



CODEBASICS RESUME PROJECT CHALLENGE

# **CONSUMER GOODS ANALYTICS**

PRESENTED BY-  
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# AD HOC REQUEST 1



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

## SQL QUERY



Limit to 100 rows

```
1 #Provide the list of markets in which customer "Atliq Exclusive" operates its business in the APAC region.
2 • select distinct(market) as list_of_market
3 from dim_customer
4 where customer= 'Atliq Exclusive';
5
```

## OUTPUT

	list_of_market
▶	India
	Indonesia
	Japan
	Philiphines
	South Korea
	Australia
	Newzealand
	Bangladesh
	France
	Germany
	Italy
	Netherlands
	Norway

# AD HOC REQUEST 2



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

## SQL QUERY

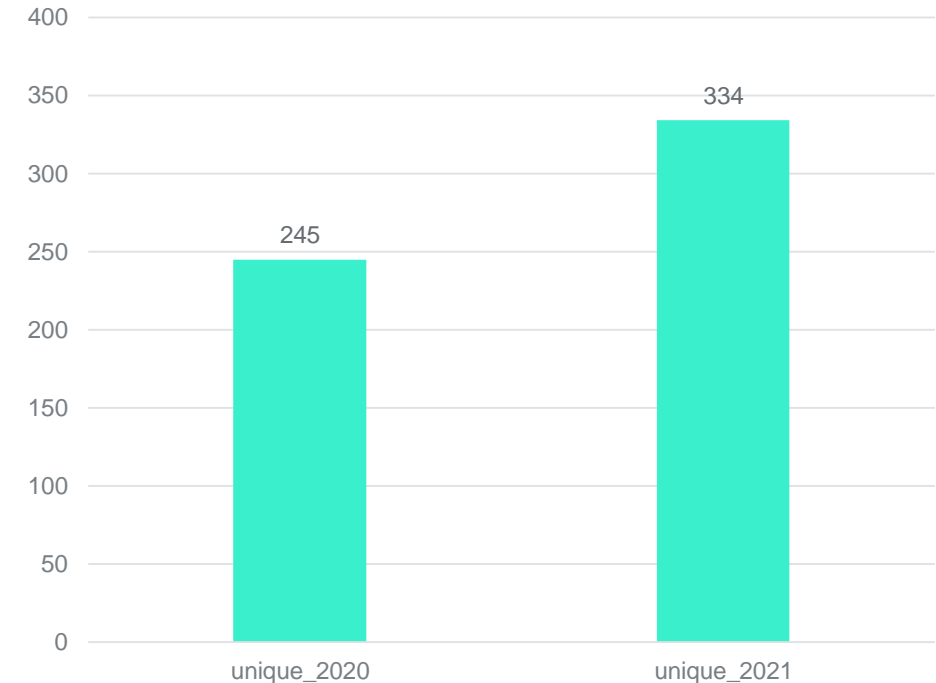
```
#What is the percentage of unique product increase in 2021 vs. 2020?
```

```
with A as(  
  select count(distinct product_code) as unique_2020  
  from fact_sales_monthly  
  where fiscal_year=2020  
,  
  B as (  
    select count(distinct product_code) as unique_2021  
    from fact_sales_monthly  
    where fiscal_year=2021)  
select A.unique_2020 , B.unique_2021, ((B.unique_2021- A.unique_2020)*100/B.unique_2021) as pct_change  
from A,B;
```

