

The background features three vertical stripes on the left side in shades of pink, blue, and beige. On the right side, there is a decorative pattern of small, light pink dots arranged in a grid-like fashion, with some dots missing to create a sparse effect.

ATLIQ HARDWARES

CONSUMER GOODS

-SALES INSIGTS

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INTRODUCTION

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.

OBJECTIVE

- 1. Develop SQL queries to address specific business questions and challenges.**
- 2. Analyze data effectively to derive actionable insights and recommendations.**

Request 1

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

```
select Distinct(market)
from dim_customer
where customer = 'Atliq Exclusive'
and region = 'APAC';
```

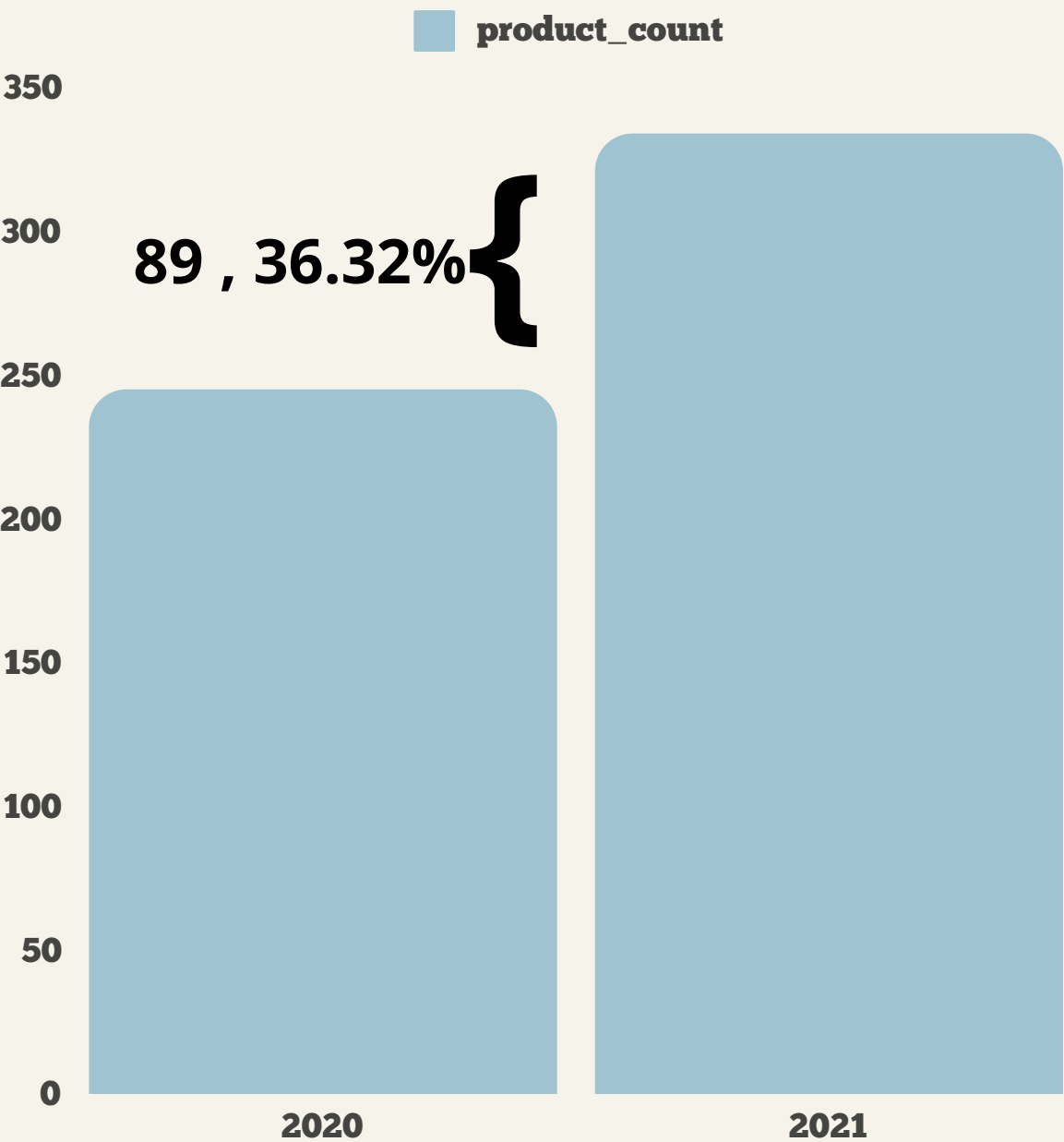
	market	
	India	
	Indonesia	
	Japan	
	Philiphines	
	South Korea	
	Australia	
	Newzealand	
	Bangladesh	

