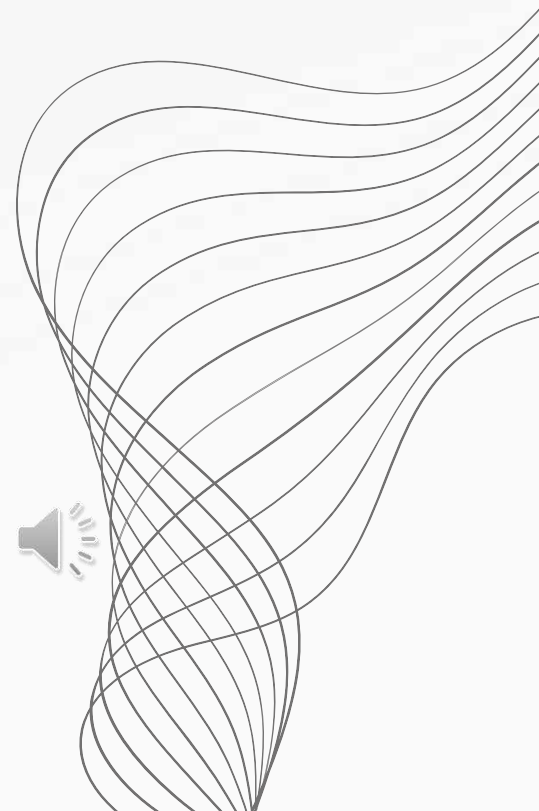




# **CONSUMER GOODS AD HOC INSIGHT**

Presented by Khushtin kashfi



# AGENDA

01

COMPANY OVERVIEW

02

PROBLEM STATEMENT

03

ABOUT DATA

04

AD HOC REQUEST WITH INSIGHT



# COMPANY OVERVIEW

Atliq Hardware is a company that sells Hardware like PC, Mouse, Keyboards, Printers and so on to different customers.

Company Specializes in manufacturing hardware products, which they distribute to customers through both online and offline channels. These products are made available to consumers through various retail outlets, catering to two primary types of customers: brick-and-mortar stores and ecommerce platforms. And distribution network consists of three main channels: Retailers, Direct, and Distributors.



# PROBLEM STATEMENT

This leading computer hardware producer in India and other countries faces challenges in obtaining timely and insightful data for informed decision-making.

Assist the management team to gain more insight about the business



# ABOUT DATA

We have six data tables, which include:

1. `dim_customer`: contains customer-related information.
2. `dim_product`: storing product-related data.
3. `fact_gross_price`: holding gross price details for each product.
4. `fact_manufacturing_cost`: recording the production costs of each product.
5. `fact_pre_invoice_deductions`: encompassing pre-invoice deduction information for each product.
6. `fact_sales_monthly`: containing monthly sales data for each product