## OUTPUT

	unique_2020	unique_2021	pct_change
▶	245	334	26.6467

## VISUAL



# AD HOC REQUEST 3



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

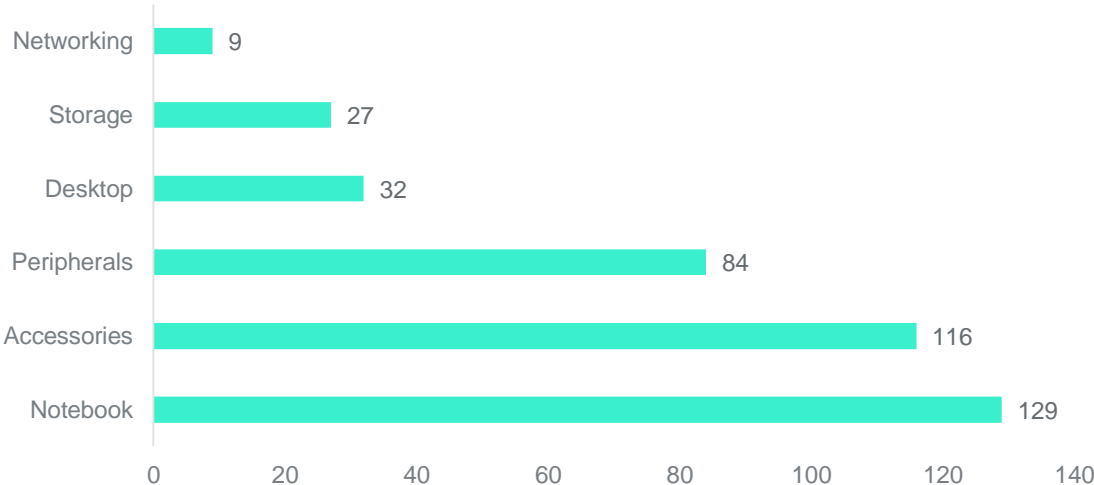
## SQL QUERY

```
#Provide a report with all the unique product counts for each segment and sort them in descending order of product counts.
select segment, count(distinct product_code) as cnt
from dim_product
group by segment
order by cnt desc;
```

## OUTPUT

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

## VISUAL



# AD HOC REQUEST 4



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

## SQL QUERY

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

```
with A as
```

```
(select p.segment, count(distinct s.product_code) as unique2020
```

```