Request 2

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

unique_products_2020	unique_products_2021	percentage_chg
245	334	36.3265

```
with cte1 as (  
  select count(distinct product_code) as unique_products_2020  
  from fact_sales_monthly  
  where fiscal_year = 2020  
)  
cte2 as (  
  select count(distinct product_code) as unique_products_2021  
  from fact_sales_monthly  
  where fiscal_year = 2021  
)  
select *,  
  (cte2.unique_products_2021-  
  cte1.unique_products_2020)*100/cte1.unique_products_2020 as  
  percentage_chg  
from cte1,cte2;
```

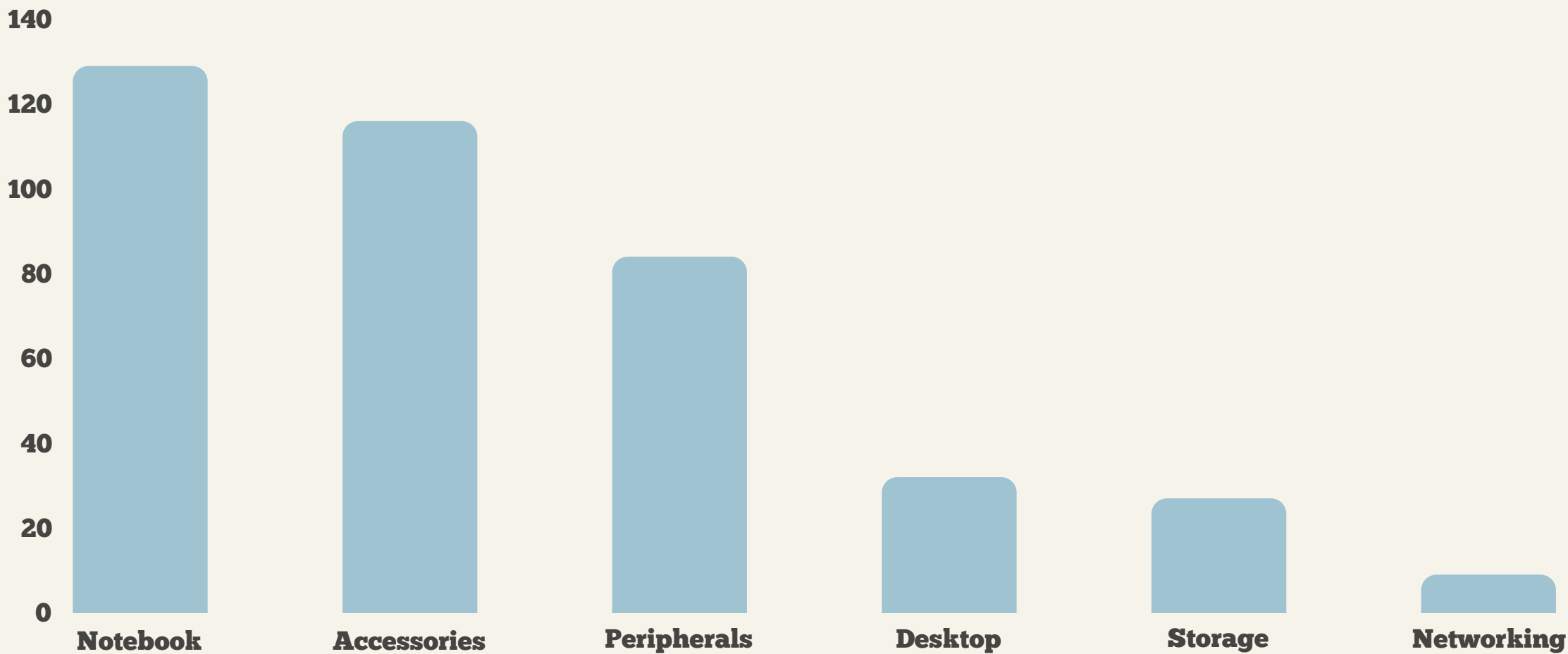


Request 3

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 product_count
from dim_product
group by segment
order by product_count desc;
```

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

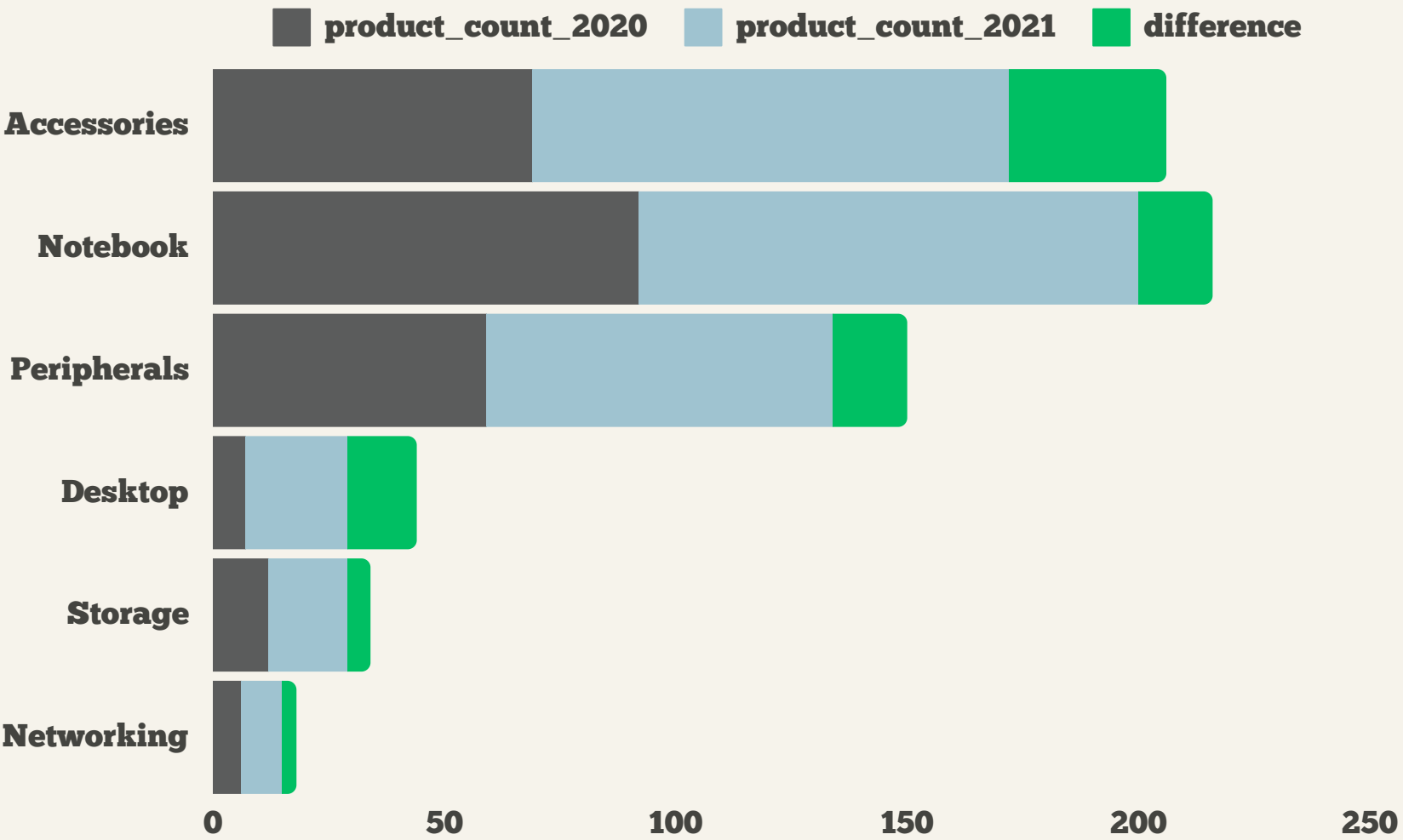


Request 4

Which segment had the most increase in unique products in 2021 vs 2020?

