



AtliQ Hardwares

Ad-Hoc Insights

Domain: Consumer Goods | **Function:** Executive Management

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

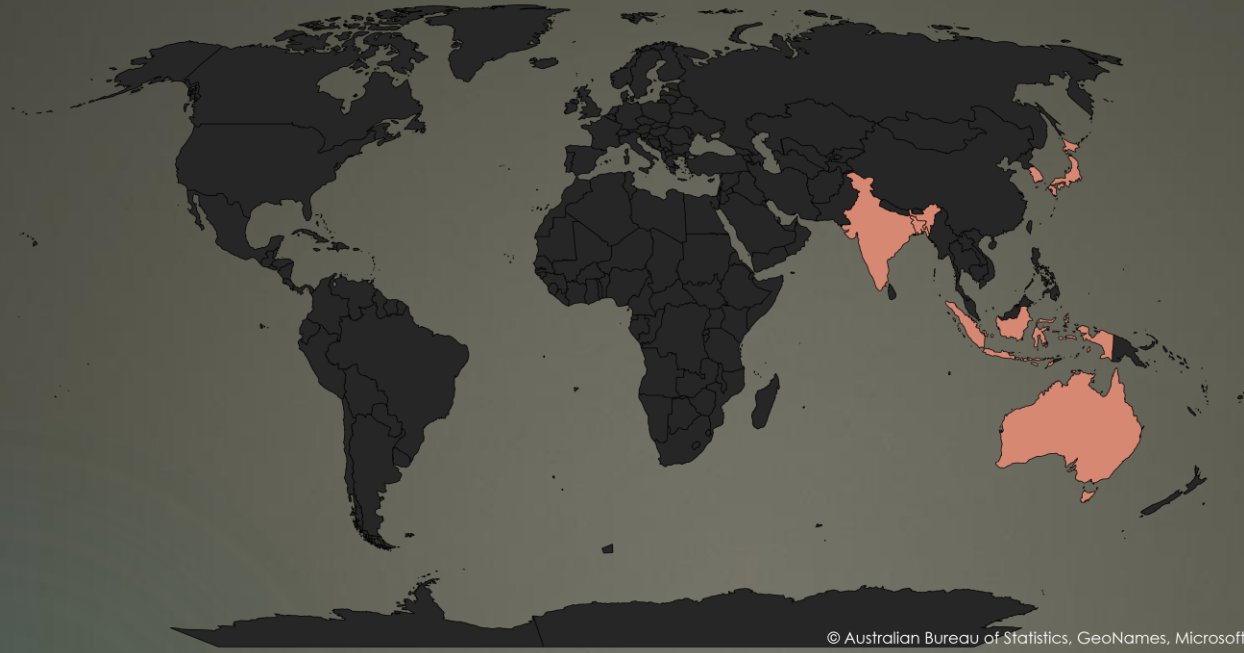


Query:

```
SELECT DISTINCT market FROM  
gdb023.dim_customer  
WHERE customer = 'AtliQ Exclusive'  
AND region = 'APAC';
```

Output:

Market
India
Indonesia
Japan
Philippines
South Korea
Australia
Newzealand
Bangladesh



Insights:

In APAC region, AtliQ Exclusive operates its business in India, Indonesia, Japan, Phillipines, South Korea, Australia, New Zealand and Bangladesh.

