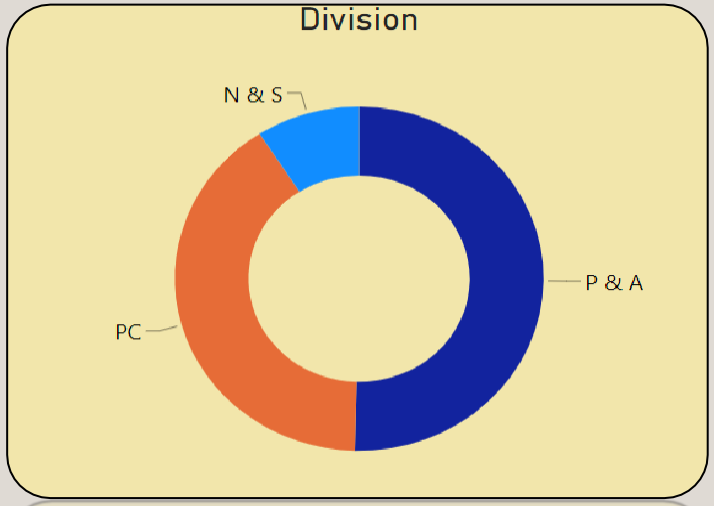
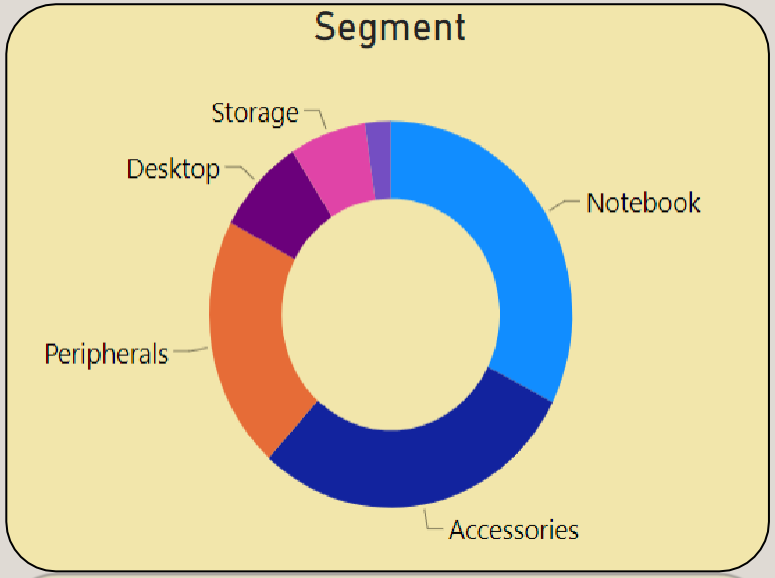
Consumer Goods Insights