# **AD HOC REQUEST WITH INSIGHT**



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



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```
SELECT distinct(market)
FROM dim_customer
where customer = "Atliq Exclusive" and region = "APAC"
```

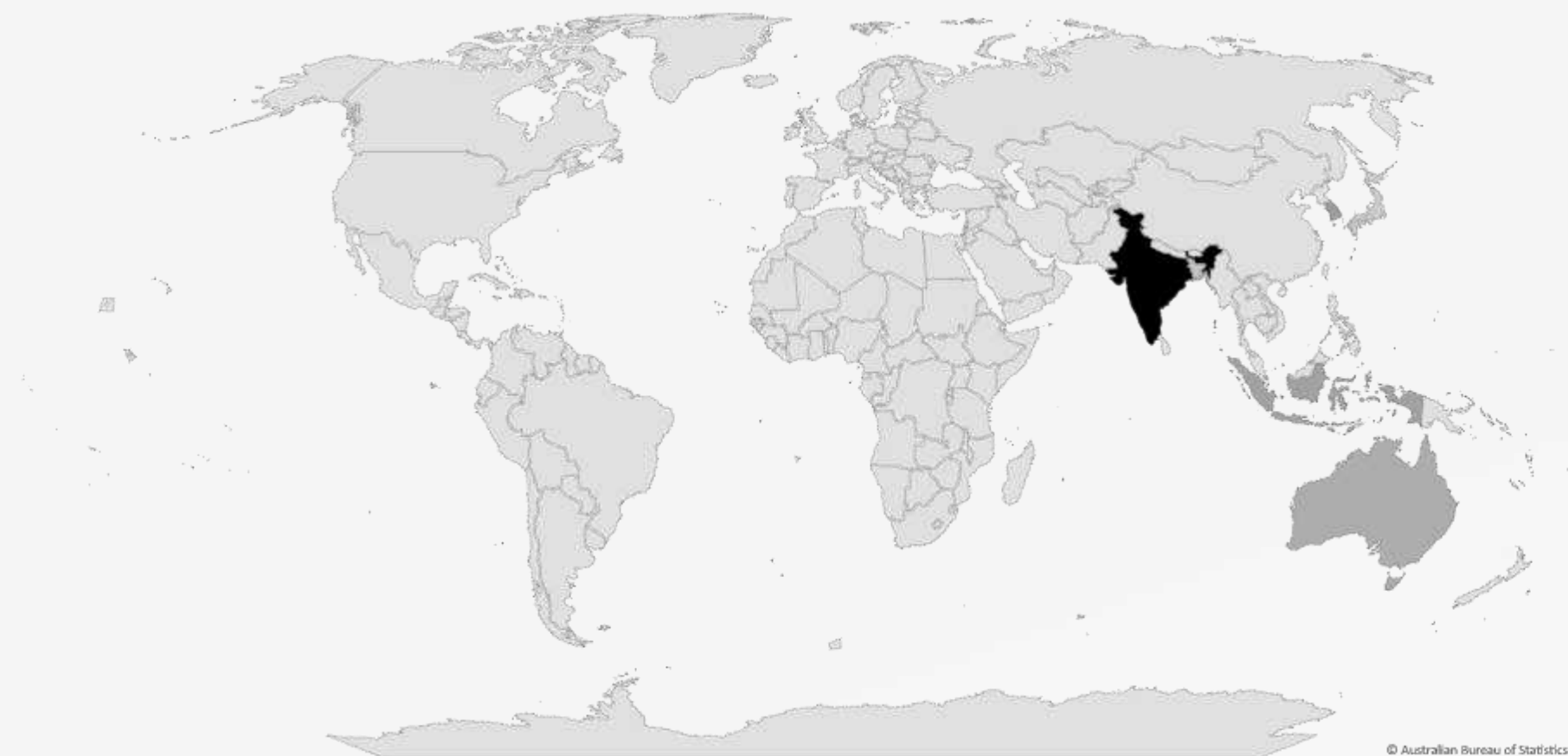


market
India
Indonesia
Japan
Philippines
South Korea
Australia
Newzealand
Bangladesh





# INSIGHT



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- Atliq Exclusive strategically operates its business in diverse APAC markets, encompassing India, Indonesia, Japan, Philippines, South Korea, Australia, New Zealand, and Bangladesh, showcasing a broad regional footprint and market penetration.



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\_chg.



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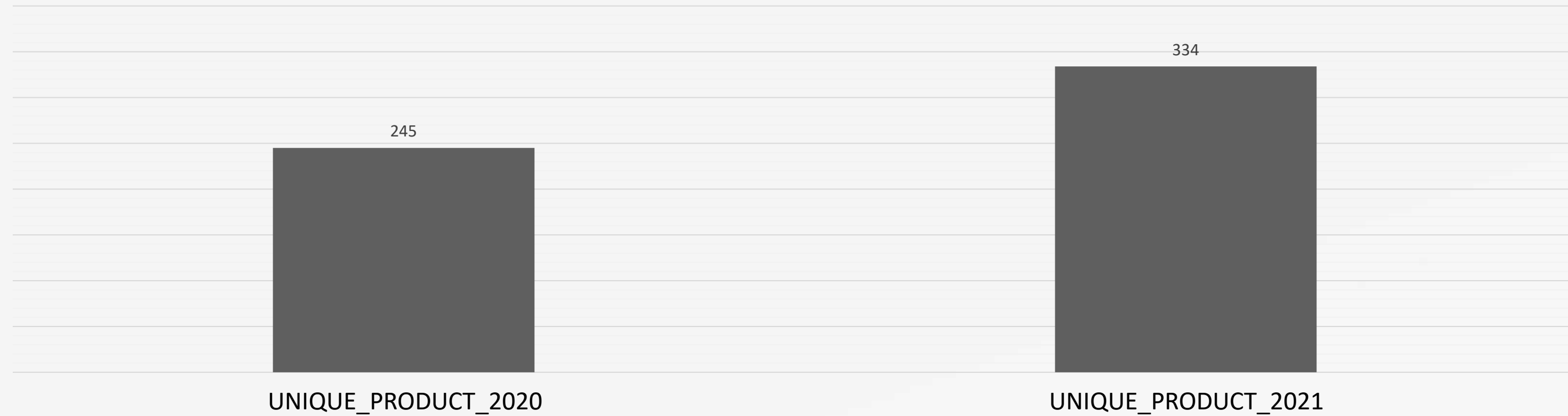
```
with unique_product as (  
  select  
    count(distinct(case  
      when fiscal_year = 2020 then product_code end )) as unique_product_2020,  
    count(distinct(case  
      when fiscal_year = 2021 then product_code end )) as unique_product_2021  
  from fact_sales_monthly  
)  
select unique_product_2020, unique_product_2021,  
  (unique_product_2021-unique_product_2020)*100/unique_product_2020 as percentage_chg  
from unique_product  
order by percentage_chg desc
```



unique_product_2020	unique_product_2021	percentage_chg