```
with cte1 as (  
  select dp.segment,count(distinct dp.product_code) as product_count_2020  
  from fact_sales_monthly fs  
  join dim_product dp  
  on dp.product_code = fs.product_code  
  where fs.fiscal_year = 2020  
  group by dp.segment  
,  
cte2 as (  
  select dp.segment,count(distinct dp.product_code) as product_count_2021  
  from fact_sales_monthly fs  
  join dim_product dp  
  on dp.product_code = fs.product_code  
  where fs.fiscal_year = 2021  
  group by dp.segment  
)  
select cte1.segment,  
  cte1.product_count_2020,  
  cte2.product_count_2021,  
  (cte2.product_count_2021 - cte1.product_count_2020) as difference  
from cte1  
join cte2  
using (segment)  
order by difference desc;
```

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



Request 5

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

```
select product_code,  
       product,manufacturing_cost  
from fact_manufacturing_cost fm  
join dim_product dp  
using (product_code)  
where manufacturing_cost = (  
    select max(manufacturing_cost)  
    from fact_manufacturing_cost )  
or manufacturing_cost = (  
    select min(manufacturing_cost)  
    from fact_manufacturing_cost );
```



'Personal Desktop'
'AQ HOME Allin1 Gen 2'



'Mouse'
'AQ Master wired x1 Ms"AQ

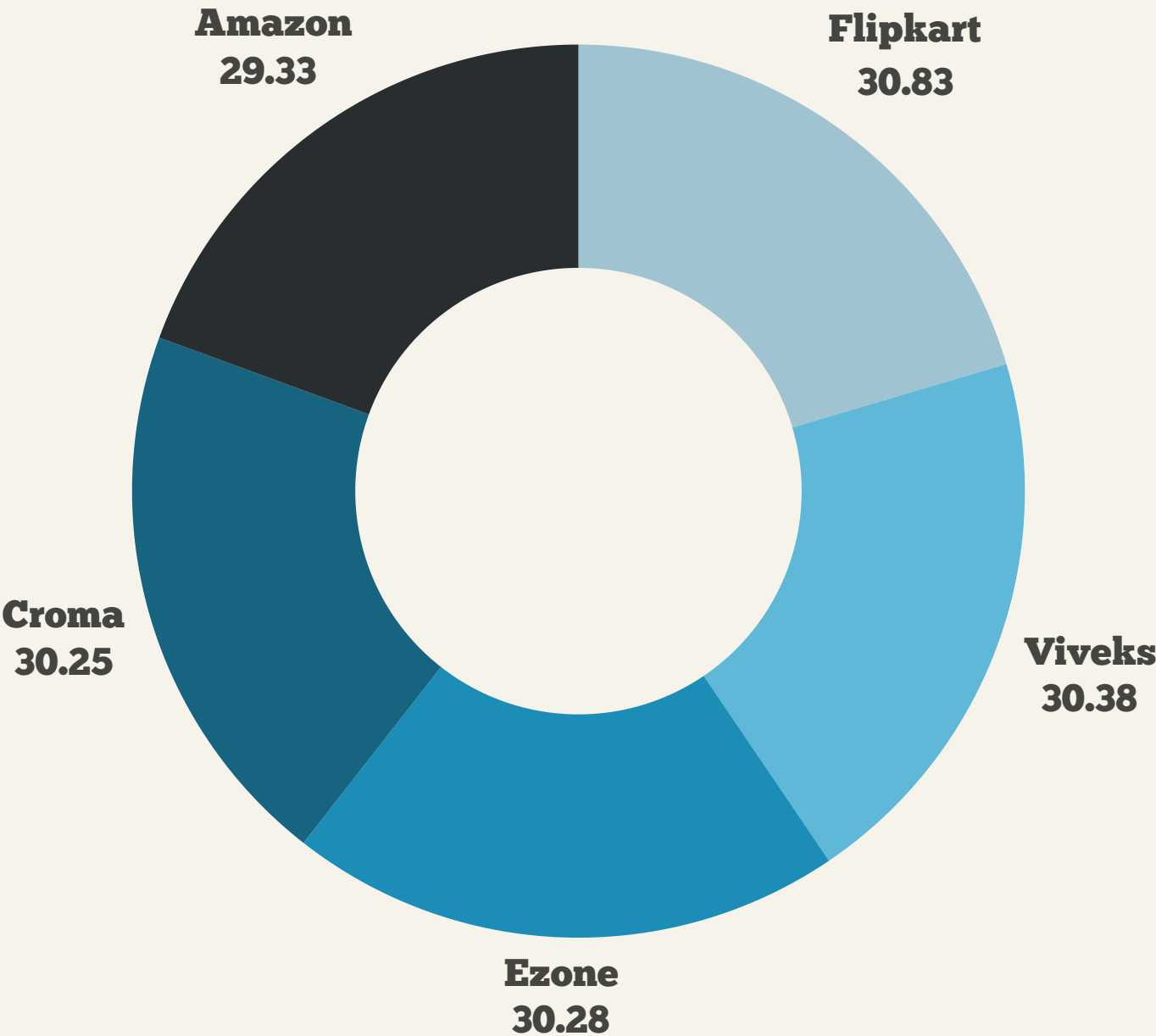
product_co...	product	manuf...
A2118150101	AQ Master wired x1 Ms	0.8920
A6120110206	AQ HOME Allin1 Gen 2	240.5364

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

