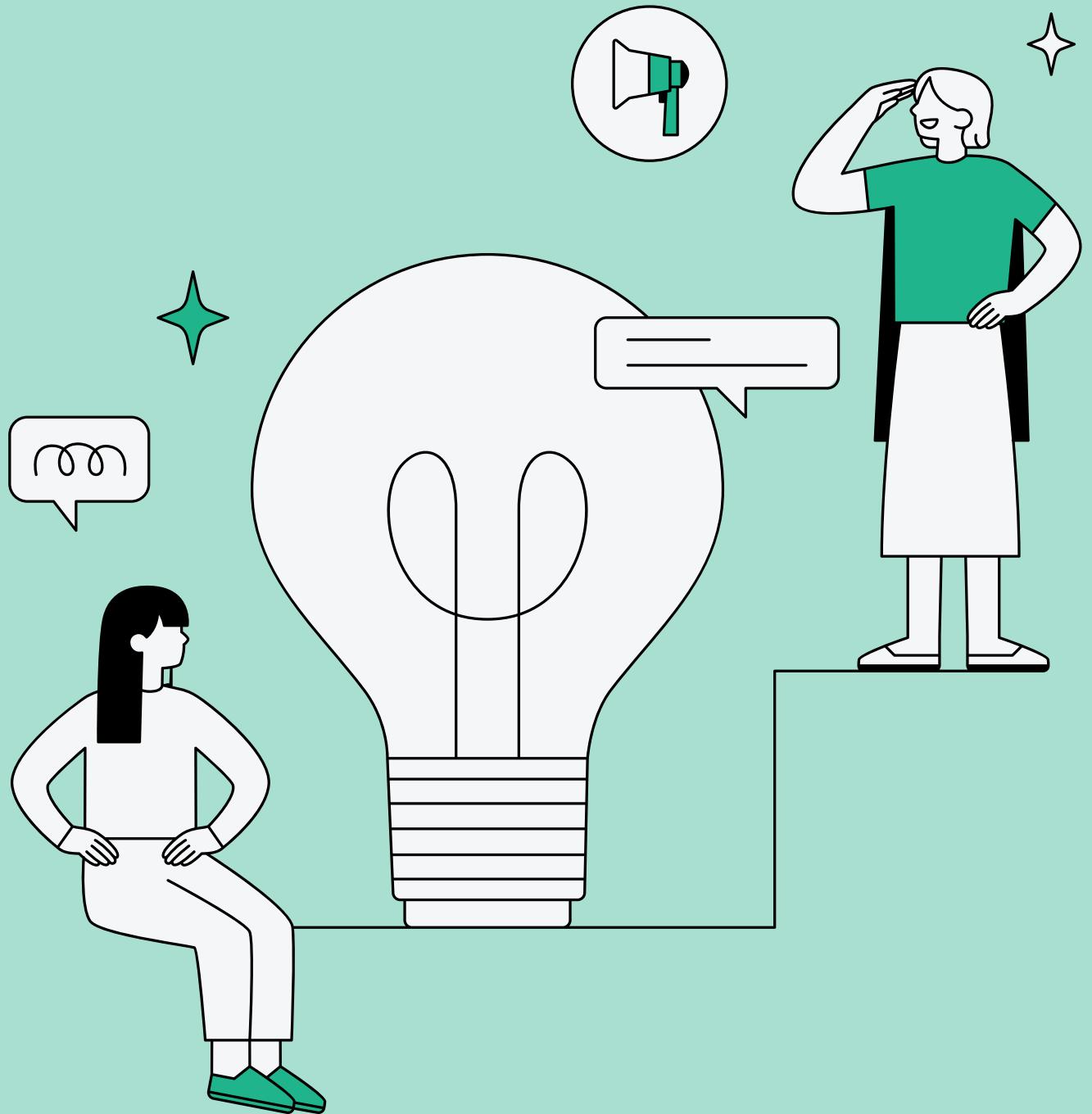
In which quarter of 2020, got the maximum total\_sold\_quantity? The final output should be sorted by the total\_sold\_quantity

Quarters	total_sold_quantity
Qtr 1	7005619
Qtr 2	6649642
Qtr 4	5042541
Qtr 3	2075087



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

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



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	ranking
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

