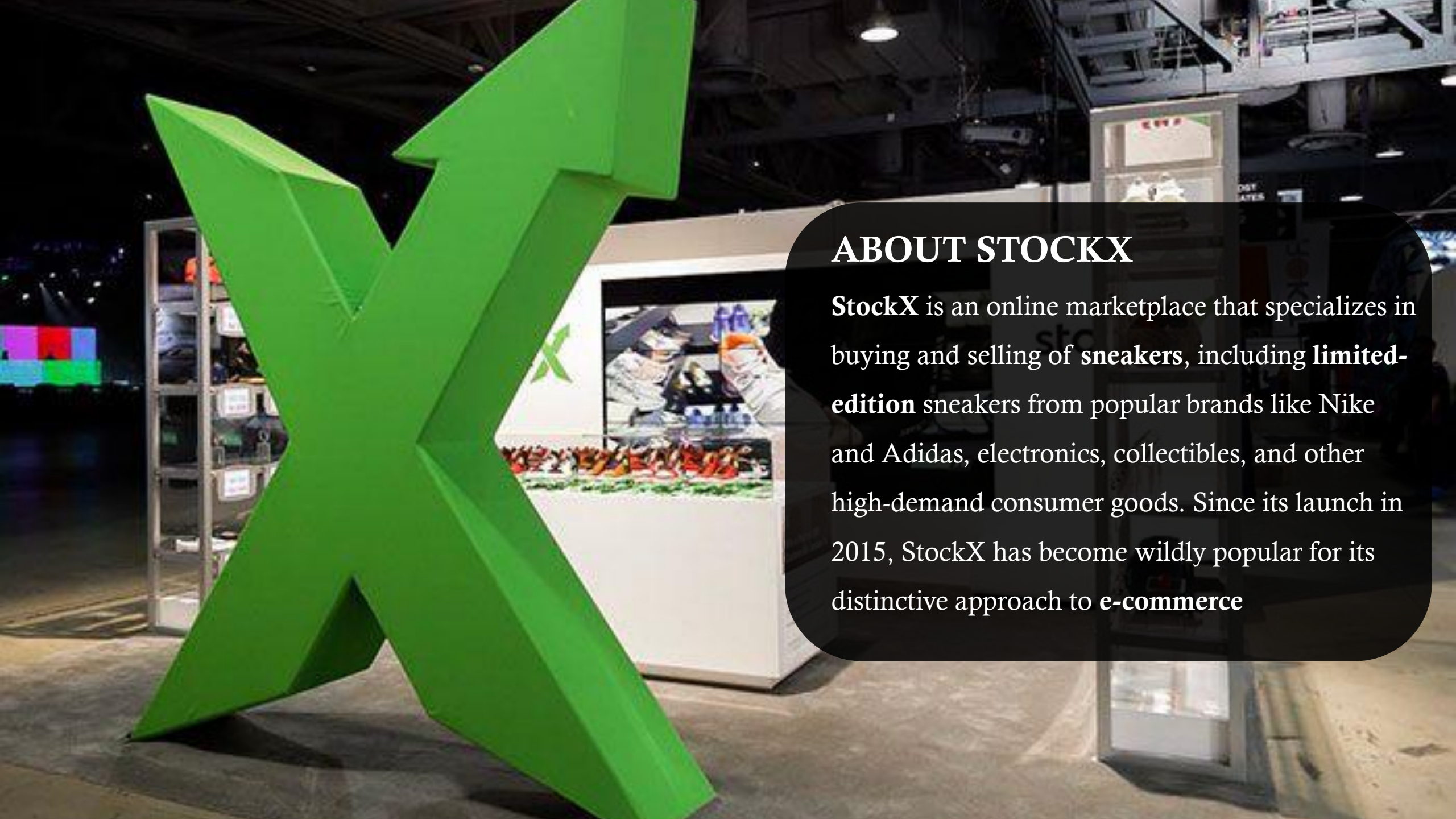

stockX

STOCKX

A Deep Dive into the Revolutionary Sneaker Market - A Case Study

By Ananya Das



ABOUT STOCKX

StockX is an online marketplace that specializes in buying and selling of **sneakers**, including **limited-edition** sneakers from popular brands like Nike and Adidas, electronics, collectibles, and other high-demand consumer goods. Since its launch in 2015, StockX has become wildly popular for its distinctive approach to **e-commerce**

Index

Case Study

This dataset comprises a **single file** of sales data sourced from StockX. It contains information such as Order Date, Brand, Sneaker Name, Sale Price, Retail Price (cost), Release Date, Shoe Size, and Buyer Region for two prominent brands: **Nike x Off-White** and **Yeezy**. There are **99,956** total sales in the data set. The sample consists of U.S. sales only.

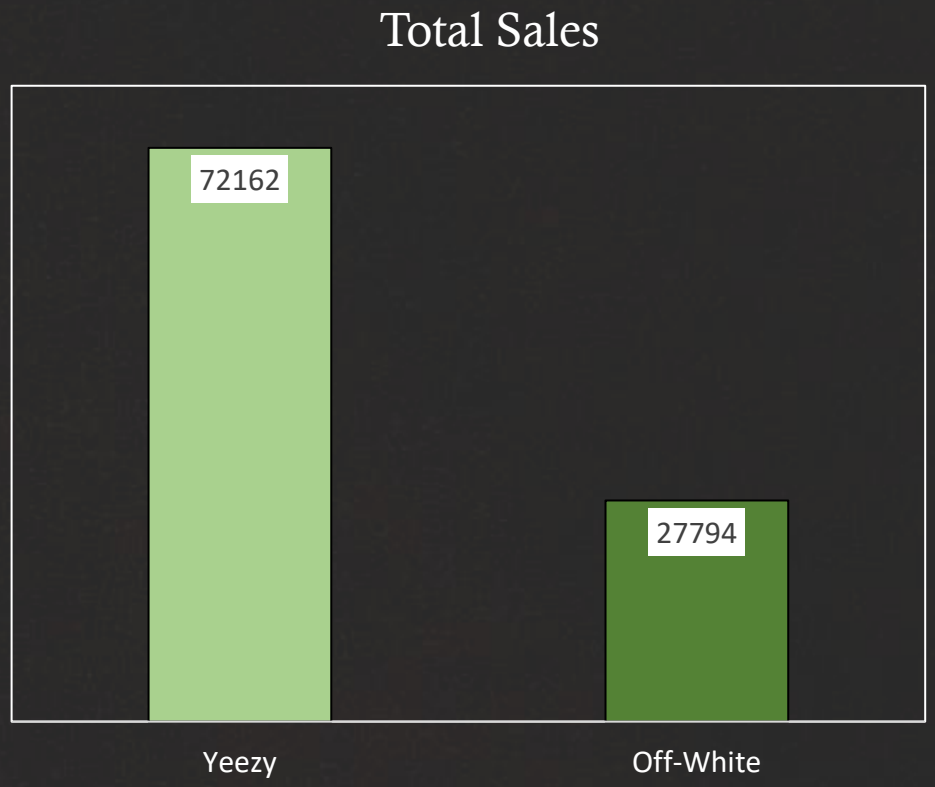
Objective

The objective of this analysis is to **gain insights** into the **sales trends** and **buyer preferences** for Yeezy sneakers and off-white sneakers during the **specified time period**. By examining factors such as order date, sale price, retail price(cost), release date, shoe size, and buyer region, we aim to identify key patterns, pricing strategies, and regional variations that can inform marketing and sales strategies for Yeezy and Off-White sneakers in the future.