from dim_product p
```

```
join fact_sales_monthly s
```

```
using(product_code)
```

```
where fiscal_year=2020
```

```
group by p.segment),
```

```
B as
```

```
(select p.segment, count(distinct s.product_code) as unique2021
```

```
from dim_product p
```

```
join fact_sales_monthly s
```

```
using(product_code)
```

```
where fiscal_year=2021
```

```
group by p.segment)
```

```
select A.segment, unique2020, unique2021, abs(unique2021-unique2020) as difference
```

```
from A
```

```
join B
```

```
using(segment)
```

```
order by difference desc;
```

## OUTPUT

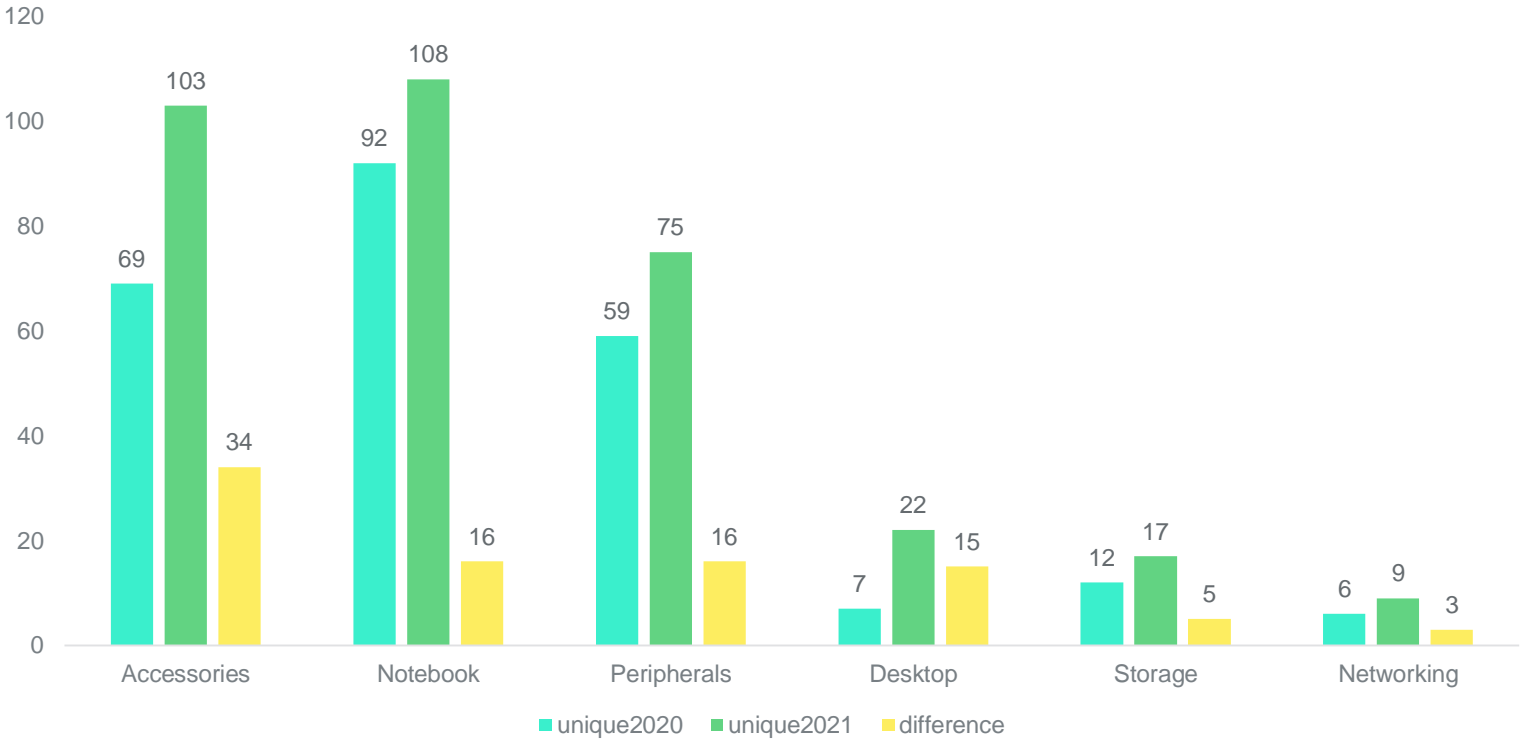
segment	unique2020	unique2021	difference
Accessories	69	103	34
Notebook	92	108	16
Peripherals	59	75	16
Desktop	7	22	15
Storage	12	17	5
Networking	6	9	3