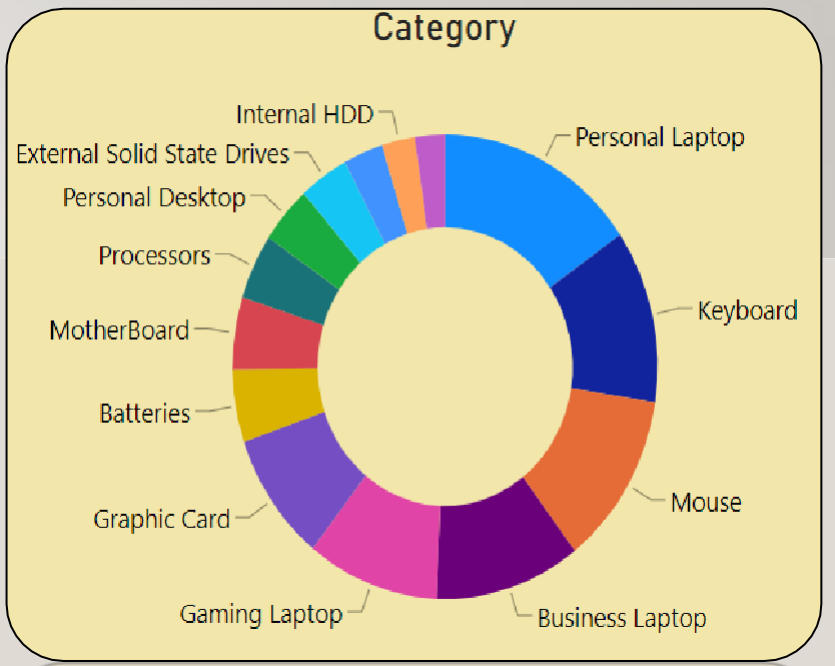
Tool Used:-

Introduction:-

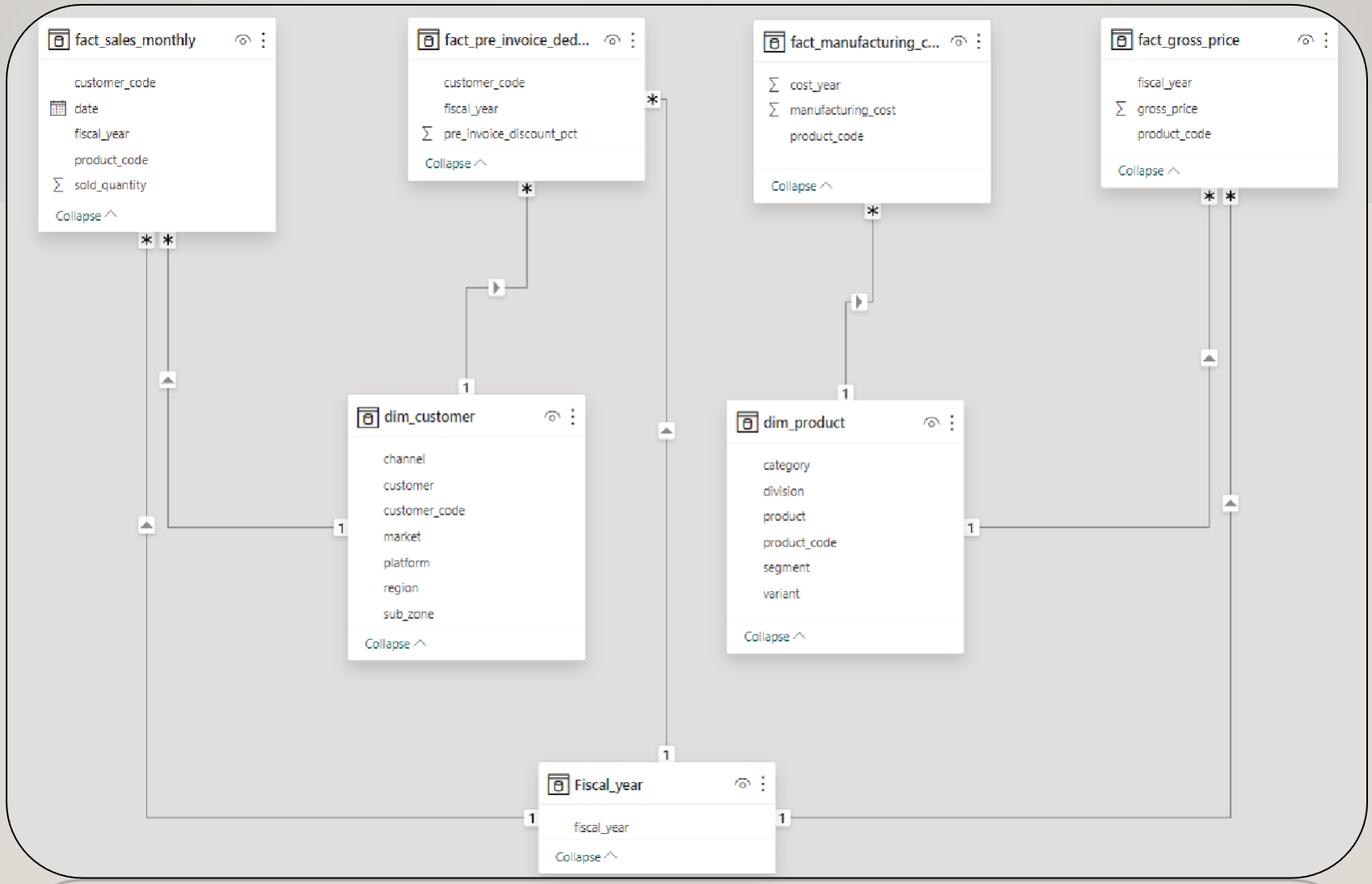
About Company:
Atliq Hardware is a prominent computer hardware producer based in India, holding a leading position not only in the Indian market but also in various other countries.