Total sales

```
82    -- 1.total sales of each brand
83
84 •  SELECT
85        Brand, COUNT(*) AS Total_Sales
86    FROM
87        stockx_data
88    GROUP BY brand;
```

Total sales



- **72,162** Yeezy sales
- **27,794** Off-White sales

Average sale price

```
95    -- 2. average Sale Price for each Brand
96
97 •  SELECT
98        brand, AVG(new_Sale_Price) AS Average_Sale_Price
99    FROM
100       stockx_data
101   GROUP BY brand
102   ORDER BY Average_Sale_Price DESC;
```

Average sale price

- Average sale price of **Off-White** is **$671.4813**
- Average sale price of **Yeezy** is **$360.0326**

Maximum and Minimum sale prices

```sql
-- 3 a. maximum sale price for each brand

SELECT
    brand, MAX(new_sale_price) AS Max_Sale_Price
FROM
    stockx_data
GROUP BY brand;
```

```sql
-- 3 b Minimum Sale Price for each Brand

SELECT
    brand, MIN(new_sale_price) AS Min_Sale_Price
FROM
    stockx_data
GROUP BY brand;
```

Maximum and Minimum sale prices

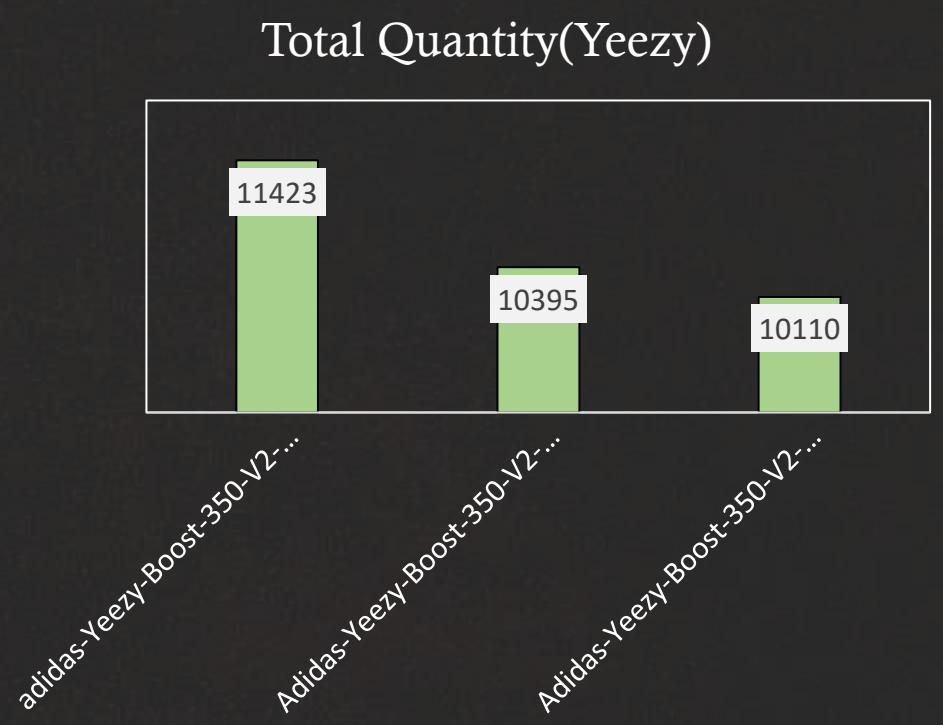
- The maximum and minimum sale prices for **Yeezy** are $2300 and $186, respectively.
- The maximum and minimum sale prices for **Off-White** are $4050 and $203, respectively.

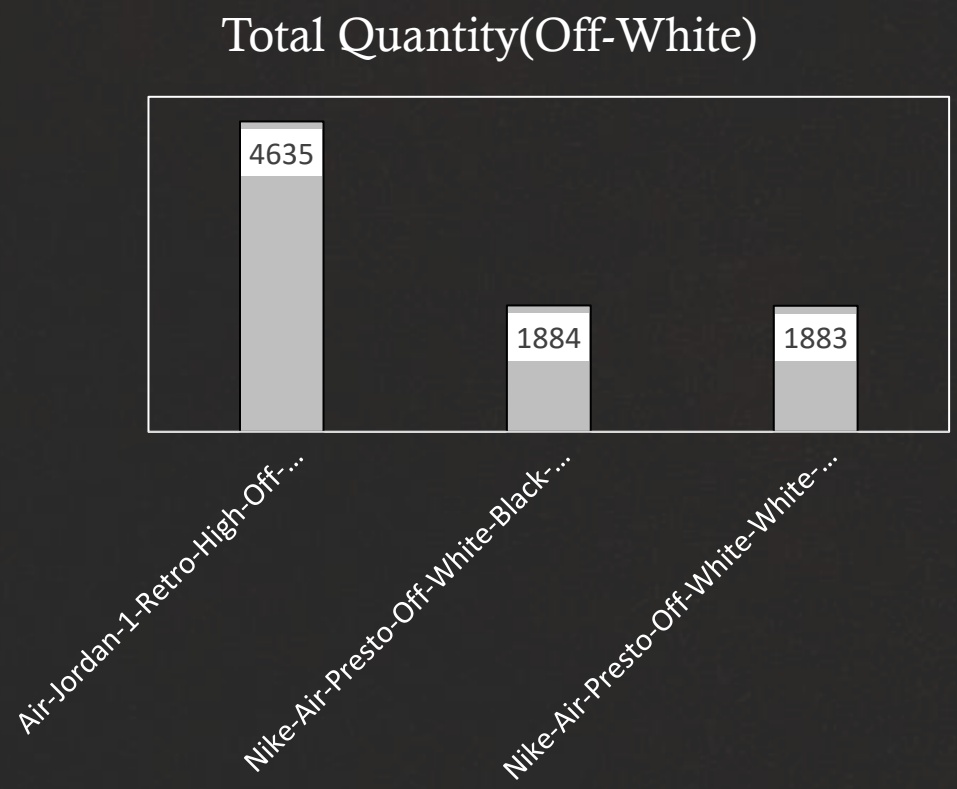
Top 3 sneakers

```sql
-- 4 List the top 3 most sold sneakers of each brand

WITH Sneakers_Rank AS (
    SELECT
        `sneaker name`,brand,COUNT(*) AS SalesCount,
        ROW_NUMBER() OVER (PARTITION BY brand ORDER BY COUNT(*) DESC) AS Sales_count_rank
    FROM
        stockx_data
    GROUP BY
        brand,
        `sneaker name`)
     SELECT *
FROM
    Sneakers_Rank
WHERE
    Sales_count_rank <= 3;
```