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

Query:

```
WITH cte11 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

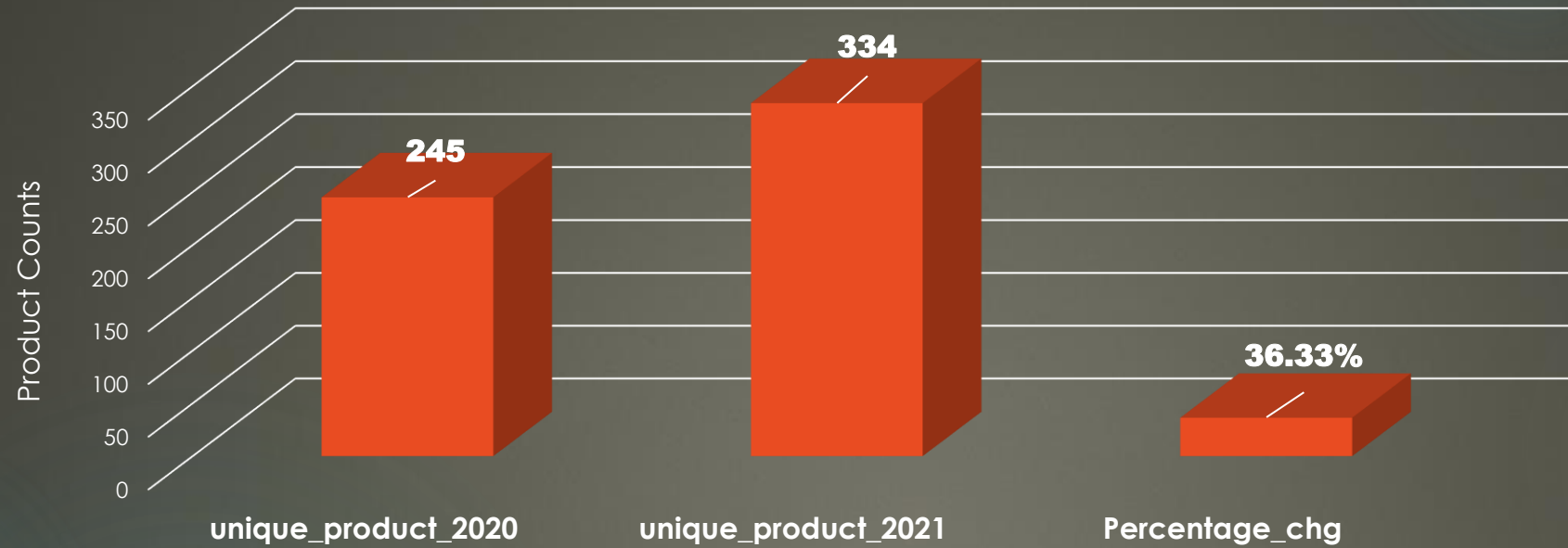
FROM fact_sales_monthly)

SELECT unique_product_2020, unique_product_2021,
CONCAT(ROUND((unique_product_2021 -
unique_product_2020)/ unique_product_2020 * 100,2),
"%" AS percentage_chg

FROM cte11
```

Output:

unique_product_2020	unique_product_2021	Percentage_chg
245	334	36.33%



Insights:

89 new products were added in 2021. So, percentage of unique product increase is 36.33%

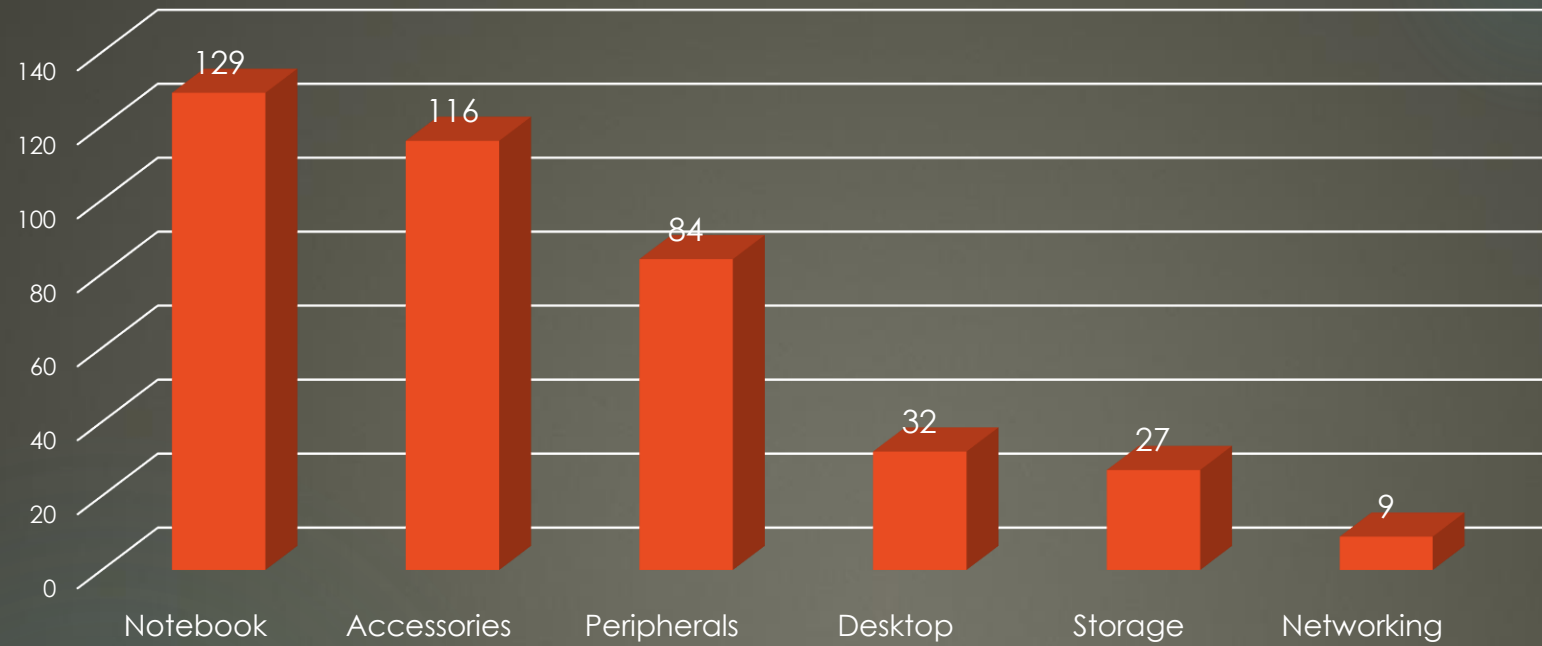
3. Provide a report with all the unique product counts for each segment and sort them in descending order of product counts.