245	334	36.3265



# INSIGHT



- The unique product count rose from 245 in 2020 to 334 in 2021, reflecting a notable increase.
- This represents a percentage change of 36.32%, suggesting a substantial expansion strategy aimed at broadening the company's product portfolio and enhancing market presence.




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



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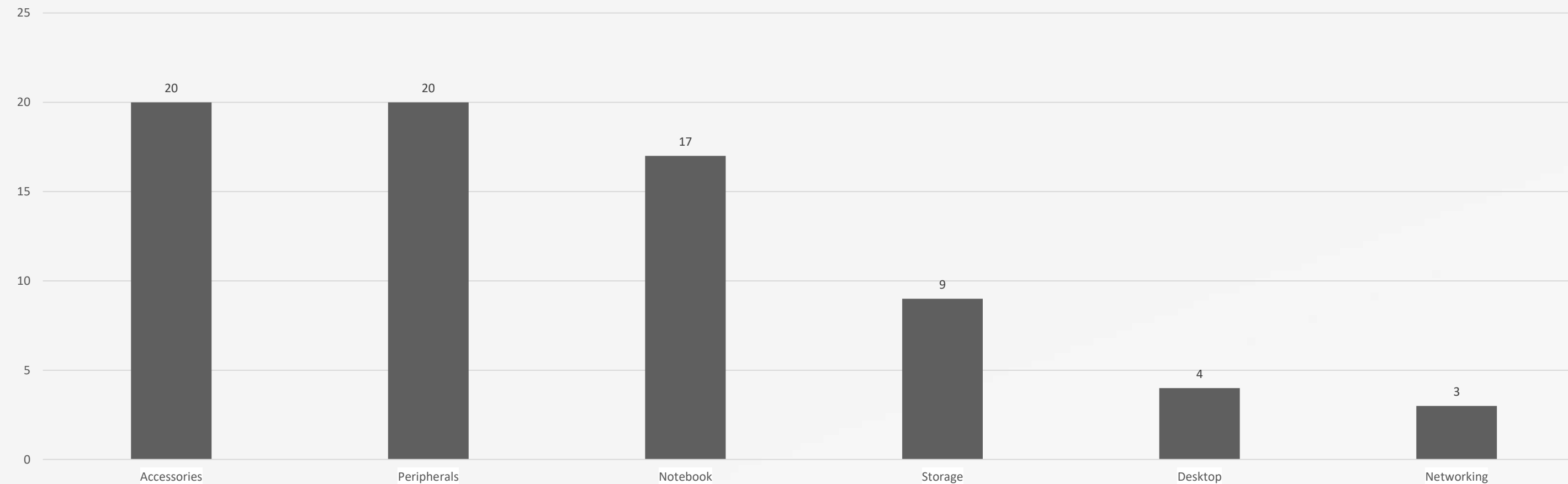
```
SELECT segment, count(distinct product) as product_count
FROM dim_product
group by segment
order by product_count desc
```



Result Grid		Filter Rows:
	segment	product_count
▶	Accessories	20
	Peripherals	20
	Notebook	17
	Storage	9
	Desktop	4
	Networking	3



# INSIGHT



- Among the segments, accessories and peripherals each feature 20 unique products, with notebooks following closely behind at 17, while storage, desktop, and networking segments have fewer unique products, at 9, 4, and 3 respectively.
- Notably, accessories, peripherals, and notebooks boast higher unique product counts compared to storage, desktop, and networking segments. To capitalize on growth opportunities, it's advisable to prioritize expanding product offerings within the desktop and networking segments.



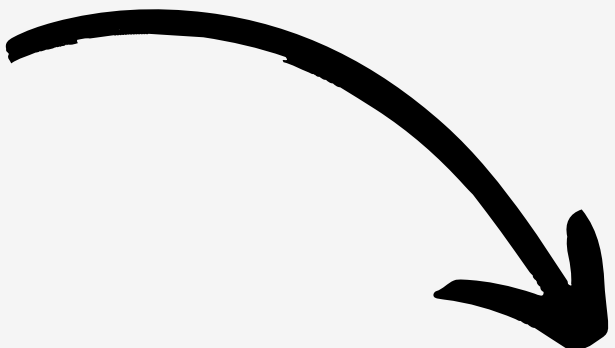
Follow-up: Which segment had the most increase in unique products in 2021 vs 2020? The final output contains these fields, segment product\_count\_2020, product\_count\_2021, difference.