Top 3 sneakers





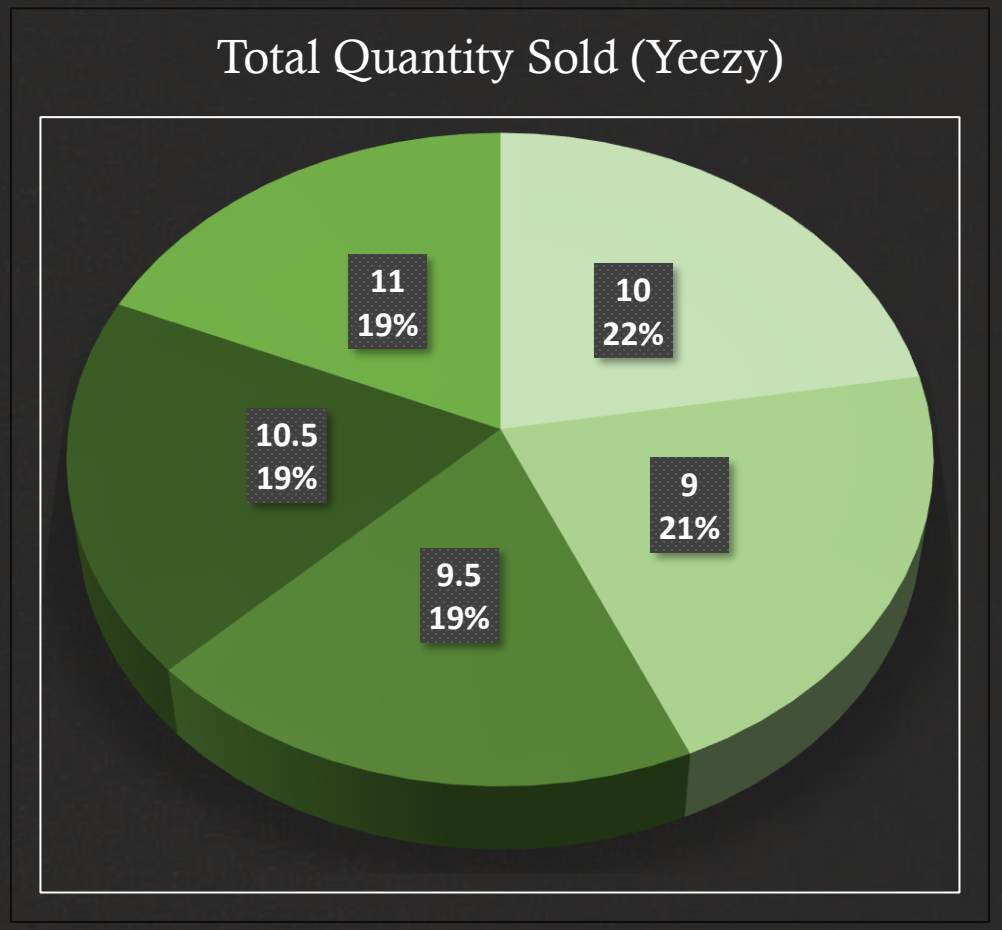
- **Yeezy's** highest-selling sneaker is the **Adidas Yeezy-Boost-350-V2-Butter** (11423).
- **Off-White's** highest-selling sneaker is **Air-Jordan-1-Retro-High-Off-White-University-Blue** (4635).

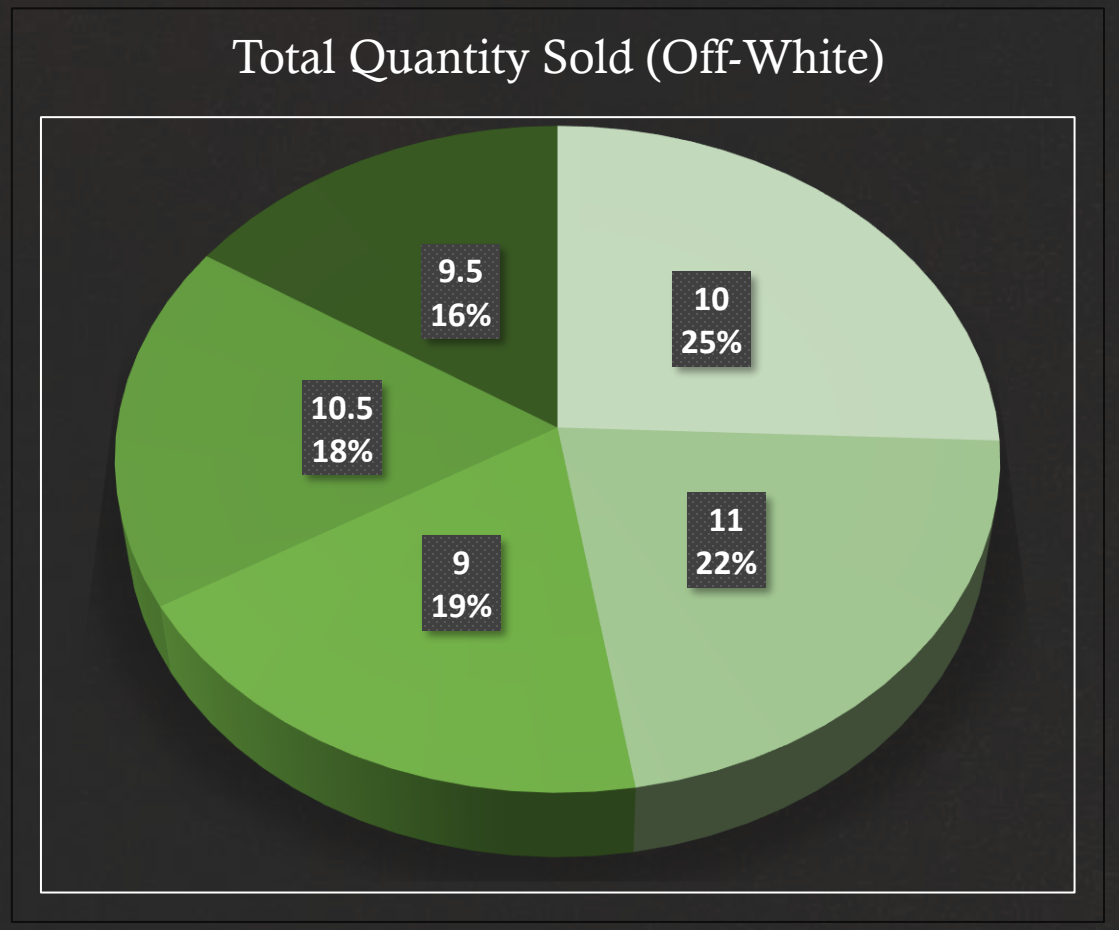
Top 5 popular shoe sizes

```sql
-- 5. top 5 popular shoe size

with Brand_shoe_size as (SELECT
    brand,`shoe size`, COUNT(*) AS TOTAL_QTY,ROW_NUMBER() OVER (PARTITION BY Brand ORDER BY COUNT(*) DESC) AS Rownumber
FROM
    stockx_data
GROUP BY brand, `shoe size`)
 SELECT *
        FROM Brand_shoe_size
        WHERE Rownumber <= 5 ;
```