```
select fpr.customer_code,
dc.customer,
round(avg(fpr.pre_invoice_discount_pct),3) as average_discount_percentage
FROM fact_pre_invoice_deductions fpr
join dim_customer dc
using (customer_code)
where fiscal_year = 2021 and market = 'India'
group by fpr.customer_code,dc.customer
order by average_discount_percentage desc
limit 5;
```

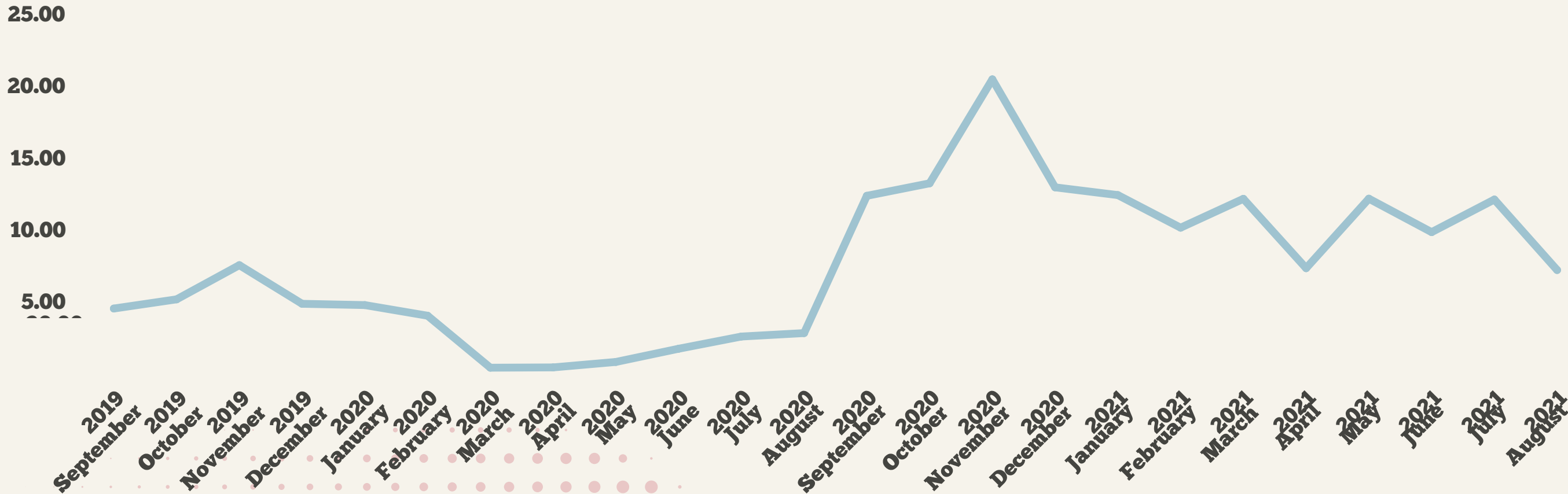
customer_code	customer	average_d
90002009	Flipkart	30.83
90002006	Viveks	30.38
90002003	Ezone	30.28
90002002	Croma	30.25
90002016	Amazon	29.33



Request 7

Get the complete report of the Gross sales amount for the customer "Atliq Exclusive" for each month