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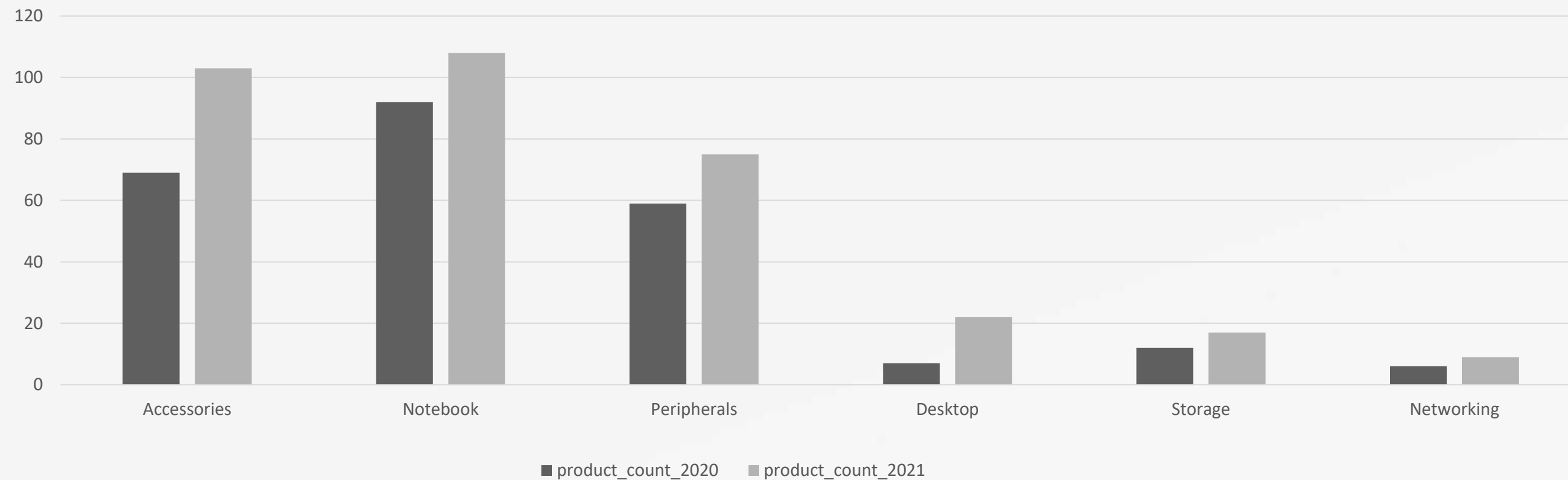
```
with unique_product as (  
  select p.segment as segment,  
  count(distinct(case  
when fiscal_year = 2020 then s.product_code end )) as product_count_2020,  
  count(distinct(case  
when fiscal_year = 2021 then s.product_code end )) as product_count_2021  
  from fact_sales_monthly s  
  join dim_product p  
  on p.product_code = s.product_code  
  group by p.segment)  
select segment, product_count_2020, product_count_2021,  
(product_count_2021-product_count_2020) as difference  
from unique_product  
order by difference desc
```



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



# INSIGHT



- The Accessories segment demonstrated the most substantial increase in unique products from 2020 to 2021, with a notable rise of 34 products. This growth suggests a potential surge in demand and highlights opportunities for further expansion within this segment.
- While both the Notebook and Peripherals segments also experienced significant increases of 16 products each, the Accessories segment surpassed them, indicating its prominence in driving product diversification and market expansion efforts for the company.