Top 5 popular shoe sizes





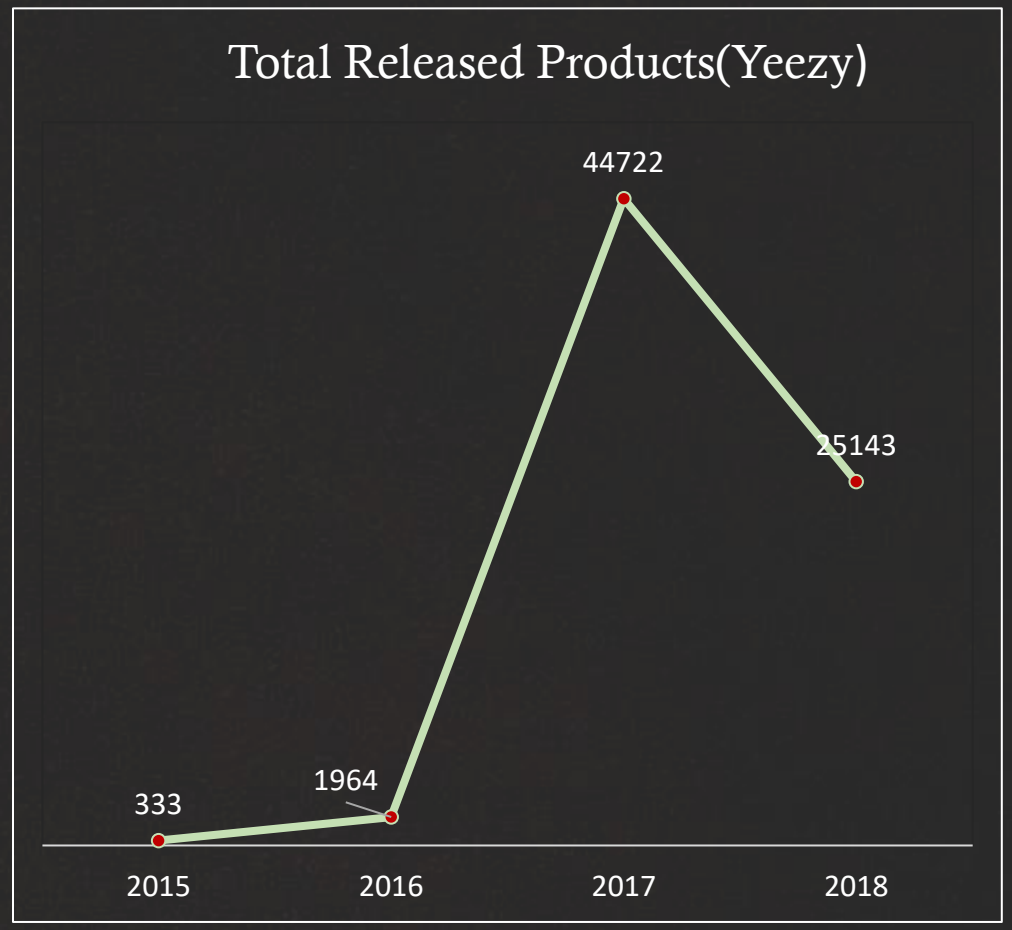
Release date Analysis

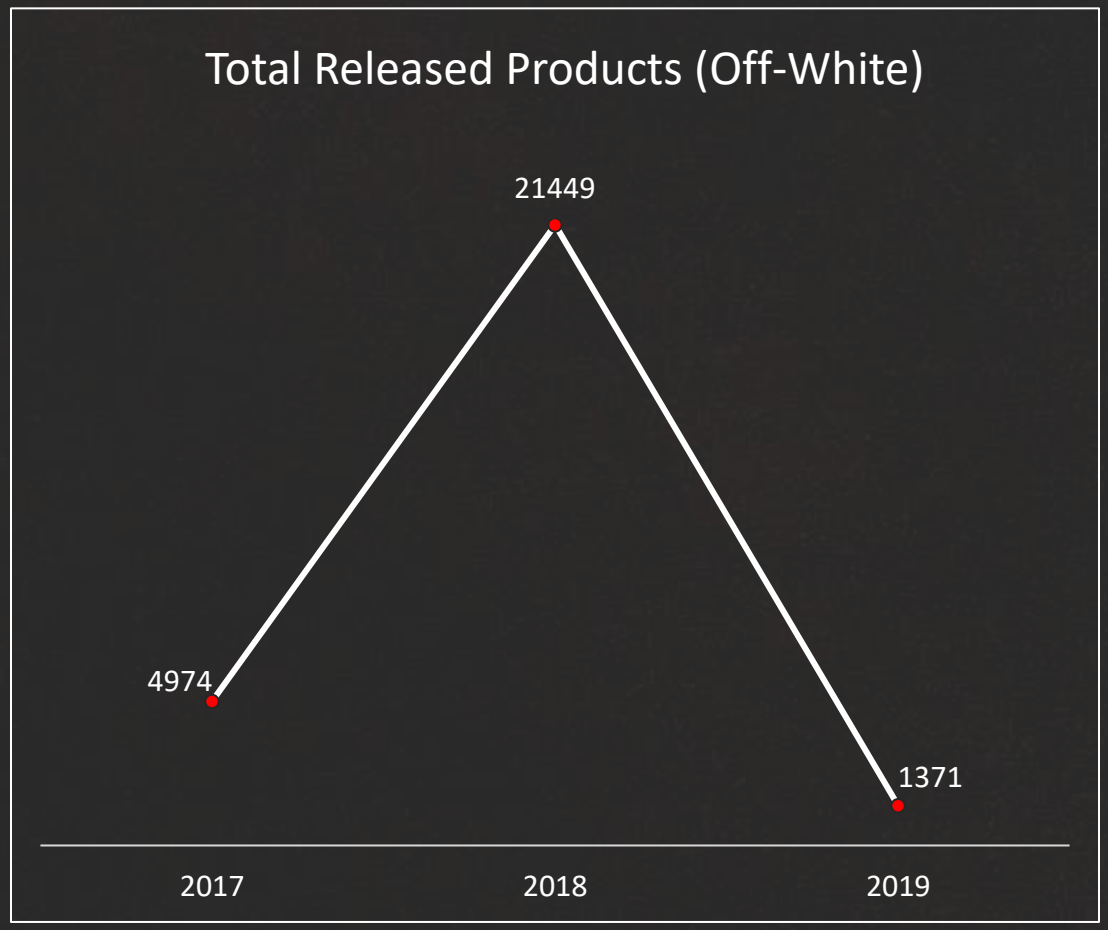
```sql
-- 6. release date trend (Analysis)

SELECT
    YEAR(new_release_date), brand, COUNT(*) AS TOTAL_QTY
FROM
    stockx_data
WHERE
    brand = ' Yeezy'
GROUP BY YEAR(new_release_date)
ORDER BY YEAR(new_Release_Date) ASC;
```

```sql
SELECT
    YEAR(new_release_date), brand, COUNT(*) AS TOTAL_QTY
FROM
    stockx_data
WHERE
    brand = 'off-white'
GROUP BY YEAR(new_release_date)
ORDER BY YEAR(new_Release_Date) ASC;
```