Query:

```
SELECT segment, COUNT(DISTINCT (product_code)) AS  
product_count  
  
FROM dim_product  
  
GROUP BY segment  
  
ORDER BY COUNT(product_code) DESC;
```

Output:

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



Insights:

Notebook, Accessories and Peripherals are the top 3 segments.

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

Query:

```
WITH cte3 AS( select p.product, p.product_code, p.segment,
s.fiscal_year
FROM dim_product p
JOIN fact_sales_monthly s
ON p.product_code = s.product_code),

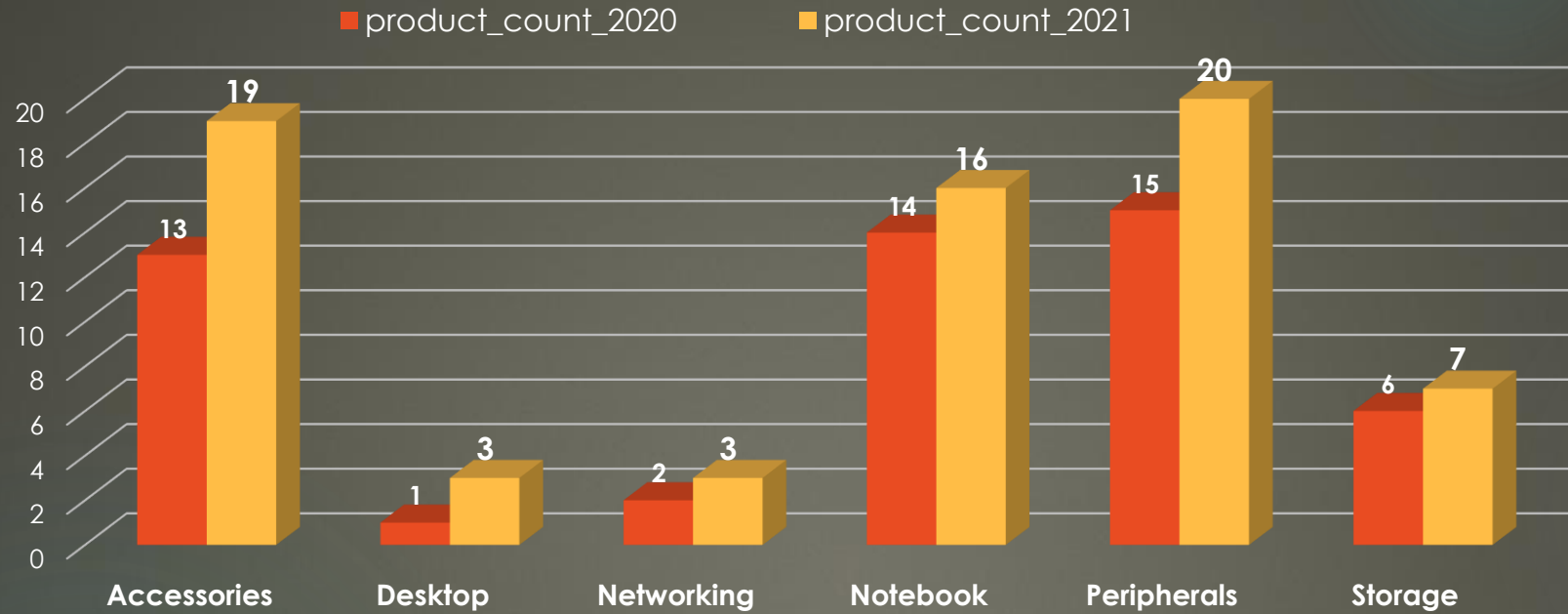
cte4 AS( select segment,
COUNT(DISTINCT
CASE
    WHEN cte3.fiscal_year = 2020 THEN cte3.product
END) AS product_count_2020,

COUNT(DISTINCT
CASE
    WHEN cte3.fiscal_year = 2021 THEN cte3.product
end) AS product_count_2021
FROM cte3
GROUP BY segment)

SELECT segment, product_count_2020, product_count_2021,
product_count_2021-product_count_2020 AS difference
FROM cte4;
```

Output:

segment	product_count_2020	product_count_2021	difference
Accessories	13	19	6
Desktop	1	3	2
Networking	2	3	1
Notebook	14	16	2
Peripherals	15	20	5
Storage	6	7	1



Insights:

Accessories segment had the most increase in unique products in 2021 vs 2020.