Data Model:-


fact_sales_monthly
customer_code
date
fiscal_year
product_code
sold_quantity
Collapse
fact_pre_invoice_ded...
customer_code
fiscal_year
pre_invoice_discount_pct
Collapse
fact_manufacturing_c...
cost_year
manufacturing_cost
product_code
Collapse
fact_gross_price
fiscal_year
gross_price
product_code
Collapse
dim_customer
channel
customer
customer_code
market
platform
region
sub_zone
Collapse
dim_product
category
division
product
product_code
segment
variant
Collapse
Fiscal_year
fiscal_year
Collapse

- 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'
Order by market ASC;
```

market
Australia
Bangladesh
India
Indonesia
Japan
Newzealand
Philiphines
South Korea

Insights

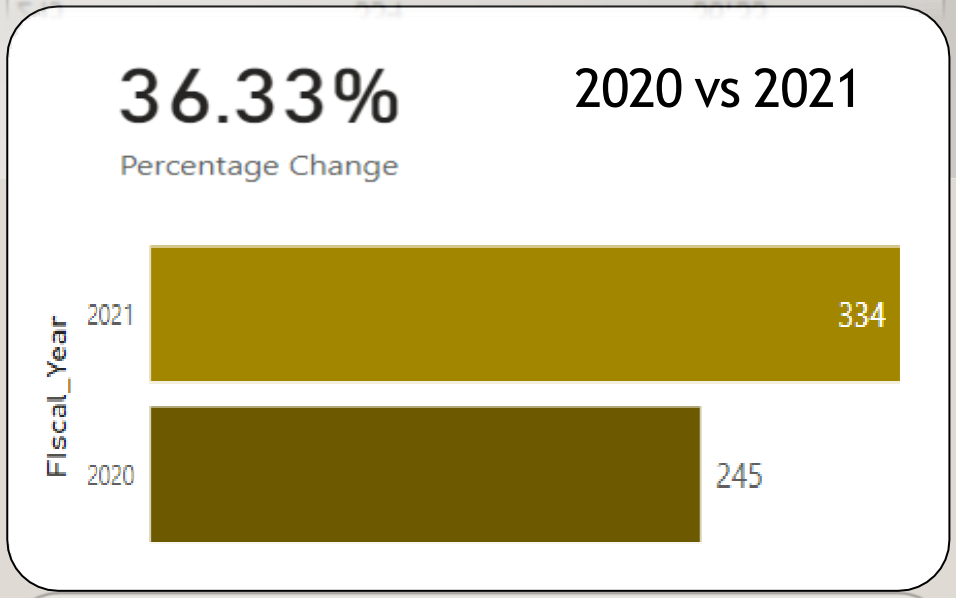
- Atliq Hardware operates in a total of 27 countries.
- Out of 27 markets, a customer named ‘Atliq Exclusive’ operates in 10 countries in the region of APAC.

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

```
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 *,
Round((unique_products_2021-unique_products_2020)*100/unique_products_2020,2) as percentage_chg
From CTE1,CTE2;
```

Unique Product Growth

unique_products_2020	unique_products_2021	percentage_chg
245	334	36.33



Insights

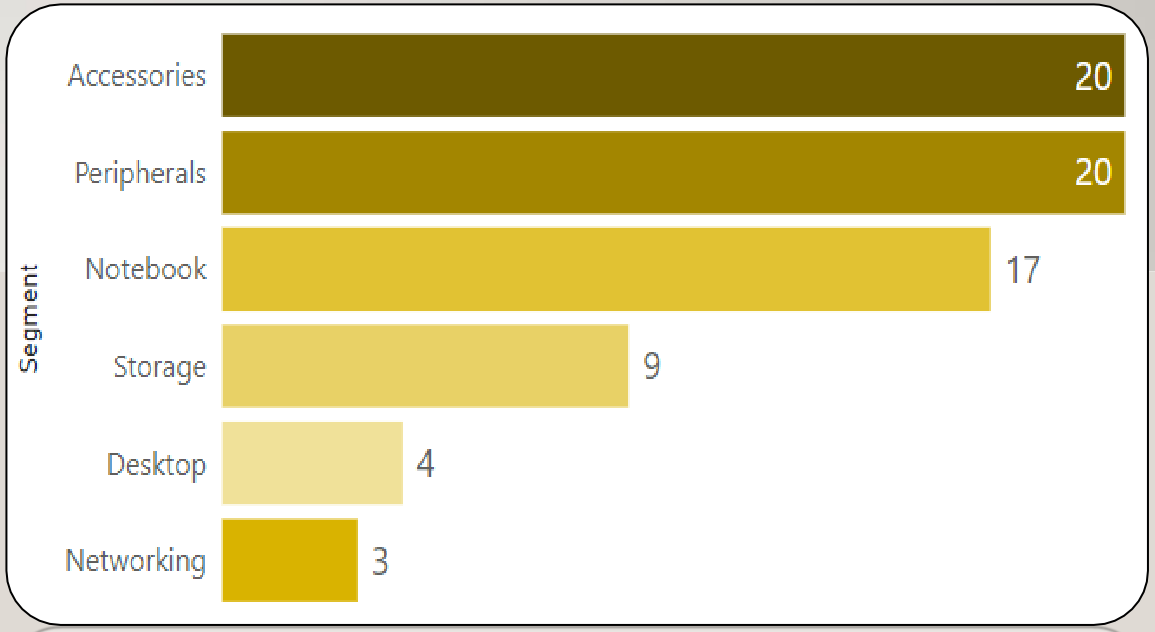
- Unique product sales experienced a spike of 36% in 2021 as compared to the previous year.
- Total unique products recorded in the Year 2020 was 245.
- Total unique products recorded in the Year 2021 was 334.

-- 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) as Unique_Product
From dim_product
Group By segment
Order By Unique_Product DESC ;
```