Release date Analysis





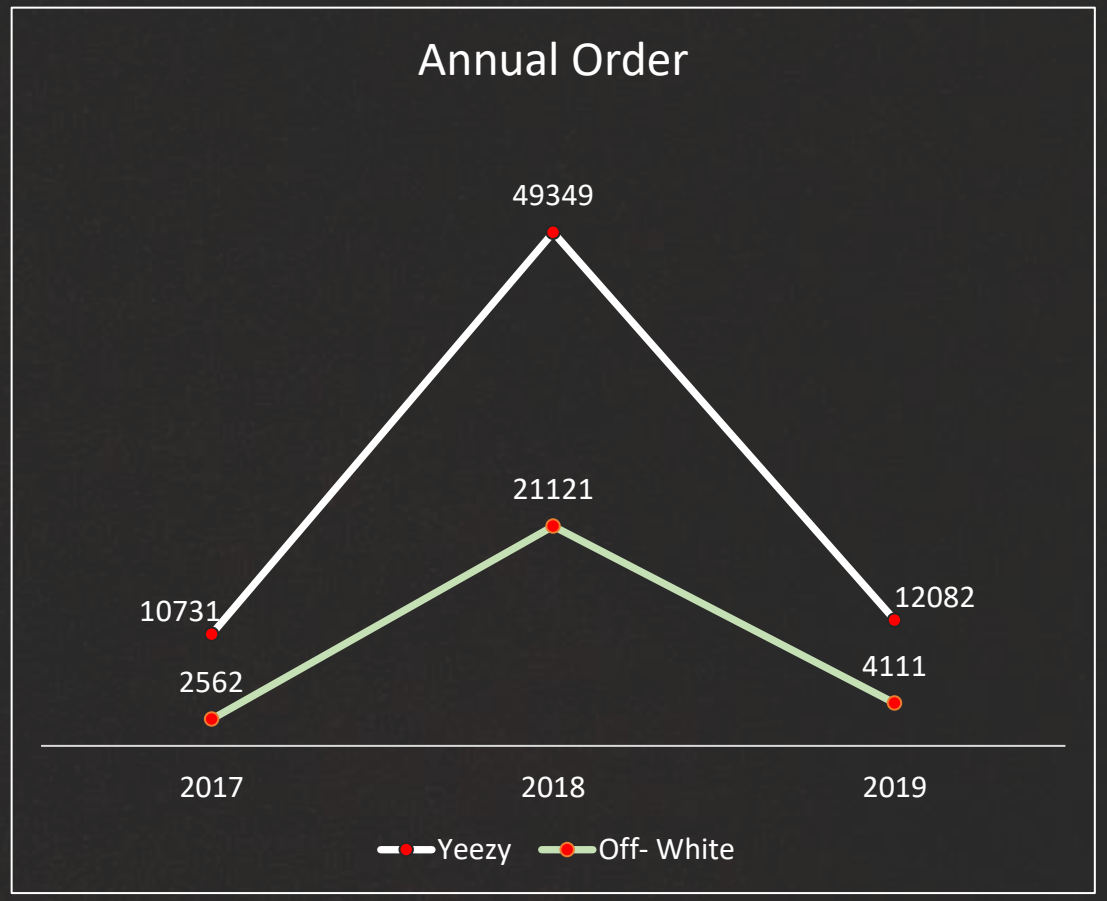
- **Yeezy** launched the most products overall in 2017 (44722), and the least products overall in 2015 (333).
- **Off-White** launched the most products overall in 2018 (21449), and the least products overall in 2019 (1371).

Annual Order Analysis

```sql
-- 7. Annual order

SELECT
    YEAR(new_order_date), brand, COUNT(*) AS TOTAL_QTY
FROM
    stockx_data
GROUP BY brand , YEAR(new_order_date);
```

Annual Order Analysis



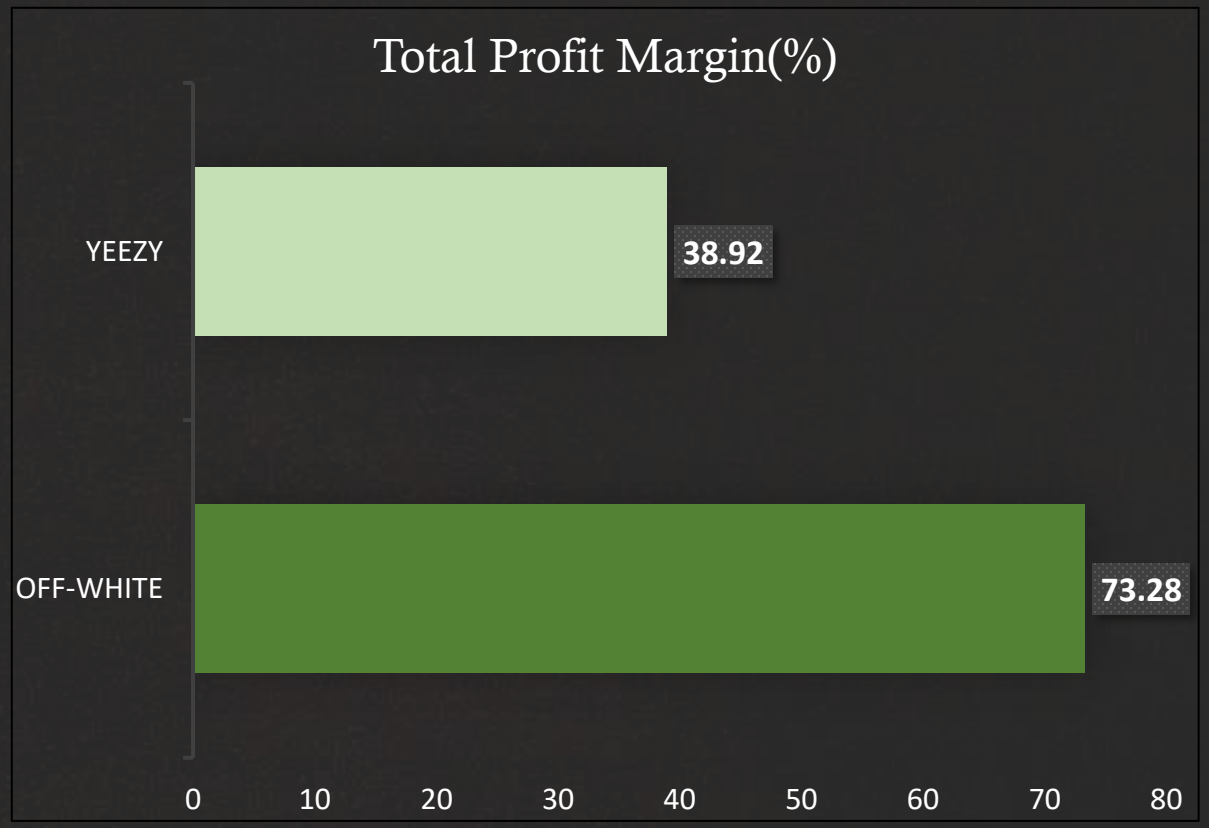
- Yeezy got the highest order in 2018 (49349) and the lowest in 2017 (10731).
- Off-White got the highest order in 2018 (21121) and lowest in 2017 (2562).