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

Query:

```
SELECT p.product_code, p.product,
mc.manufacturing_cost

FROM fact_manufacturing_cost mc

JOIN dim_product p

ON mc.product_code = p.product_code

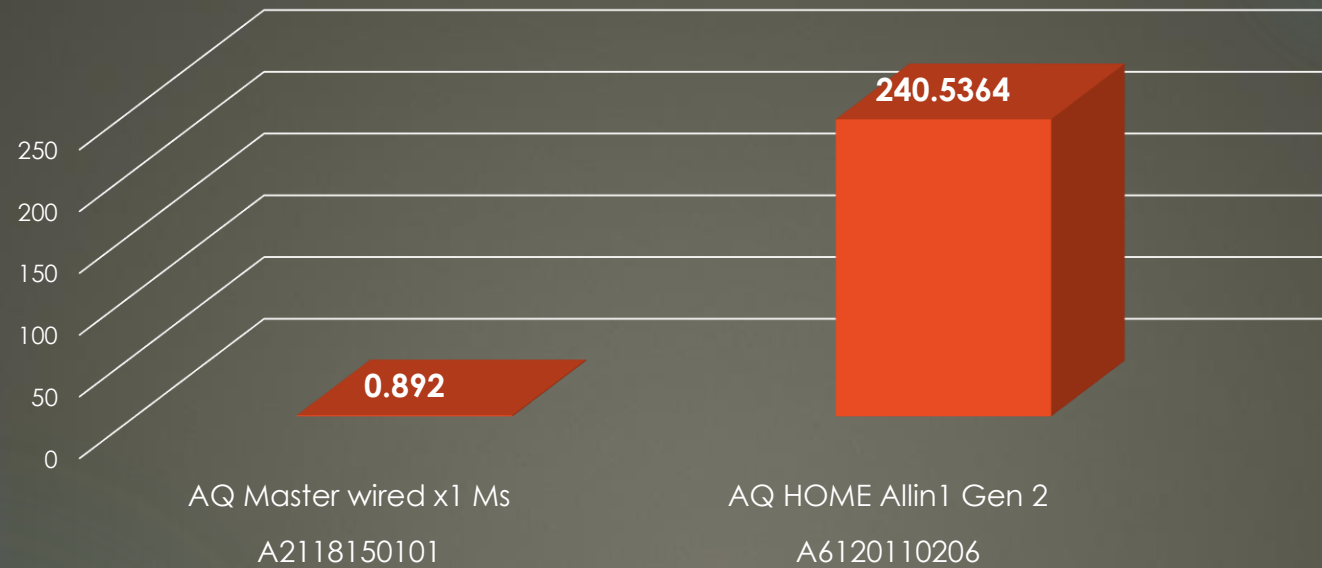
WHERE manufacturing_cost = (SELECT
MAX(manufacturing_cost)
FROM fact_manufacturing_cost)

OR manufacturing_cost = (SELECT
MIN(manufacturing_cost)

FROM fact_manufacturing_cost);
```

Output:

product_code	product	manufacturing_cost
A2118150101	AQ Master wired x1 Ms	0.892
A6120110206	AQ HOME Allin1 Gen 2	240.5364



Insights:

AQ HOME Allin1 Gen 2 has the highest manufacturing cost and AQ Master wired x1 Ms has the lowest manufacturing cost.

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.