# AD HOC REQUEST 4



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

## VISUAL



# AD HOC REQUEST 5



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

## SQL QUERY

```
#Get the products that have the highest and lowest manufacturing costs.  
select product,manufacturing_cost  
from fact_manufacturing_cost m  
join dim_product p  
using(product_code)  
where m.manufacturing_cost =(select max(manufacturing_cost) from fact_manufacturing_cost)  
or m.manufacturing_cost =(select min(manufacturing_cost) from fact_manufacturing_cost)  
order by manufacturing_cost desc;
```

## OUTPUT

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

# AD HOC 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..

## SQL QUERY

```
select c.customer_code,customer,pre.pre_invoice_discount_pct
from fact_pre_invoice_deductions pre
join dim_customer c
using(customer_code)
where fiscal_year=2021 and market="India" and pre_invoice_discount_pct>(select avg(pre_invoice_discount_pct) from fact_pre_invoice_deductions)
order by pre.pre_invoice_discount_pct desc
limit 5;
```

## OUTPUT

customer_code	customer	pre_invoice_discount_pct
90002009	Flipkart	0.3083
90002006	Viveks	0.3038
90002003	Ezone	0.3028
90002002	Croma	0.3025
90002016	Amazon	0.2933

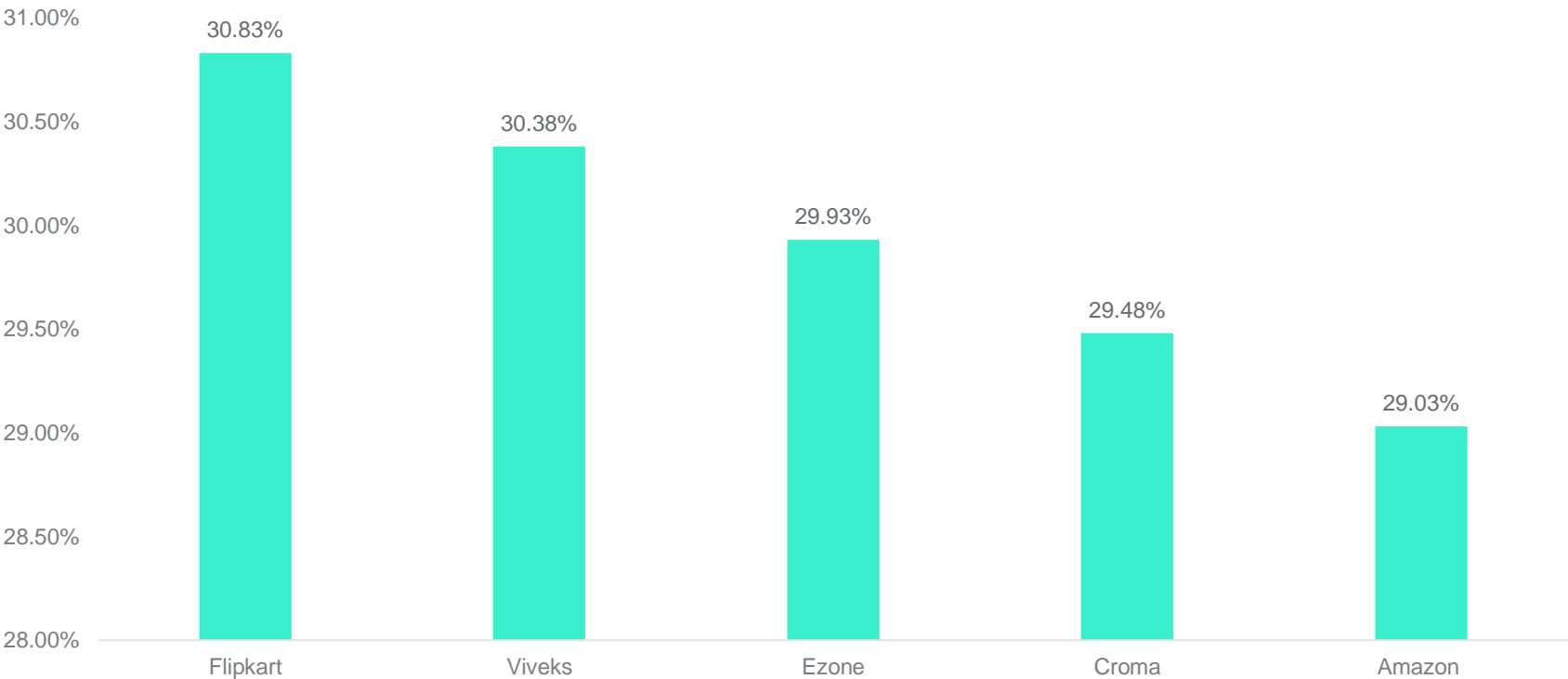


# AD HOC REQUEST 6



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..

## VISUAL



# AD HOC 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

## SQL QUERY

```
#Get the complete report of the Gross sales amount for the customer
select monthname(s.date) as month, s.fiscal_year,
sum(round(gr.gross_price*s.sold_quantity,2)) as gross_total
from fact_sales_monthly s
join fact_gross_price gr
using(fiscal_year,product_code)
join dim_customer c
using(customer_code)
where c.customer="Atliq Exclusive"
group by month, fiscal_year
order by fiscal_year;
```

month	fiscal_year	gross_total
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

## OUTPUT

month	fiscal_year	gross_total
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