Profit Margin Analysis

```sql
-- 8. best/worst profit margins


SELECT
    brand,
    ((SUM(`new_Sale_Price`) - SUM(`new_Retail_Price`)) / SUM(`new_Sale_Price`) * 100)
    AS Total_Profit_Margin
FROM
    stockx_data
GROUP BY brand
ORDER BY Total_Profit_Margin DESC;
```

Profit Margin Analysis



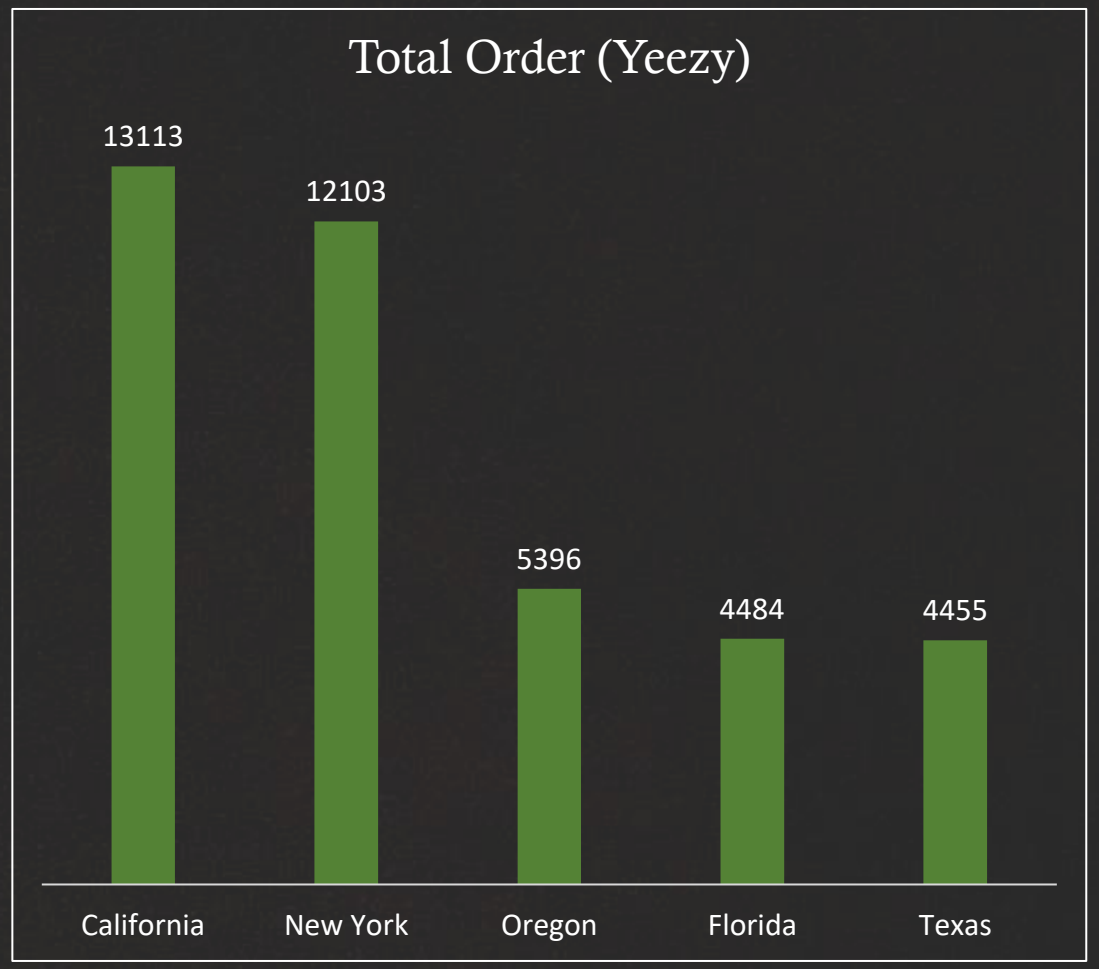
- **Yeezy's** Profit Margin is **39%**
- **Off-White's** Profit Margin is **74%**

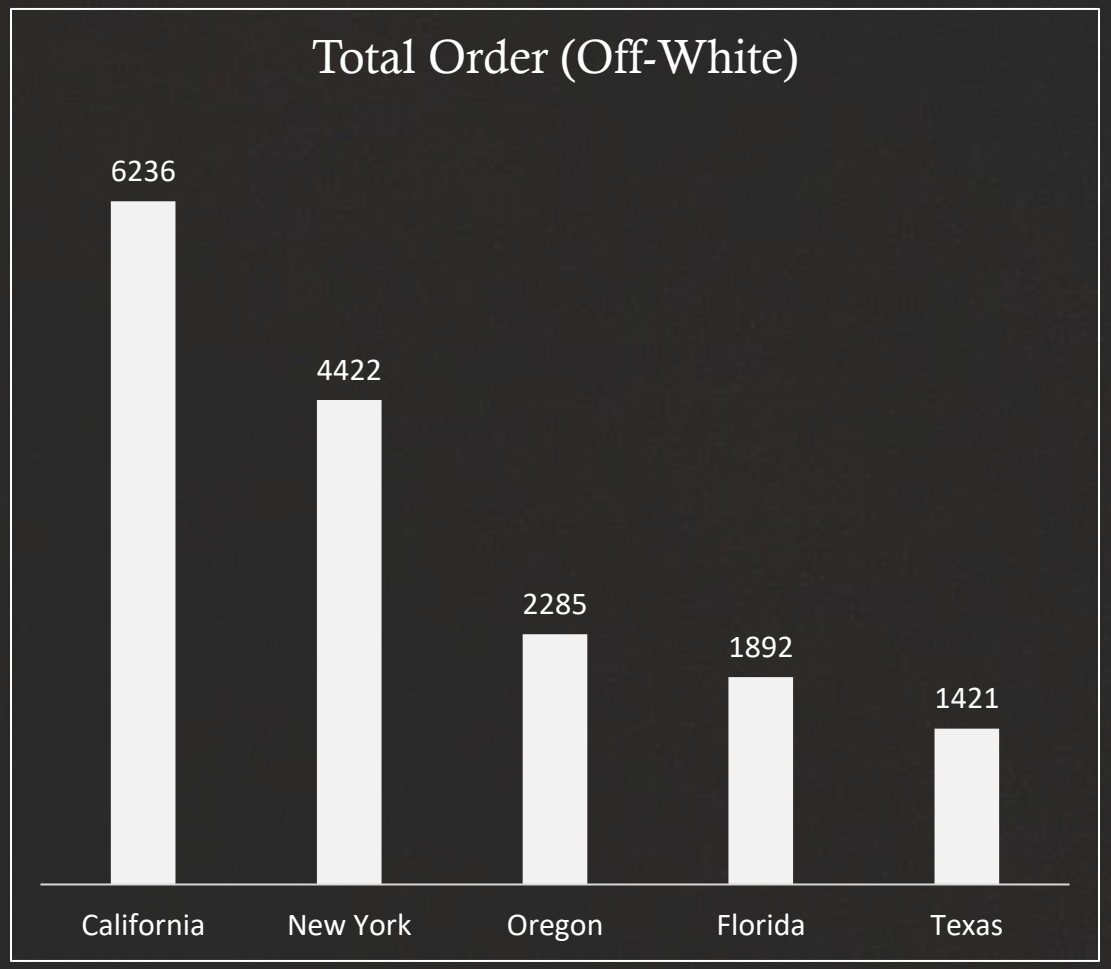
Top 5 regions with highest order

```sql
-- 9. top 5 region with highest order

WITH Brand_region_order AS (
SELECT
    Brand,
`Buyer Region`,
    COUNT(*) as TOTAL_ORDER,
        ROW_NUMBER() OVER (PARTITION BY Brand ORDER BY COUNT(*) DESC) AS Rownumber
    FROM
        stockx_data
        GROUP BY brand,`Buyer Region`)
        SELECT *
        FROM Brand_region_order
        WHERE Rownumber <= 5 ;
```