Get the products that have the highest and lowest manufacturing costs. The final output should contain these fields, product\_code, product, manufacturing\_cost .



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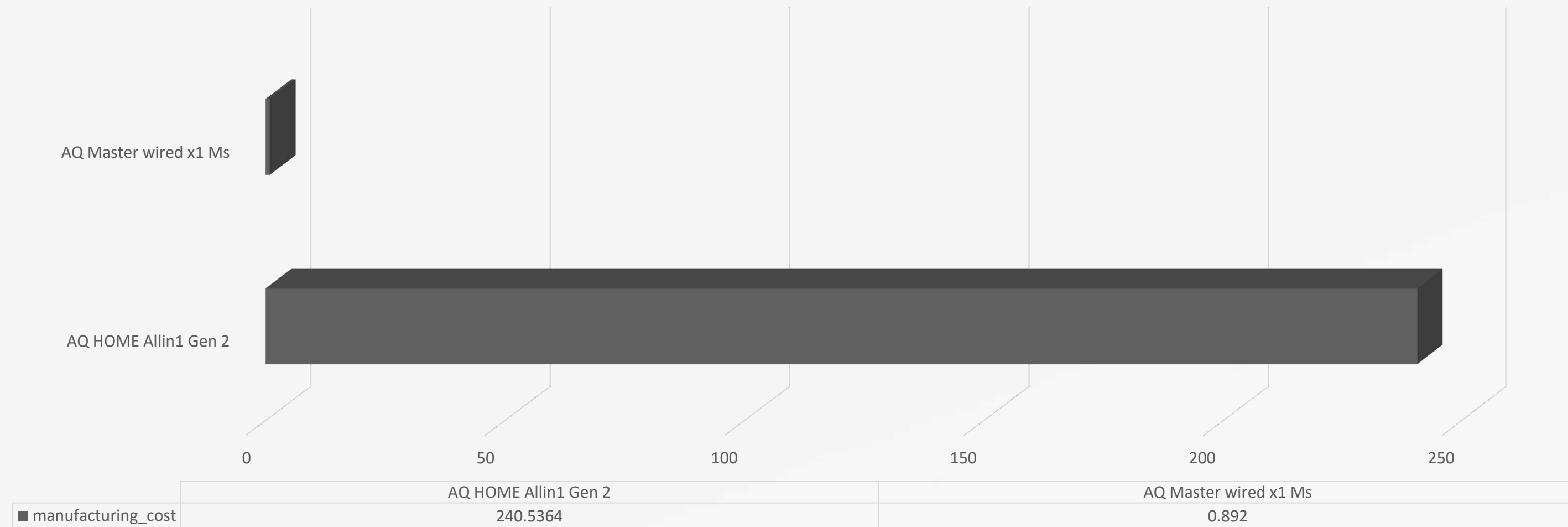
```
SELECT p.product_code, p.product , m.manufacturing_cost
from fact_manufacturing_cost m
join dim_product p
on p.product_code = m.product_code
where manufacturing_cost = ( select max(manufacturing_cost) from fact_manufacturing_cost)
or
manufacturing_cost = (select min(manufacturing_cost) from fact_manufacturing_cost)
order by manufacturing_cost desc
```



product_code	product	manufacturing_cost
A6120110206	AQ HOME Allin1 Gen 2	240.5364
A2118150101	AQ Master wired x1 Ms	0.8920



# INSIGHT



- The product with the highest manufacturing cost is "AQ HOME Allin1 Gen 2" priced at 240.53, while the product with the lowest manufacturing cost is "AQ Master wired x1 Ms" valued at 0.89. This disparity highlights the importance of cost management strategies and pricing considerations for optimizing profitability.




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.



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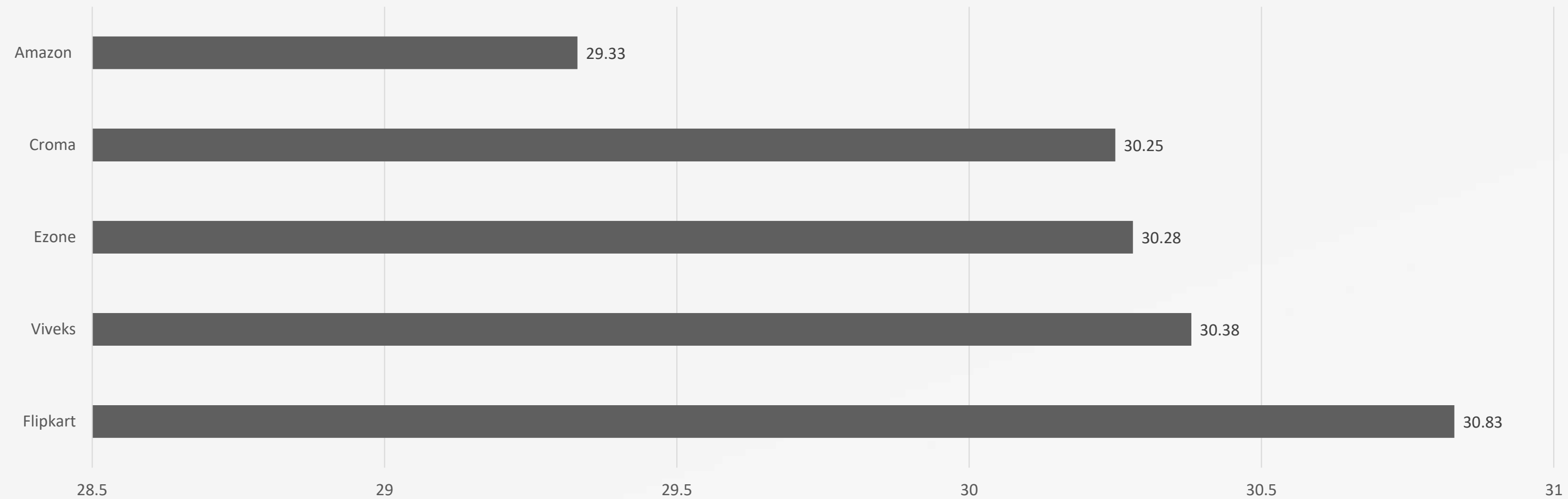
```
SELECT p.customer_code , c.customer, round(avg(pre_invoice_discount_pct*100),2) as avg_discount_percentage
FROM fact_pre_invoice_deductions p
join dim_customer c
on p.customer_code = c.customer_code
where p.fiscal_year = 2021 and market = "india"