segment	Unique_Product
Accessories	20
Peripherals	20
Notebook	17
Storage	9
Desktop	4
Networking	3

Unique Product By Segment



Insights

- Out of 6 segments,Accessories and Peripherals are selling 20 unique products followed by Notebook, Storage, Desktop, and Networking.

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

```sql
With CTE1 as (
Select p.segment ,count(distinct s.product_code) as product_count_2020 From fact_sales_monthly s
Inner Join dim_product p
On s.product_code = p.product_code
Where fiscal_year = 2020
Group By segment
),
CTE2 as (
Select p.segment,count(distinct s.product_code) as product_count_2021 From fact_sales_monthly s
Inner Join dim_product p
On s.product_code = p.product_code
Where fiscal_year = 2021
Group By segment
)
```

```sql
Select CTE1.segment as Segment,SUM(product_count_2021) as product_count_2021,
SUM(product_count_2020) as product_count_2022,(SUM(product_count_2021) - SUM(product_count_2020)) as difference
From CTE1,CTE2
Where CTE1.segment = CTE2.segment
Group By Segment
Order By difference DESC
Limit 1;
```

Segment Wise Unique Products

Segment	product_count_2021	product_count_2022	difference
Accessories	103	69	34

Segment	Products 2021	Products 2020	Product Increase
Accessories	103	69	34
Desktop	22	7	15
Networking	9	6	3
Notebook	108	92	16
Peripherals	75	59	16
Storage	17	12	5

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

```
Select m.product_code,p.product,m.manufacturing_cost
From fact_manufacturing_cost m
Inner Join dim_product p
on m.product_code = p.product_code
Where m.manufacturing_cost IN
( (Select max(manufacturing_cost) From fact_manufacturing_cost ),
(Select min(manufacturing_cost) From fact_manufacturing_cost) ) ;
```

Max/Min Manufacturing Cost By Product Code

Product_Code	Max Manf_cost
A6120110206	
AQ HOME Allin1 Gen 2	240.54

Product_Code	Min Manf_cost
A2118150101	
AQ Master wired x1 Ms	0.89

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

Insights

- Among all the products, the manufacturing cost of “Home Gen 2” is the highest ($240.53) whereas “Master Wired Ms” has the lowest manufacturing cost ($0.892).

-- Generate a report that 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 c.customer_code,c.customer,
Round(Avg(pre_invoice_discount_pct),2)*100 as avg_disct_pct
From dim_customer c
Inner Join fact_pre_invoice_deductions i
on c.customer_code = i.customer_code
Where fiscal_year = 2021 and market = "India"
Group by c.customer_code,c.customer
Order by avg_disct_pct DESC
Limit 5;
```

Top 5 Customers

customer_code	customer	avg_disct_pct
90002009	Flipkart	31.00
90002006	Viveks	30.00
90002002	Croma	30.00
90002003	Ezone	30.00
90002016	Amazon	29.00

Insights

- During the fiscal year 2021, Flipkart, Viveks, Croma, Ezone, and Amazon are the top 5 customers who received the highest pre-discount percentage.
- Flipkart made the highest discount with 31%.

-- Get the complete report of the Gross sales amount for the customer “Atliq Exclusive” for each month.