Top 5 regions with highest order





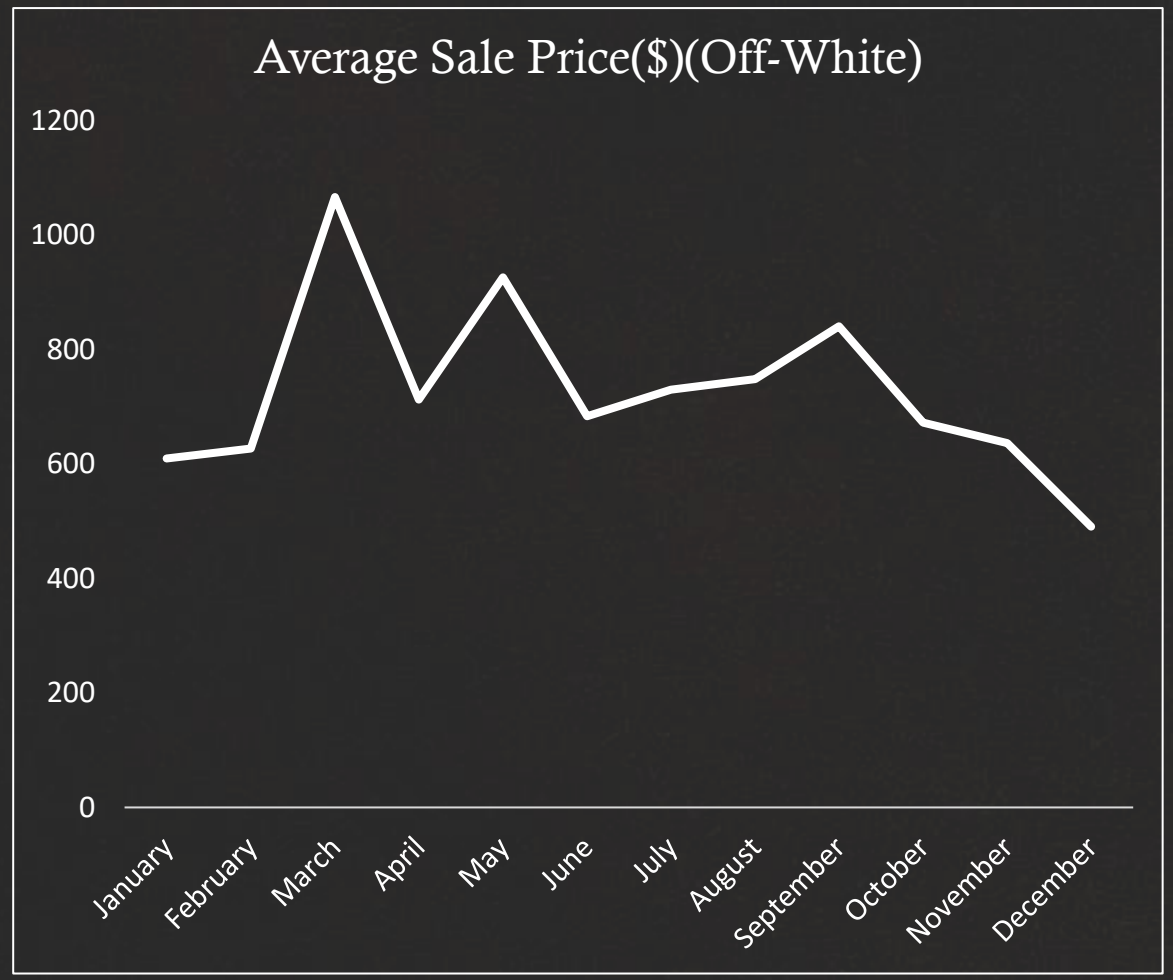
Average sale price across different time periods

```sql
-- 10. average sale prices across different time periods

 SELECT brand,
    month(new_Order_Date) AS month, monthname(new_Order_Date) AS monthname,
    AVG(new_sale_price) AS average_sale_price
FROM
    stockx_data

GROUP BY
    month,monthname, brand
ORDER BY
     brand, month asc;
```

Average sale price across different time periods



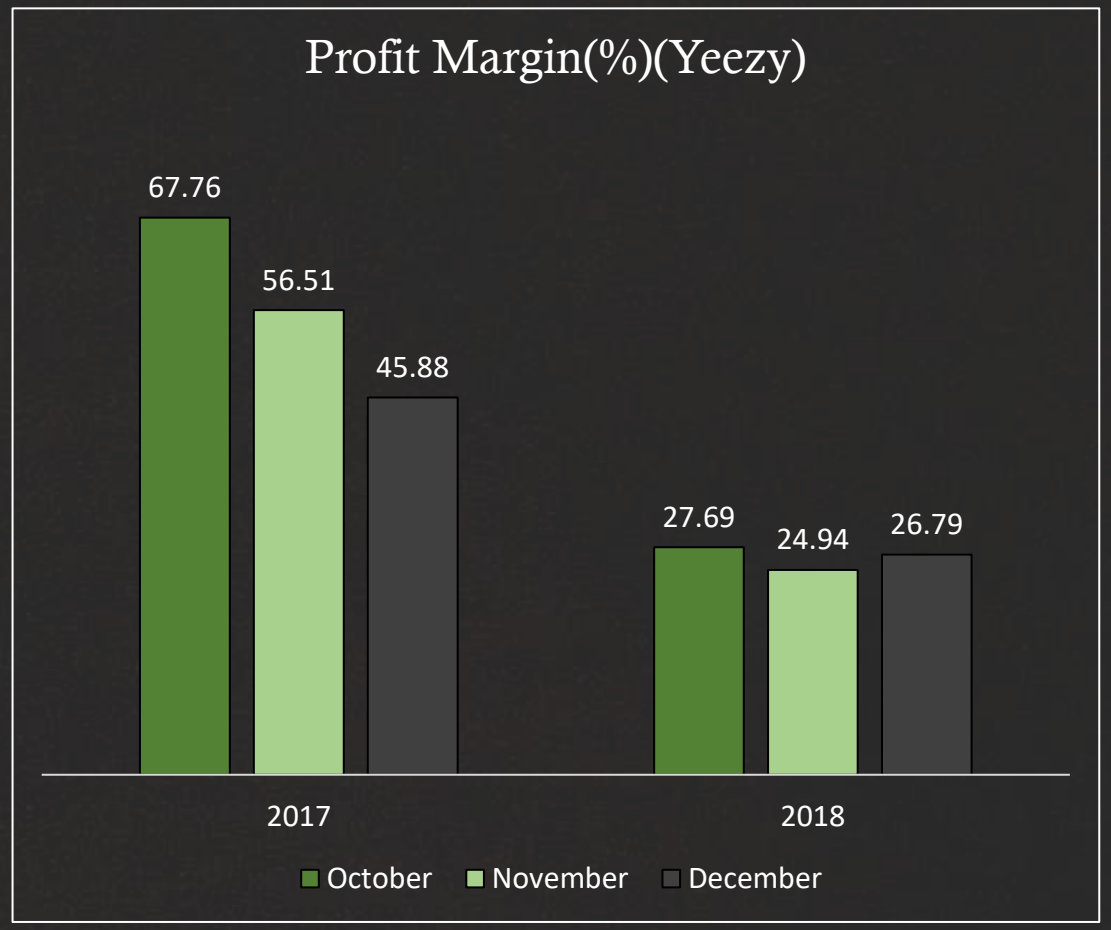
- **Off-White consistently has higher average sale prices compared to Yeezy** throughout the year. Prices tend to be lower in the first few months of the year (January to March) and then rise during the middle months before potentially declining again towards the end of the year for both brand.