```
select monthname(fs.date) as month, Year(fs.date) as year,
       round(sum(fs.sold_quantity * fg.gross_price)/1000000,2) as gross_sales_mln
from fact_sales_monthly fs
join fact_gross_price fg
using (product_code,fiscal_year)
join dim_customer dc
using (customer_code)
where dc.customer = 'Atliq Exclusive'
group by month,year
order by year;
```



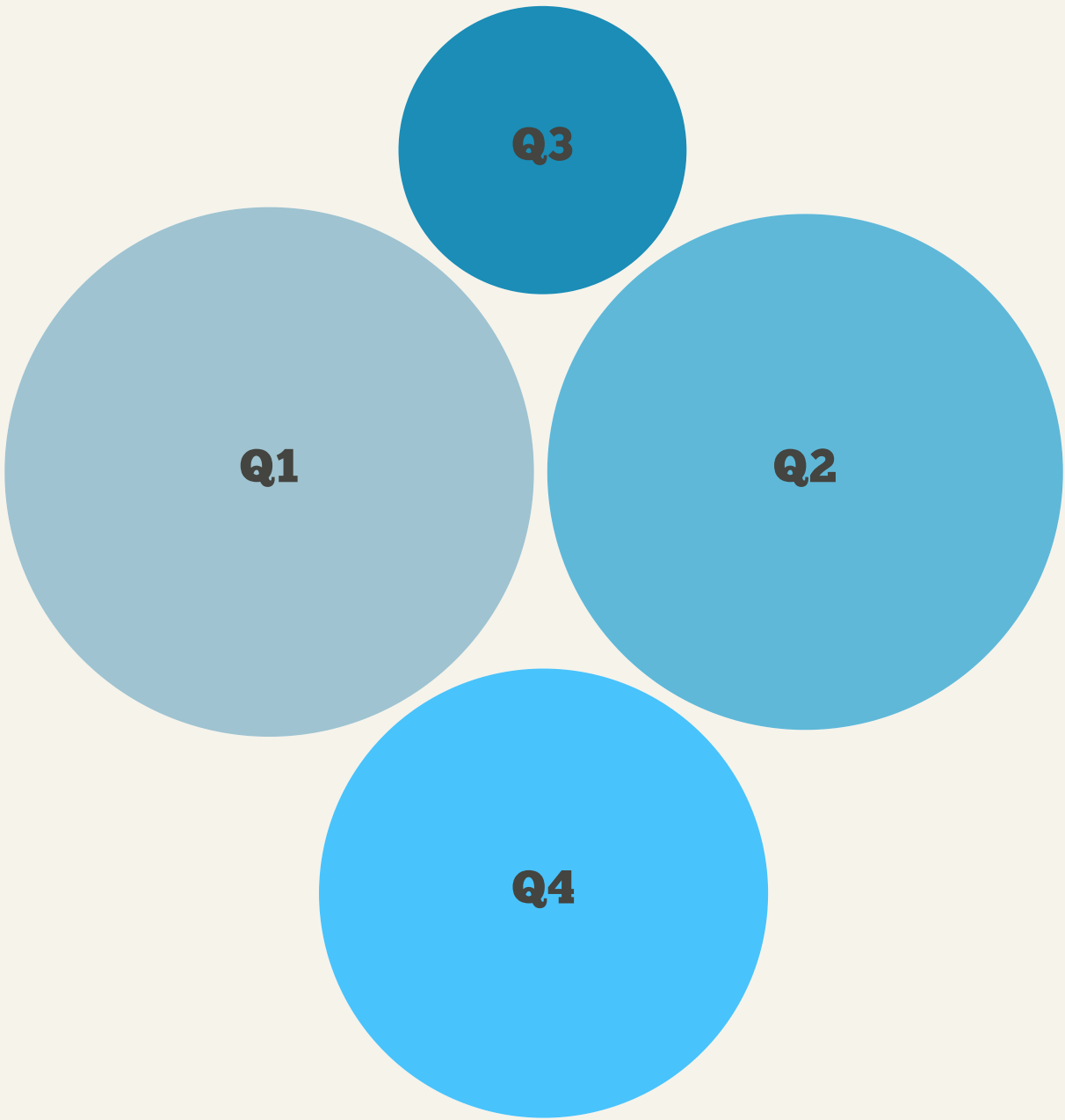
month	year	gross...
September	2019	4.50
October	2019	5.14
November	2019	7.52
December	2019	4.83
January	2020	4.74
February	2020	4.00
March	2020	0.38
April	2020	0.40
May	2020	0.78
June	2020	1.70
July	2020	2.55
August	2020	2.79
September	2020	12.35
October	2020	13.22
November	2020	20.46
December	2020	12.94
January	2021	12.40
February	2021	10.13
March	2021	12.14
April	2021	7.31
May	2021	12.15
June	2021	9.82
July	2021	12.09
August	2021	7.18

Request 8

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'
else 'Q4'
end as quarter,
sum(sold_quantity) as total_sold_quantity
from fact_sales_monthly
where fiscal_year = 2020
group by quarter
order by total_sold_quantity desc;
```