Query:

```
WITH cte5 AS ( select c.customer_code, c.customer,
c.market, d.fiscal_year, d.pre_invoice_discount_pct

FROM dim_customer c

JOIN fact_pre_invoice_deductions d
ON c.customer_code = d.customer_code)

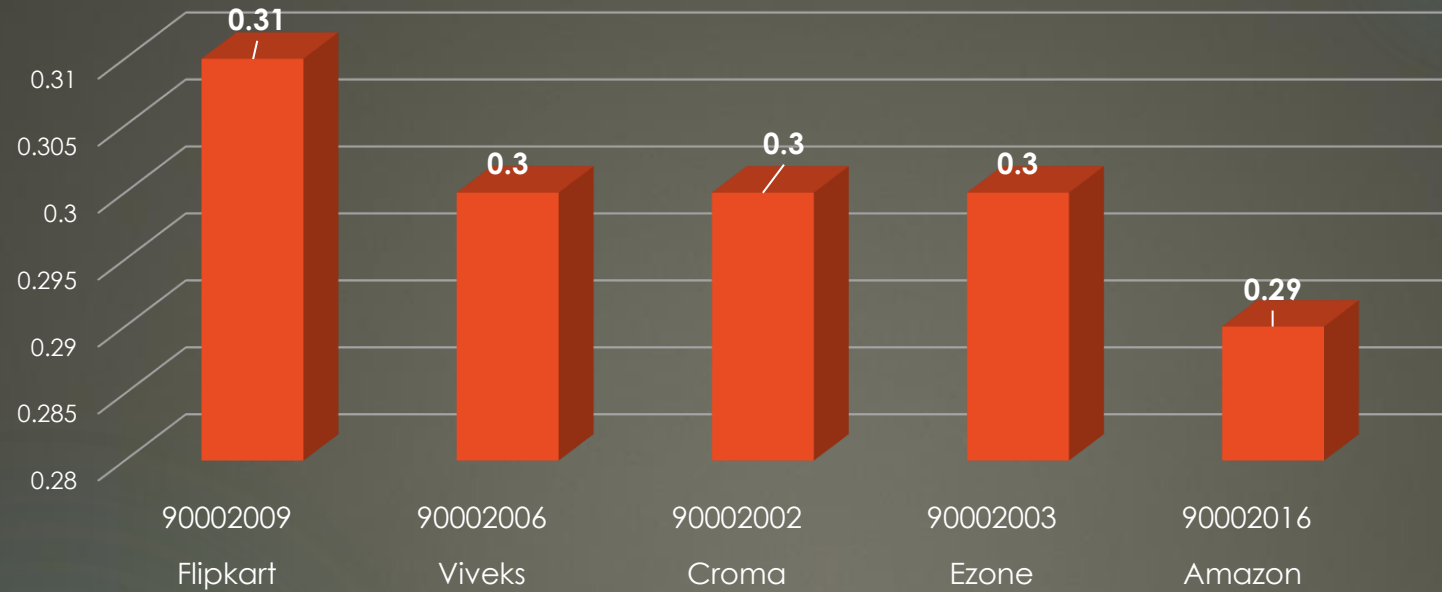
SELECT customer, customer_code,
ROUND(AVG(pre_invoice_discount_pct),2) AS
Average_discount_percentage

FROM cte5

WHERE market = "India" AND fiscal_year = "2021"
GROUP BY customer, customer_code
ORDER BY avg(pre_invoice_discount_pct) DESC
LIMIT 5;
```

Output:

customer	Cus tomer_code	Average_discount_percentage
Flipkart	90002009	0.31
Viveks	90002006	0.3
Ezone	90002003	0.3
Croma	90002002	0.3
Amazon	90002016	0.29



Insights:

The top 5 customers who received an average high pre_invoice_discount_pct for the fiscal year 2021 and in the Indian market were Flipkart, Viveks, Ezone, Croma, Amazon.

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.

Query:

```
SELECT MONTH(s.date) as Month,
YEAR(s.date) as Year,
SUM(g.gross_price * s.sold_quantity) AS
Gross_Sales_amount

FROM dim_customer c

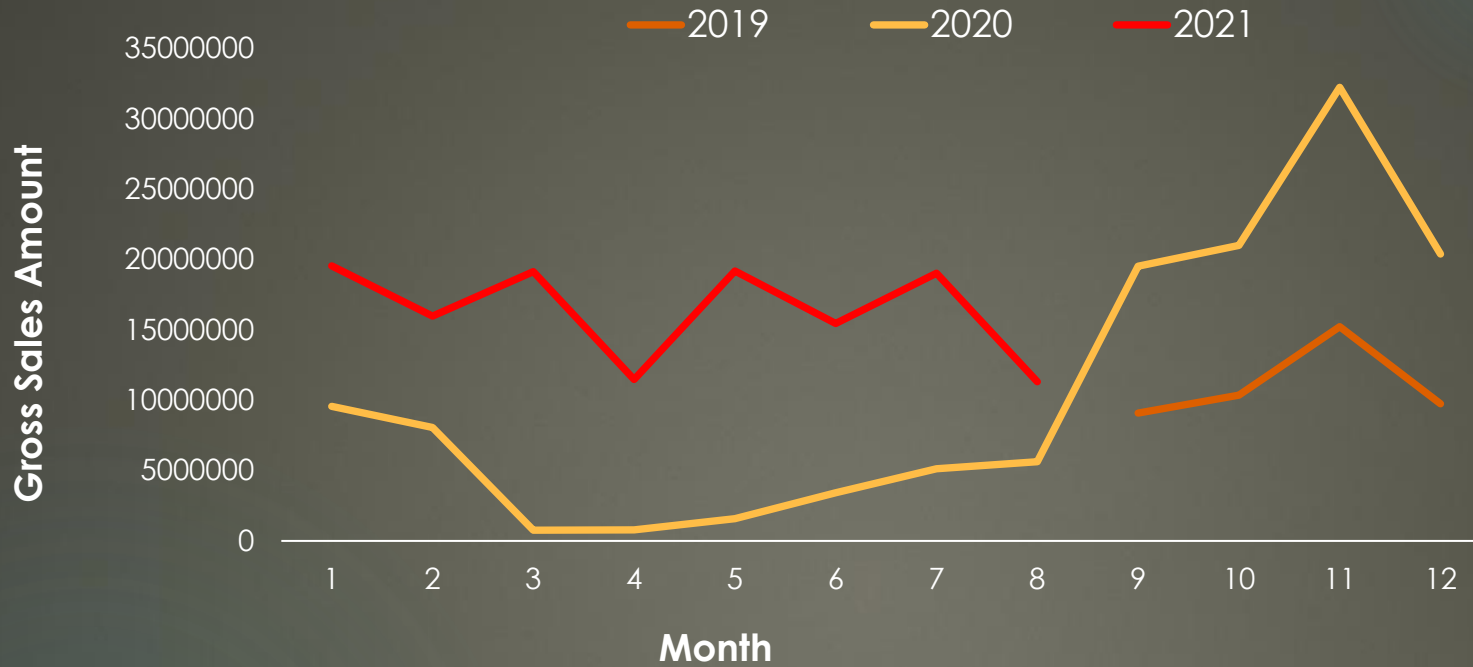
JOIN fact_sales_monthly s
ON c.customer_code = s.customer_code

JOIN fact_gross_price g
ON g.product_code = s.product_code

WHERE customer = "AtliQ Exclusive"
GROUP BY Month, Year
ORDER BY Month;
```