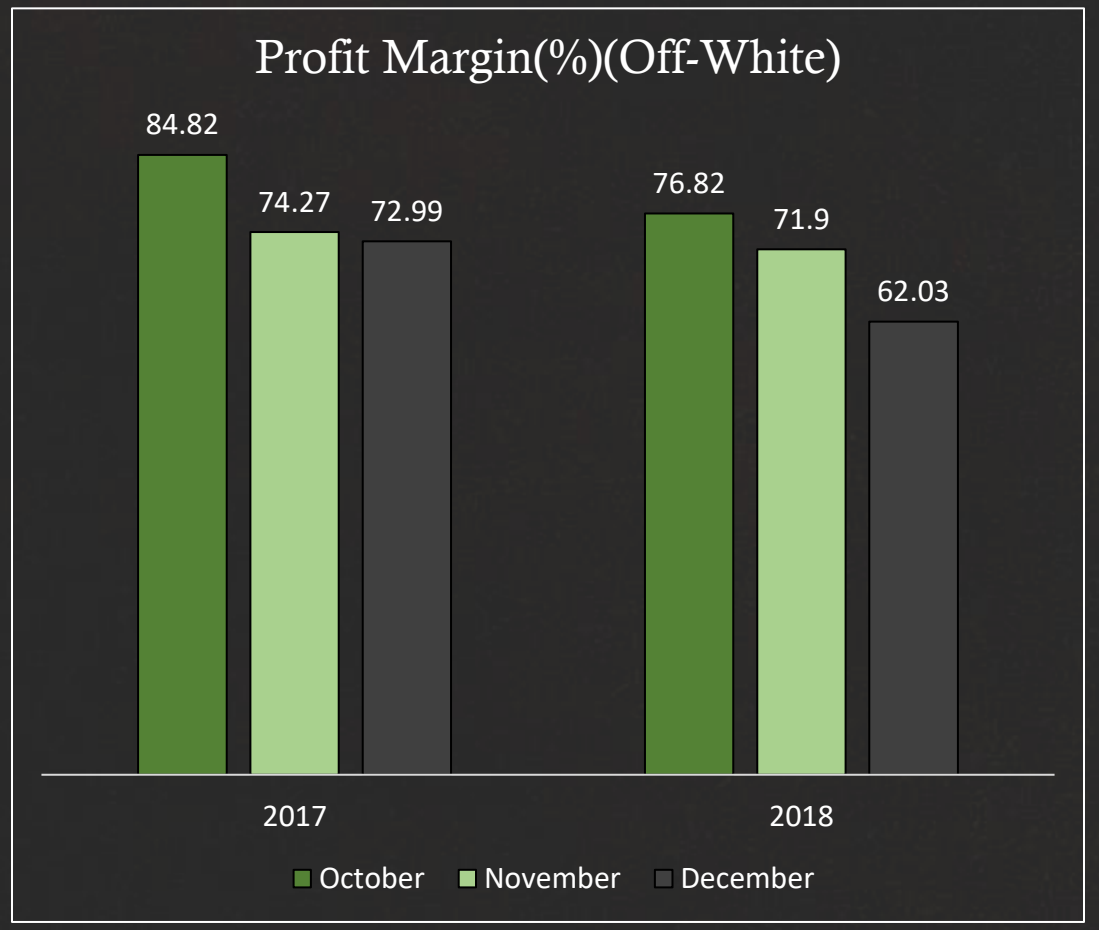
Total profit margin for last quarter of the year 2017 Vs 2018

```sql
-- 11. Total profit margin for last quarter of the year (2017 Vs 2018)

SELECT brand,
    YEAR(new_Order_Date) AS YEAR,
    MONTHNAME(new_Order_Date) AS MONTH,
    ((SUM(`new_Sale_Price`) - SUM(`new_Retail_Price`)) / SUM(`new_Sale_Price`) * 100) AS Total_Profit_Margin
FROM
    stockx_data
WHERE
    MONTHNAME(new_Order_Date) IN ('October' , 'November', 'December')
GROUP BY brand,YEAR(new_Order_Date) , MONTHNAME(new_Order_Date)
ORDER BY 1,2,3 DESC;
```

Total profit margin for last quarter of the year 2017 Vs 2018





- **Yeezy** : In 2017, Yeezy's profit margin declined from 67.76% in October to 56.51% in November and 45.88% in December. In 2018, it averaged 27.69% in October, decreased to 24.95% in November, and improved to 26.79% in December, but remained lower than in 2017.

- **Off-white** : In 2017, Off-White consistently had strong profit margins in the last quarter of the year, with October at 84.83%, November at 74.27%, and December at 72.99%. In 2018, they maintained relatively high profit margins, starting at 76.82% in October, decreasing to 71.90% in November, and 62.04% in December, still **outperforming Yeezy**.

Observations

- Yeezy has higher total sales than Off-White; however, Off-White products typically have a higher average sale price than Yeezy products, suggesting that **Off-White** items are generally more **expensive** in the market.
- Yeezy product releases have experienced significant growth from 2015 to 2017, followed by a decrease in 2018. Off-White experienced a notable fluctuation in its product release strategy over the three-year period.
- In 2018, there was a significant uptick in orders for both Yeezy and Off-White items. However, in the following year, 2019, orders for both brands decreased. Notably, in 2017, Yeezy received 10,731 orders, a substantially higher number than Off-White's 2,562 orders.
- To maximize sales and inventory management, the brands should focus on popular sizes such as size 10, and consider targeted marketing and stocking strategies for these sizes.
- Off-White has a higher profit margin than Yeezy, possibly because of higher prices, lower production costs, or better cost management. Conversely, Yeezy might have lower profit margins due to higher production or operational costs.

- **California** and **New York** seem to be the top regions for both brands, with California having the highest total orders for both Yeezy and Off-White products, and the brands should continue to focus their marketing and distribution efforts in this area.
- Yeezy and Off-White both show **seasonal price trends**. Off-White consistently having higher average sale prices indicating its premium image. Yeezy's lowest prices occur in July, suggesting a chance for promotions to boost sales then.
- Off-White had a more favorable profit margin performance compared to Yeezy during the specified time frame. Off-White also saw fluctuations in profit margin, its decline from 2017 to 2018 was less pronounced compared to Yeezy.

Thank you