quarter	total_sold_c
Q1	7005619
Q2	6649642
Q4	5042541
Q3	2075087

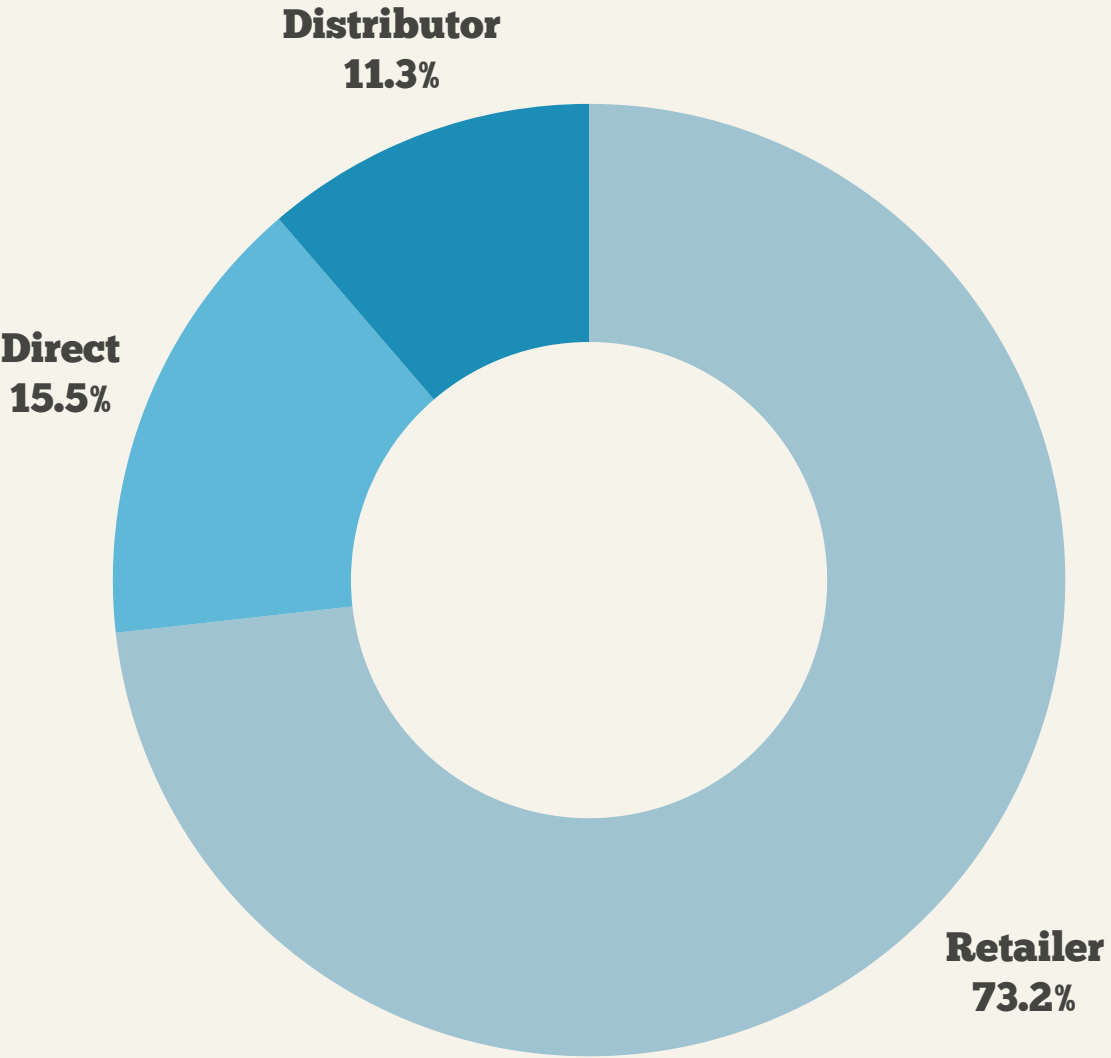


Request 9

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

```
with ctel as(
  select dc.channel,
    round(sum(fs.sold_quantity * fg.gross_price)/1000000,2) as
gross_sales_mln
  from fact_sales_monthly fs
  join fact_gross_price fg
  using (product_code,fiscal_year)
  join dim_customer dc
  using (customer_code)
  where fs.fiscal_year = 2021
  group by channel
)
select *,
  round(gross_sales_mln*100/sum(gross_sales_mln) over(),2) as pct
from ctel
order by gross_sales_mln desc;
```

channel	gross...	pct
Retailer	1219.08	73.23
Direct	257.53	15.47
Distributor	188.03	11.30