group by c.customer, p.customer_code
order by avg_discount_percentage desc
limit 5
```



customer_code	customer	avg_discount_percentage
90002009	Flipkart	30.83
90002006	Viveks	30.38
90002003	Ezone	30.28
90002002	Croma	30.25
90002016	Amazon	29.33



# INSIGHT



- The report highlights the top 5 customers in the Indian market with the highest average pre-invoice discount percentages for the fiscal year 2021 include Flipkart, Viveks, Ezone, Croma, and Amazon, with average discount percentages ranging from 30.83% to 29.33%.
- The data reveals significant discounting trends among key customers in India, suggesting varying strategies in pricing and promotions. Understanding these trends can inform targeted marketing efforts and negotiations with customers to optimize profitability and maintain competitive positioning in the market.





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



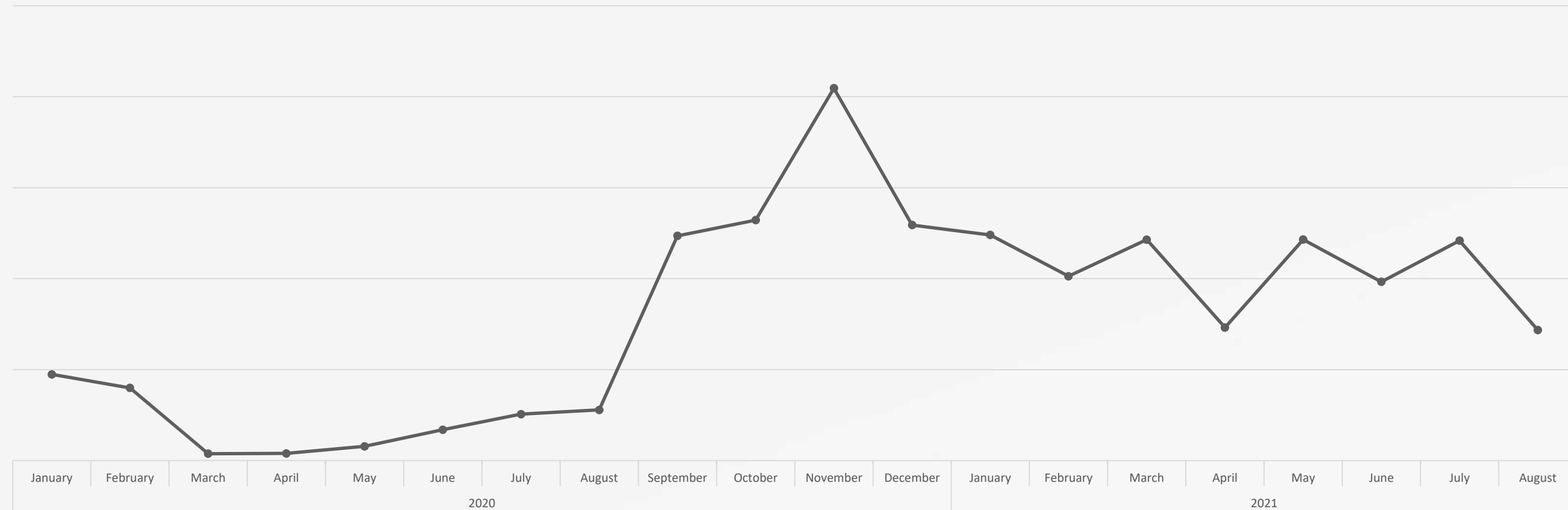
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```
SELECT monthname(s.date) as month, year(s.date) as year, round(sum(s.sold_quantity*g.gross_price),2) as gross_sales_amount
FROM fact_sales_monthly s
join dim_customer c
on c.customer_code = s.customer_code
join fact_gross_price g
on g.fiscal_year = s.fiscal_year and
g.product_code = s.product_code
where c.customer = "Atliq Exclusive"
group by month , year
order by gross_sales_amount desc
```



