# PENS & PRINTERS

PRODUCT SALES ANALYSIS

Business Goals:

- The primary goal is to establish an effective sales strategy for the newly launched product line.
- Insights to maintain trust and lasting relationship with the customers.
- The company recognizes that the consumer buying behaviour is changing and they aim to adapt their sales tactics to meet the demands of this new product line hence will like to know the following insights:
  - How many customers were there for each sales approach ?
  - What does the spread of the revenue look like overall and for each sales method?
  - Was there any difference in revenue over time for each of the methods?
  - Based on the data, which method would you recommend we continue to use?

Outcomes

Number of customers for each sales approach:

Number of customers per sales approach
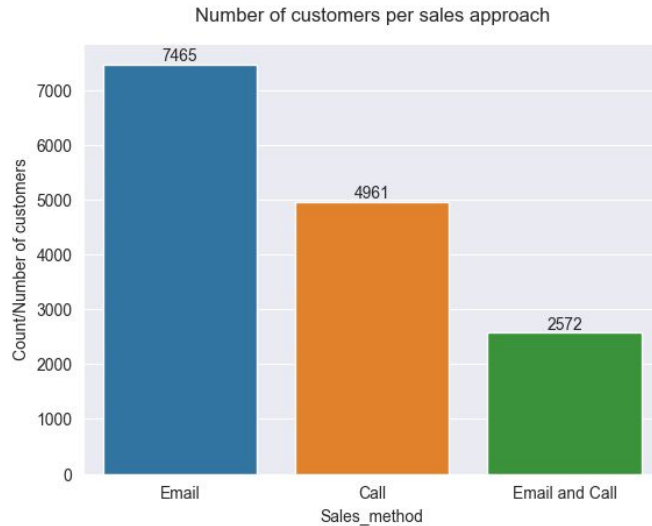
From the last 6 weeks records we analysed, the Email method has the highest number of customers with 7465 customers, followed by the Call method at 4961 customers and Email and Call method with the least number of customers at 2572 customers.

Outcomes

Revenue distribution in general and across sales methods:
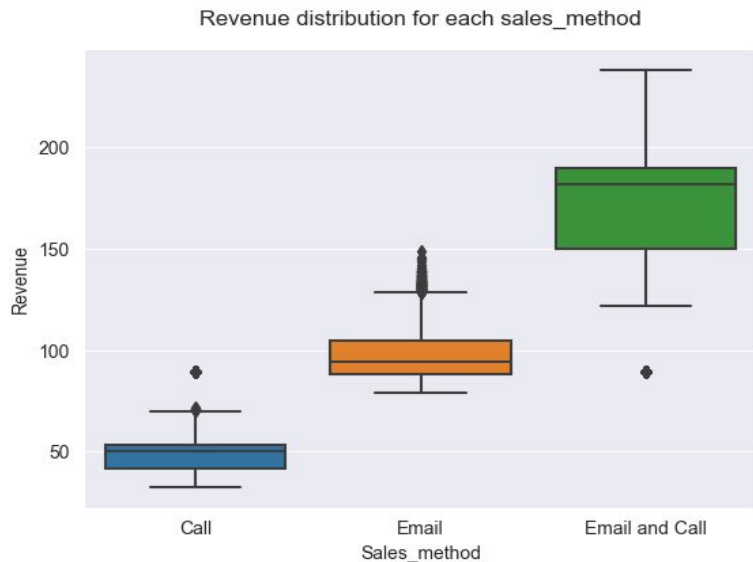

Overall revenue distribution
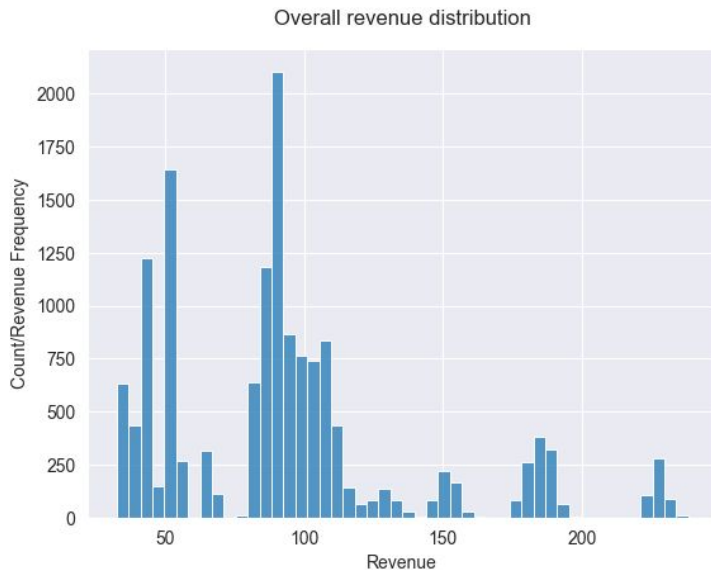
The overall distribution of the revenue has a long tail of high revenue sales.