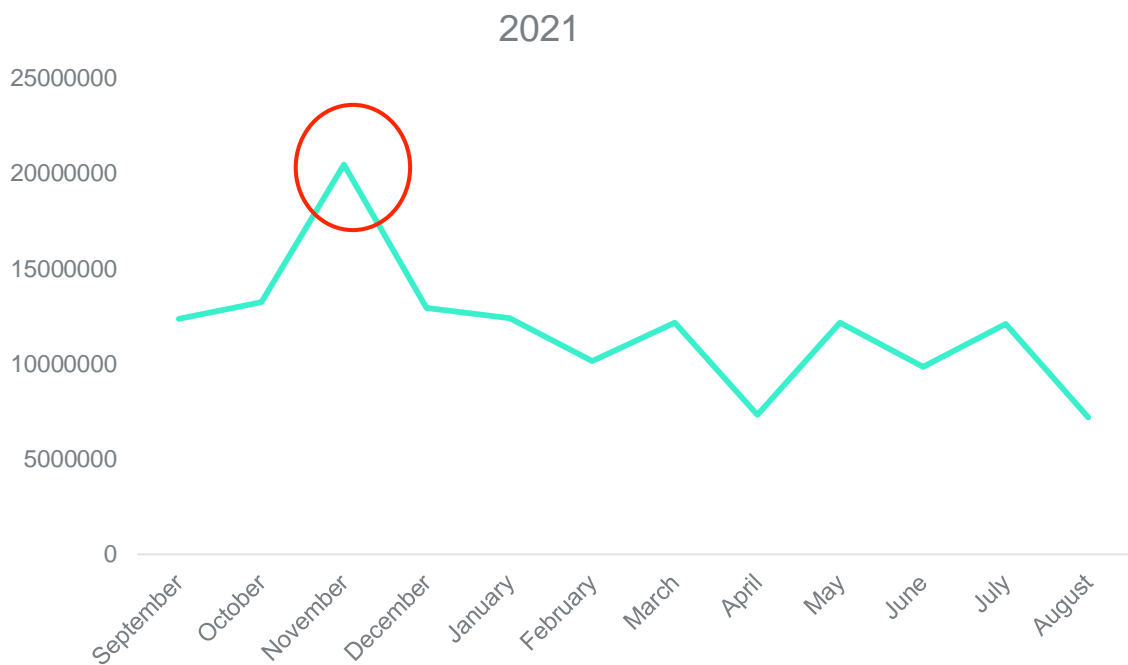
# AD HOC REQUEST 7



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

## VISUAL



# AD HOC REQUEST 8



In which quarter of 2020, got the maximum total\_sold\_quantity

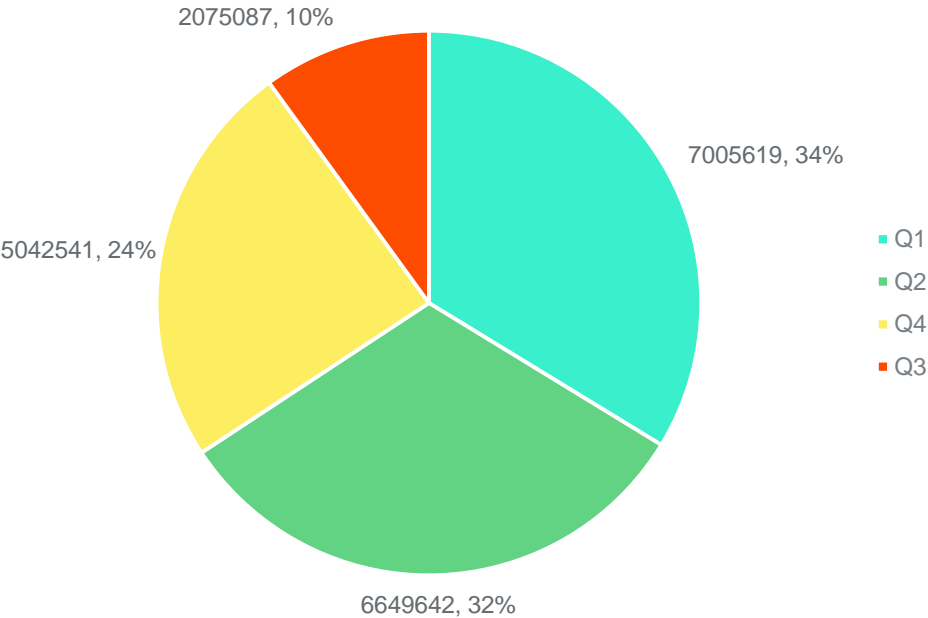
## SQL QUERY

```
#In which quarter of 2020, got the maximum total_sold_quantity
select
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 Qtr, sum(sold_quantity) as total_quantity_sold
from fact_sales_monthly
where fiscal_year=2020
group by Qtr
order by total_quantity_sold desc;
```

## OUTPUT

Qtr	total_quantity_sold
Q1	7005619
Q2	6649642
Q4	5042541
Q3	2075087

## VISUAL



# AD HOC REQUEST 8



In which quarter of 2020, got the maximum total\_sold\_quantity

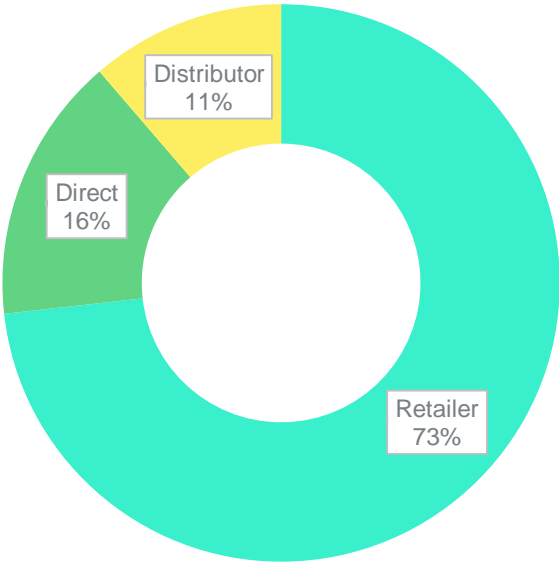
## SQL QUERY

```
#Which channel helped to bring more gross sales in the fiscal year 2021 and the percentage of contribution?
> with A as(
  select c.channel,round(sum(gr.gross_price*s.sold_quantity)/1000000,2)as gross_total_mln
  from fact_sales_monthly s
  join fact_gross_price gr
  using(fiscal_year,product_code)
  join dim_customer c
  using(customer_code)
  where fiscal_year=2021
  group by c.channel
  order by gross_total_mln desc
~ )
select *, round(gross_total_mln*100/sum(gross_total_mln) over(),2) as pct
from A;
```