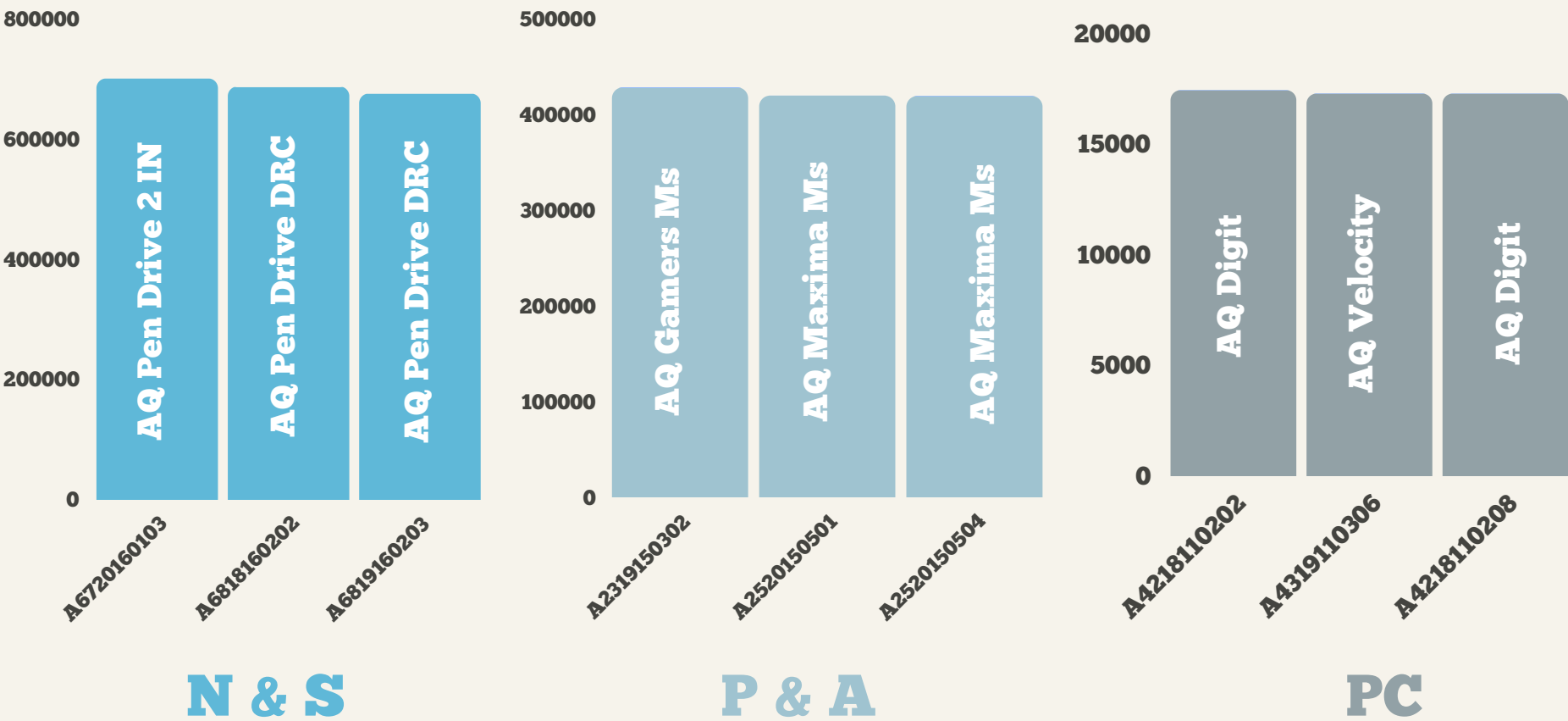


Request 10

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

```
with cte1 as (  
  select dp.division,fs.product_code,  
    dp.product,sum(fs.sold_quantity) as total_sold_quantity  
  from fact_sales_monthly fs  
  join dim_product dp  
  using (product_code)  
  where fiscal_year = 2021  
  group by dp.division, fs.product_code, dp.product  
)  
,  
cte2 as (  
  select *,  
    Dense_rank() over(partition by division order by  
total_sold_quantity desc) as rank_order  
  from cte1  
)  
select * from cte2  
where rank_order <= 3
```

division	product_code	product	total_sold_quan...	rank_o
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



The background features three vertical bars on the left: a wide pink bar, a medium blue bar, and a narrow beige bar. In the top right corner, there is a grid of small pink dots. A similar, but less dense, pattern of dots is located at the bottom right, partially behind the signature.

**THANKS FOR
WATCHING**

- THARUN V