```
Select month(s.date) as Month,s.fiscal_year as Fiscal_Year,
Round(SUM(g.gross_price*s.sold_quantity),2) as gross_sales
From dim_customer c
Inner Join fact_sales_monthly s
on c.customer_code = s.customer_code
Inner Join fact_gross_price g
On g.product_code = s.product_code
Where c.customer = 'Atliq Exclusive'
Group By Month,Fiscal_Year
Order By Fiscal_Year,Month ASC;
```

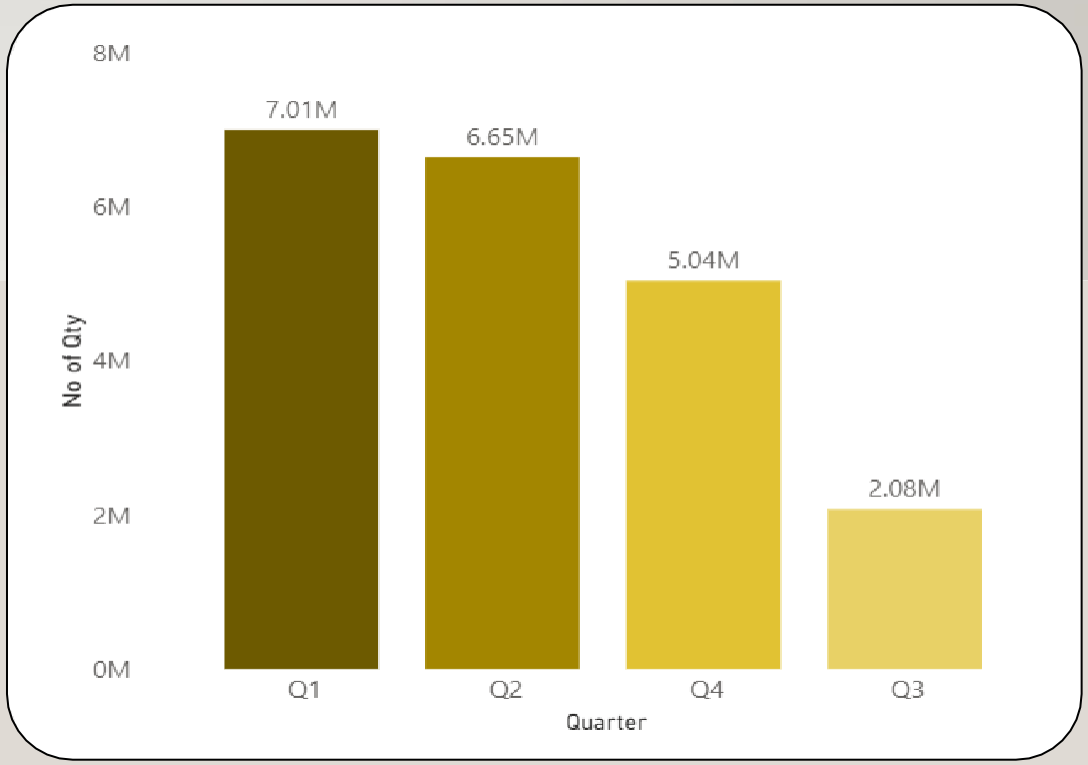
Month	Fiscal Year	Gross Sales
1	2020	9584951.94
2	2020	8083995.55
3	2020	766976.45
4	2020	800071.95
5	2020	1586964.48
6	2020	3429736.57
7	2020	5151815.4
8	2020	5638281.83
9	2020	9092670.34
10	2020	10378637.6
11	2020	15231894.97
12	2020	9755795.06
1	2021	19570701.71
2	2021	15986603.89
3	2021	19149624.92
4	2021	11483530.3
5	2021	19204309.41
6	2021	15457579.66
7	2021	19044968.82
8	2021	11324548.34
9	2021	19530271.3
10	2021	21016218.21
11	2021	32247289.79
12	2021	20409063.18

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,
Round(Sum(sold_quantity)/1000000,2) as Total_sold_qty_mln
From fact_sales_monthly
Where fiscal_year = 2020
group by Quarter;
```

Quarter	Total_sold_qty_mln
Q1	7.01
Q2	6.65
Q3	2.08
Q4	5.04

FY 2020 – Quarter Wise Distribution



Insights

- During the first quarter of fiscal year 2020, Atliq Hardware sold the most number of quantities (Over 7 Million).
- Atliq Hardware saw a decrease in sold quantities in Q2 and Q3, but increased to 5.04 million in Q4.