## OUTPUT

channel	gross_total_mln	pct
Retailer	1219.08	73.23
Direct	257.53	15.47
Distributor	188.03	11.30

## VISUAL



# AD HOC REQUEST 9



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

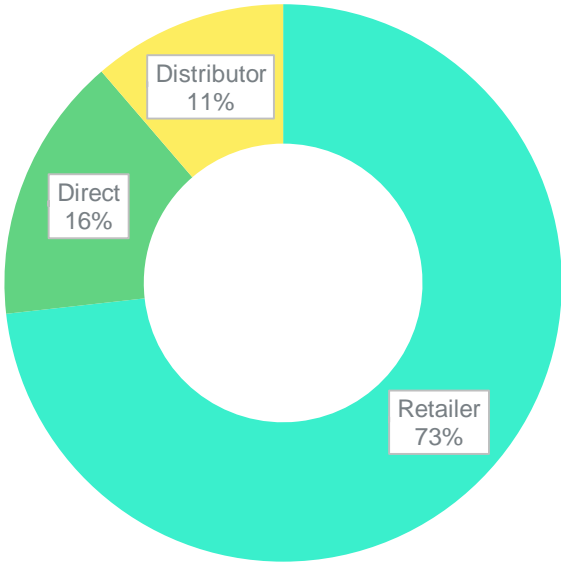
## SQL QUERY

```
#Which channel helped to bring more gross sales in the fiscal year 2021 and the percentage of contribution?
> with A as(
  select c.channel,round(sum(gr.gross_price*s.sold_quantity)/1000000,2)as gross_total_mln
  from fact_sales_monthly s
  join fact_gross_price gr
  using(fiscal_year,product_code)
  join dim_customer c
  using(customer_code)
  where fiscal_year=2021
  group by c.channel
  order by gross_total_mln desc
)
select *, round(gross_total_mln*100/sum(gross_total_mln) over()),2) as pct
from A;
```

## OUTPUT

channel	gross_total_mln	pct
Retailer	1219.08	73.23
Direct	257.53	15.47
Distributor	188.03	11.30

## VISUAL



# AD HOC REQUEST 10



Get the Top 3 products in each division that have a high total\_sold\_quantity in the fiscal\_year 2021

## SQL QUERY

```
#Get the Top 3 products in each division that have a high total_sold_quantity in the fiscal_year 2021
```

```
with A as(
select p.division,s.product_code,p.product,sum(s.sold_quantity) as total_sold_quantity,
row_number() over (partition by division order by sum(sold_quantity) desc) as rnk
from fact_sales_monthly s
join dim_product p
using(product_code)
where fiscal_year=2021
group by p.division,s.product_code,p.product)
select * from A
where rnk<=3
```