Output:

Month	Year	Gross_Sales_amount
1	2020	9584952
1	2021	19570702
2	2020	8083996
2	2021	15986604
3	2020	766976.5
3	2021	19149625
4	2020	800072
4	2021	11483530
5	2020	1586964
5	2021	19204309
6	2020	3429737
6	2021	15457580
7	2020	5151815
7	2021	19044969
8	2020	5638282
8	2021	11324548
9	2019	9092670
9	2020	19530271
10	2019	10378638
10	2020	21016218
11	2019	15231895
11	2020	32247290
12	2019	9755795
12	2020	20409063



Insights:

- In 2020, March was the least performing month and November was the highest performing month.
- Overall, April was the least performing month.

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

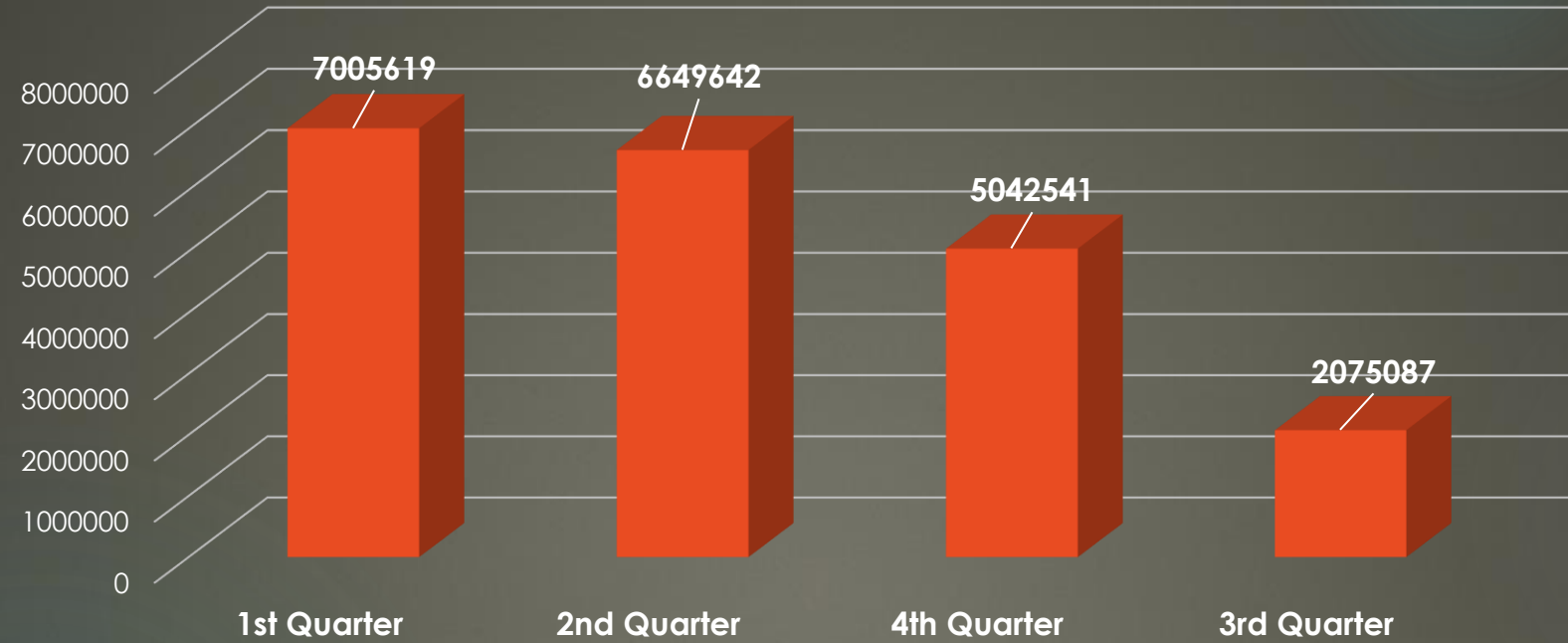
Query:

```
SELECT
CASE
    WHEN month(date) in (9,10,11) THEN "1st
    Quarter"
    WHEN month(date) in (12,1,2) THEN "2nd
    Quarter"
    WHEN month(date) in (3,4,5) THEN "3rd
    Quarter"
    WHEN month(date) in (6,7,8) THEN "4th
    Quarter"
END AS Quarter,
SUM(sold_quantity) as Total_quantity

FROM fact_sales_monthly
WHERE fiscal_year = "2020"
GROUP BY Quarter
ORDER BY SUM(sold_quantity) DESC;
```