month	year	gross_sales_amount
November	2020	20464999.10
October	2020	13218636.20
December	2020	12944659.65
January	2021	12399392.98
September	2020	12353509.79
May	2021	12150225.01
March	2021	12144061.25
July	2021	12092346.32
February	2021	10129735.57
June	2021	9824521.01
November	2019	7522892.56
April	2021	7311199.95
August	2021	7178707.59
October	2019	5135002.35

# INSIGHT



- The report highlights gross sales amounts for "Atliq Exclusive" across different months, aiding in the identification of low and high-performing periods. March 2020 shows notably low sales likely due to pandemic-related factors, while November typically exhibits the highest sales, likely influenced by festive season demand like Diwali.
- As lockdown measures ease, sales gradually increase, reflecting a correlation between easing restrictions and improved consumer spending behavior.



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



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

```
with quarter as (  
  select sold_quantity, (case  
    when month(date) in (9,10,11) then "Q1"  
    when month(date) in (12,1,2) then "Q2"  
    when month(date) in (3,4,5) then "Q3"  
    when month(date) in (6,7,8) then "Q4" END ) AS Quarter  
  from fact_sales_monthly  
  where fiscal_year = 2020)  
select Quarter, sum(sold_quantity) as total_sold_quantity  
from quarter  
group by Quarter  
order by total_sold_quantity desc
```



Quarter	total_sold_quantity
Q1	7005619
Q2	6649642
Q4	5042541
Q3	2075087



# INSIGHT



- Atliq Hardware fiscal year starts in September and ends in august.
- The analysis reveals that the first quarter (Q1) of 2020 recorded the highest total\_sold\_quantity, likely due to holiday months like September, October, and November, which experience increased consumer activity.
- In contrast, the third quarter (Q3) registered the lowest total sold quantity, suggesting a dip in sales during this period compared to other quarters.