## OUTPUT

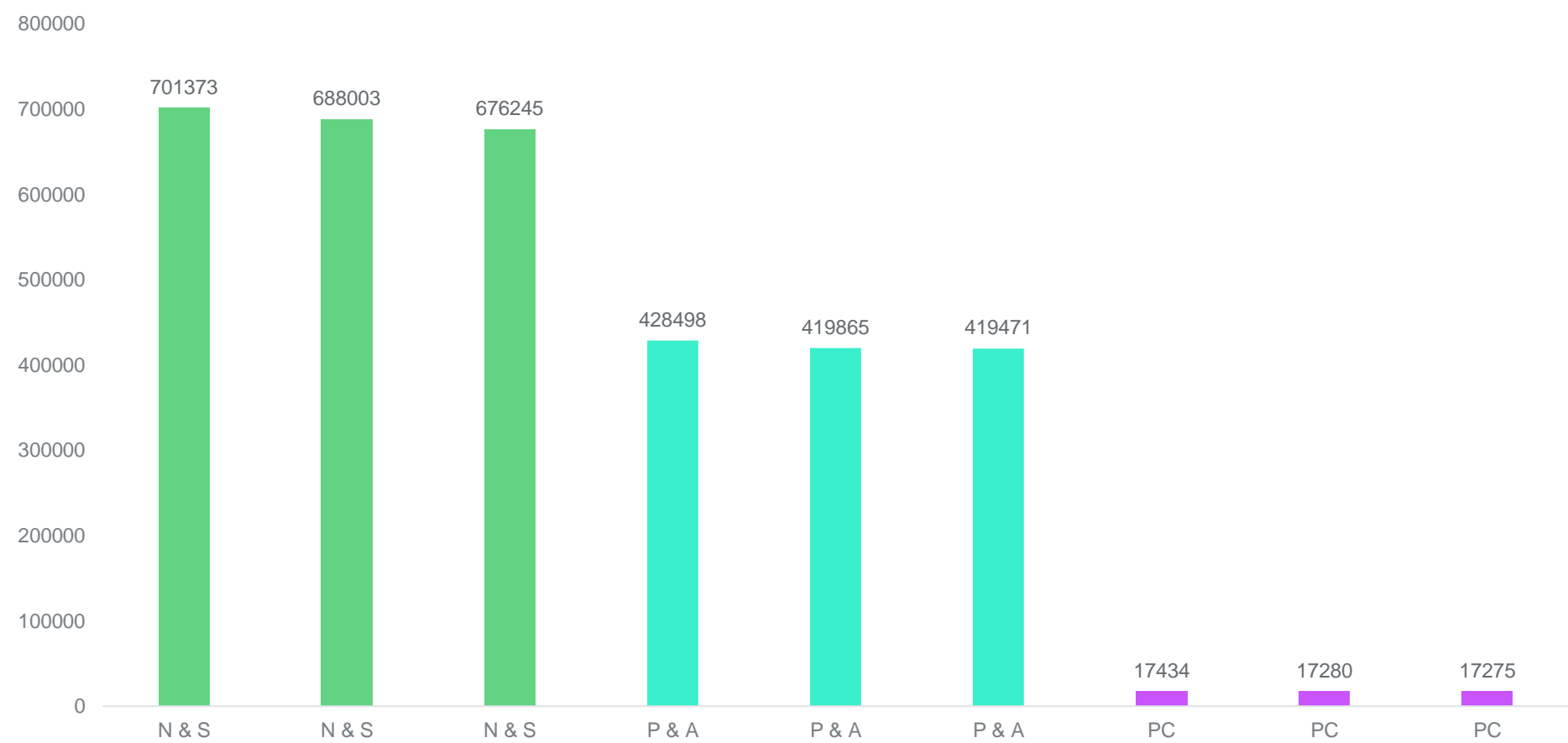
division	product_code	product	total_sold_quantity	rnk
N & S	A6720160103	AQ Pen Drive 2 IN 1	701373	1
N & S	A6818160202	AQ Pen Drive DRC	688003	2
N & S	A6819160203	AQ Pen Drive DRC	676245	3
P & A	A2319150302	AQ Gamers Ms	428498	1
P & A	A2520150501	AQ Maxima Ms	419865	2
P & A	A2520150504	AQ Maxima Ms	419471	3
PC	A4218110202	AQ Digit	17434	1
PC	A4319110306	AQ Velocity	17280	2
PC	A4218110208	AQ Digit	17275	3

# AD HOC REQUEST 10



Get the Top 3 products in each division that have a high total\_sold\_quantity in the fiscal\_year 2021

## VISUAL





# INSIGHTS GENERATED

- Our unique product experienced a remarkable **36.33%** increase in sales during the fiscal year 2021 compared to the previous year.
- The **top-selling** product in our portfolio is the **Notebook**, while the **Networking product** line shows the **lowest sales figures**.
- Among our product manufacturing costs, **Desktops have the highest expenditure**, whereas **Mouse** production costs are the **lowest**.
- During FY2021, **Flipkart** made the highest customer contribution with an impressive **30.83%**, whereas **Amazon's** customer contribution was at its lowest, with a figure of **29.33%**.
- During the **lowest sales** period, which was in March 2020, we achieved sales of **2.8 million** units. However, in November 2021, we experienced our **highest sales** contribution with a record of **32.2 million** units sold.



**THANK YOU**