Output:

Quarter	Total_quantity
1st Quarter	7005619
2nd Quarter	6649642
4th Quarter	5042541
3rd Quarter	2075087



Insights:

In 1st Quarter of 2020 (Sept, Oct, Nov) maximum products were sold.

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

Query:

```
WITH cte6 as(
  SELECT channel,
  ROUND(SUM(g.gross_price * s.sold_quantity)/1000000,2) AS
  Gross_sales_mln
  FROM dim_customer c

  JOIN fact_sales_monthly s
  ON c.customer_code = s.customer_code

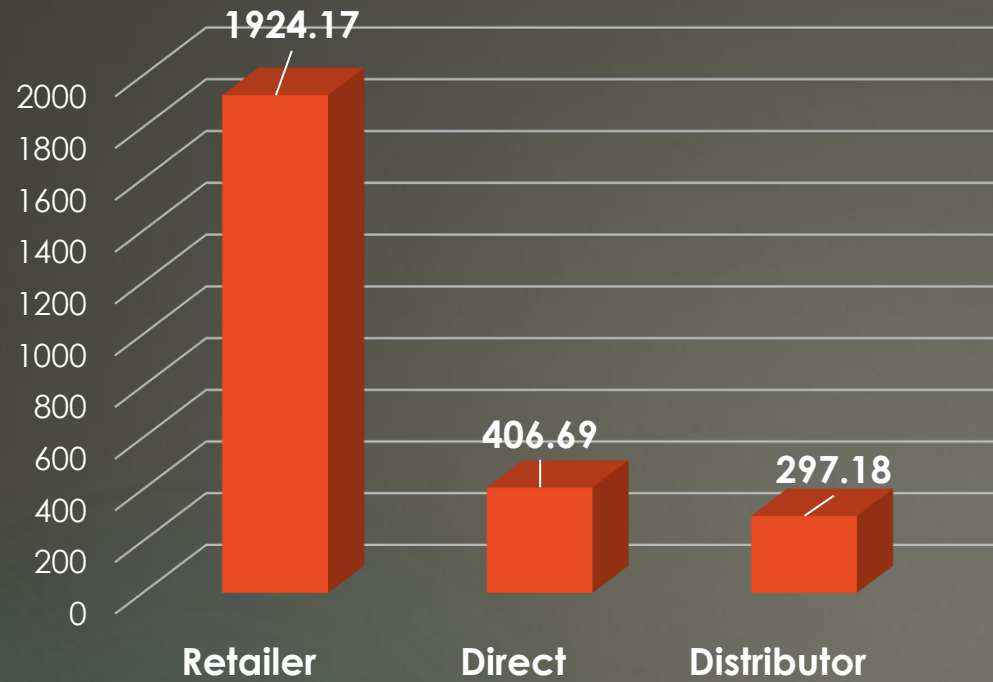
  JOIN fact_gross_price g
  ON g.product_code = s.product_code

  WHERE s.fiscal_year = "2021"
  GROUP BY channel
  ORDER BY Gross_sales_mln)

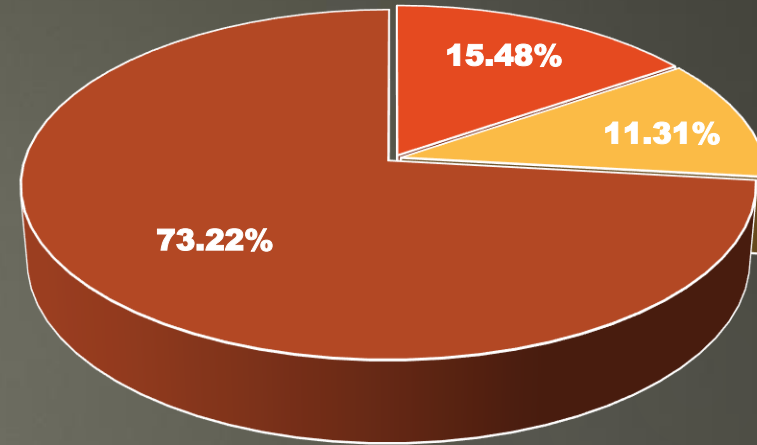
SELECT *,
(Gross_sales_mln * 100)/ SUM(Gross_sales_mln)
OVER() AS Percentage
FROM cte6;
```