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



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```
with gross_sales as
(
SELECT c.channel as channel , round(sum(g.gross_price* s.sold_quantity)/1000000,2) as gross_sales_mln
FROM fact_sales_monthly s
join dim_customer c
on c.customer_code = s.customer_code
join fact_gross_price g
on g.fiscal_year = s.fiscal_year and
g.product_code = s.product_code
group by c.channel
)
select channel, gross_sales_mln,
round(gross_sales_mln/sum(gross_sales_mln) over()*100,2) as percentage
from gross_sales
order by percentage desc
```

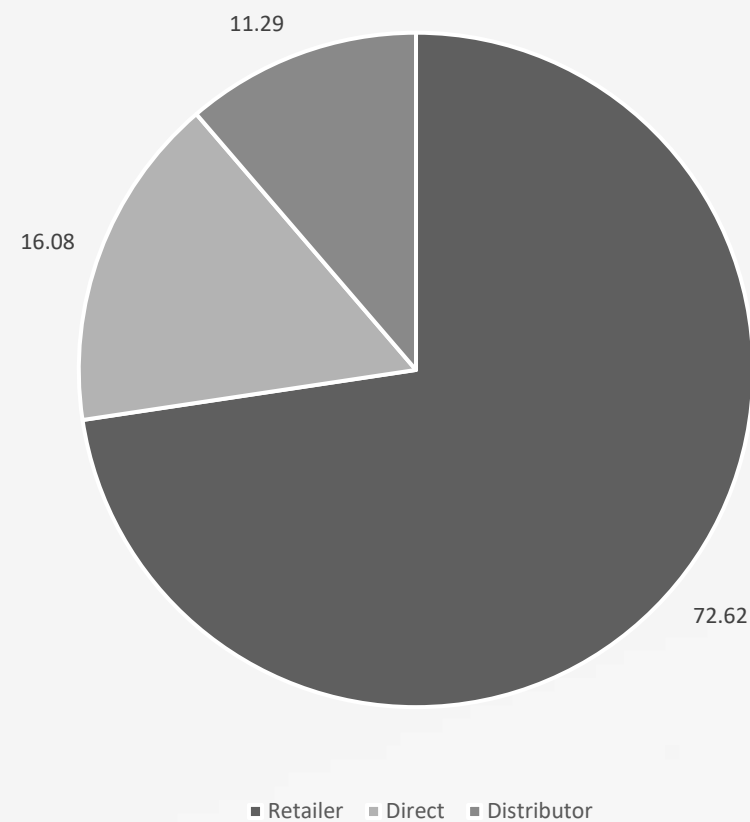


channel	gross_sales_mln	percentage
Retailer	1598.16	72.62
Direct	353.96	16.08
Distributor	248.47	11.29





# INSIGHT



- Among the three channels, distributors had the lowest contribution, with retailers accounting for 72.62%, direct sales for 16.08%, and distributors for 11.29% of the total sales. Understanding these variations is essential for optimizing channel strategies and maximizing overall sales performance.

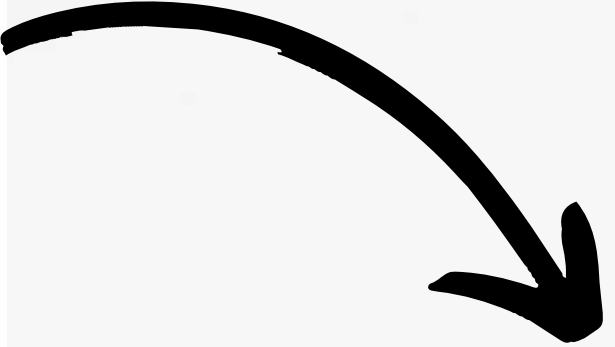


Get the Top 3 products in each division that have a high total\_sold\_quantity in the fiscal\_year 2021? The final output contains these fields, division, product\_code, product ,total\_sold\_quantity ,rank\_order



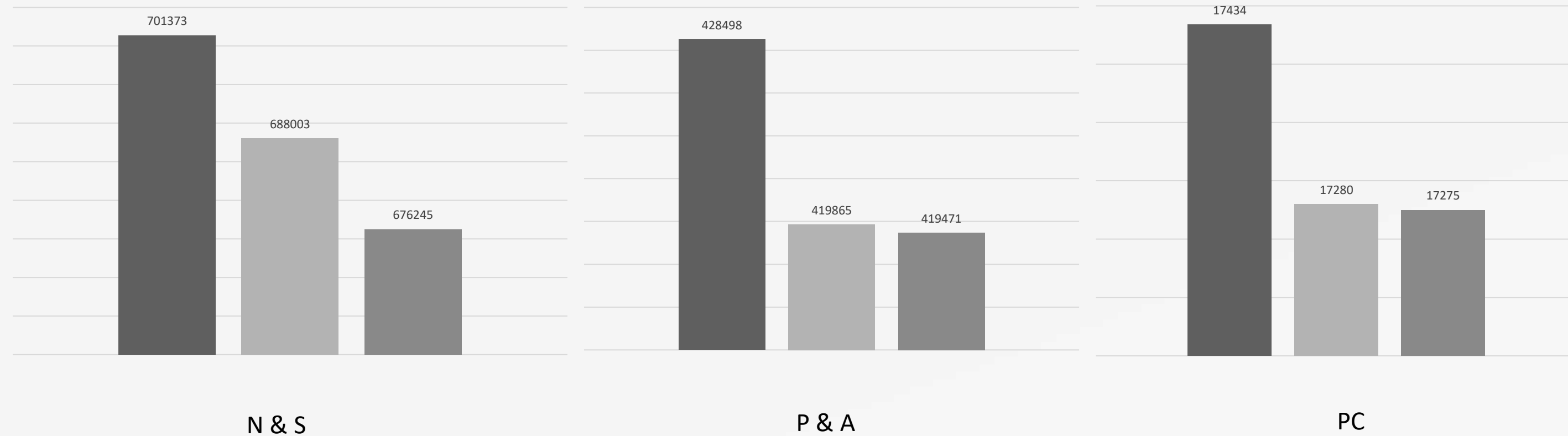
Get the Top 3 products in each division that have a high total\_sold\_quantity in the fiscal\_year 2021? The final output contains these fields, division, product\_code, product ,total\_sold\_quantity ,rank\_order

```
with total as
) (SELECT p.division as division, p.product_code as product_code,
  p.product as product , sum(s.sold_quantity) as total_sold_quantity
FROM fact_sales_monthly s
join dim_product p
on p.product_code = s.product_code
where s.fiscal_year = 2021
group by p.division , p.product_code, p.product
order by total_sold_quantity desc),
) top as (select division, product_code, product, total_sold_quantity,
rank()over(partition by division order by total_sold_quantity desc) as rank_order
from total)
select *
from top
where rank_order <=3
```



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

# INSIGHT



- Analysis reveals the top 3 products in each division with the highest total\_sold\_quantity in the fiscal year 2021. In the N & S division, "AQ Pen Drive 2 IN 1," "AQ Pen Drive DRC," and "AQ Pen Drive DRC" were the top-selling products.
- Similarly, within the P & A division, "AQ Gamers Ms," "AQ Maxima Ms," and "AQ Maxima Ms" emerged as the top-selling products based on total\_sold\_quantity.
- Additionally, in the PC division, "AQ Digit," "AQ Velocity," and "AQ Digit" were identified as the top-selling products. Understanding the performance of these products within their respective divisions is crucial for optimizing inventory management and marketing strategies.



**THANK YOU  
FOR  
WATCHING**