Output:

channel	Gross_sales_mln	Percentage
Distributor	297.18	11.30805
Direct	406.69	15.47503
Retailer	1924.17	73.21692



■ Direct
 ■ Distributor
 ■ Retailer



Insights:

Retailer channel helped to bring more gross sales in the fiscal year 2021 which were about 73.22%.

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

Query:

```
WITH cte7 as( SELECT p.division, p.product,
p.product_code, sum(s.sold_quantity) AS
Total_sold_quantity

FROM dim_product p
JOIN fact_sales_monthly s

ON p.product_code = s.product_code

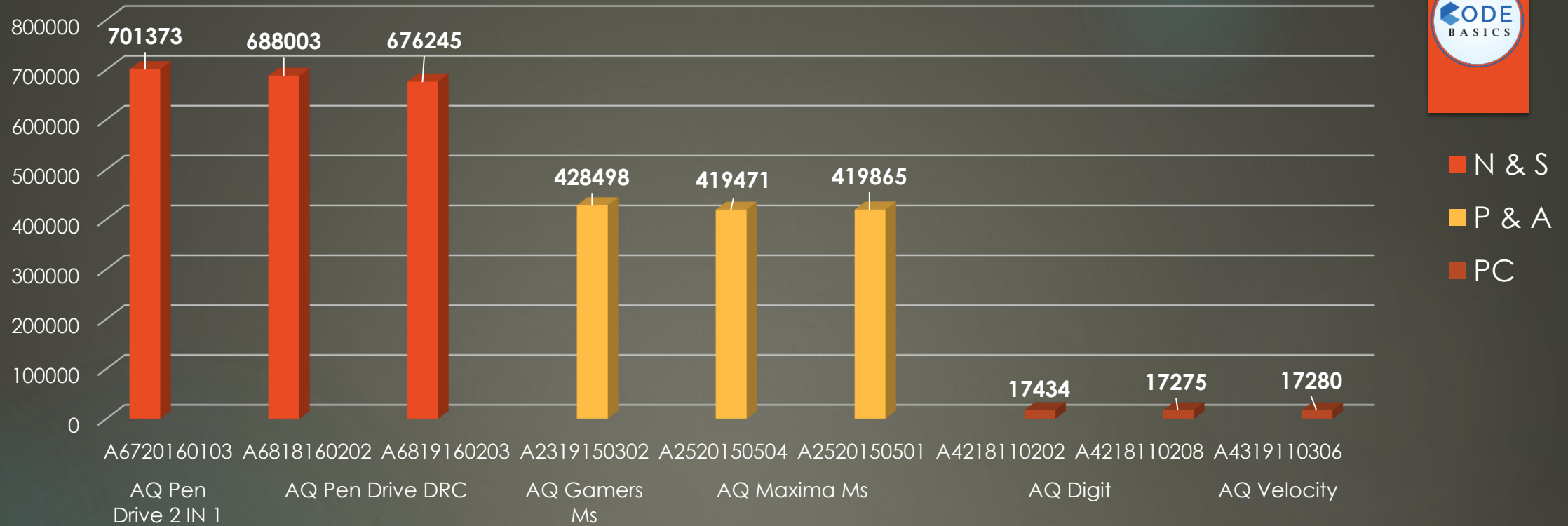
WHERE s.fiscal_year = "2021"
GROUP BY p.division,p.product,
p.product_code),

cte8 AS (SELECT *, dense_rank() over(
partition by division
ORDER BY Total_sold_quantity desc) AS
Rank_order
FROM cte7)

SELECT * from cte8
WHERE Rank_order <=3;
```

Output:

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



Insights:

Following are the highest sold products in the fiscal year 2021:

- IN & S division - AQ Pen Drive 2 in 1, AQ pen drive DRC.
- In P & A division, AQ Gamers Ms and AQ Maxima MS.
- In PC division, AQ Digit and AQ Velocity

Thank You!