This shows us that there were a few sales that were higher than the average revenue.

We can also see from the distribution that the most number of products sold are within 45 USD and 150 USD, other products that sold more than 200 USD could be considered as outliers.

Outcomes

Revenue for each sales method:

Revenue distribution for each sales_method

The multiple boxplot represents the distribution of revenue for each sales method.

The boxplot shows that the "Email and Call" sales method has the highest median revenue of 182 USD, with 50% of its revenue between 150 and 190 USD.

This is followed by the Email method and lastly the Call method with the least median revenue sales.

Outcomes

Difference in revenue over time for each sales approach:

Revenue over time for each sales method
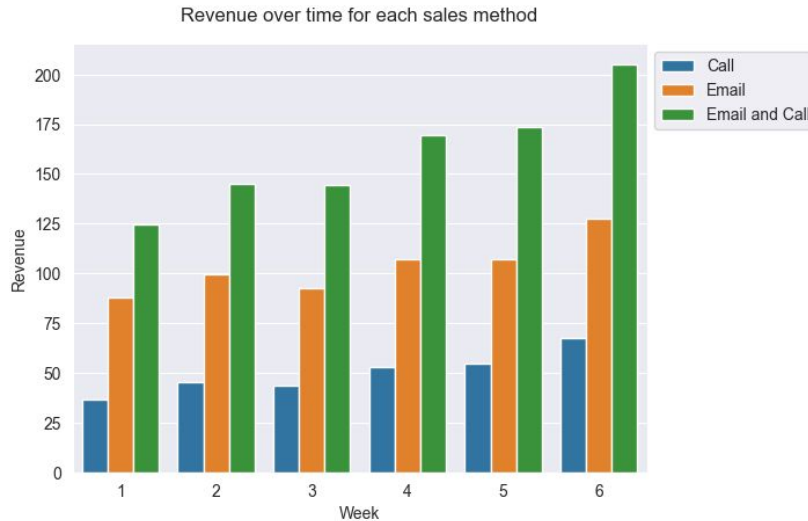
Comparing revenue over time(in weeks) that it takes for a customer to make a purchase, the graph shows that the "Email and Call" sales method has the highest average revenue for all three sales tactics across all 6weeks.

This is followed by the "Email" sales method with the second-highest average revenue and the "Call" sales method with the least average revenue for all three sales tactics.

Outcomes

Difference in revenue over years as customer for each sales approach:

Revenue over years as customer for each sales method

From the graph, we can see that the Email and call method had the highest revenue compared to the other two methods for the years as customer between 0 and 39, although it showed larger variability compared to the other methods.

The Email method and Call method both had less variability compared to the Email and call method for the years observed. The Email method however showed higher revenue than the call method with the call method having the least revenue for the years as customer.

Outcomes

Overall distribution for years as customer:
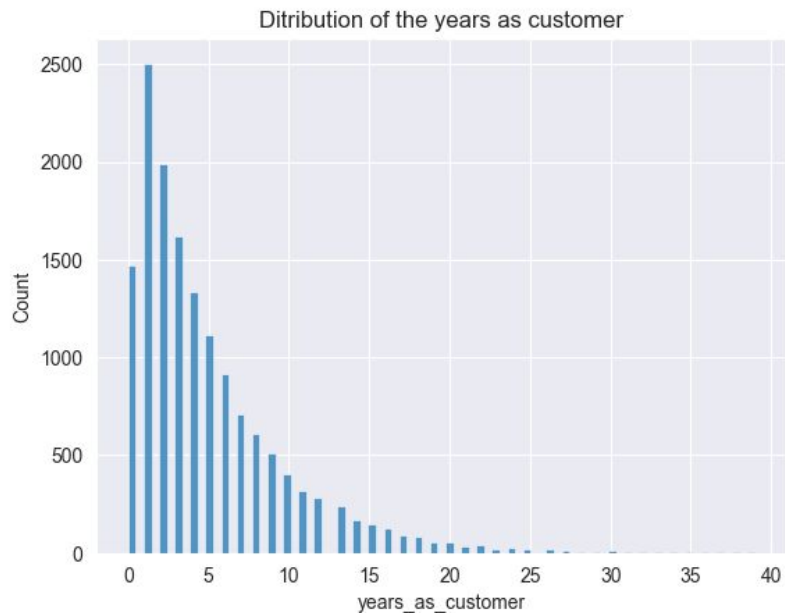
The graph shows that the majority of customers have been customers for less than 10 years, regardless of sales method.

The graph also shows that there is a long tail of customers who have been customers for more than 20 years.

Business Metric

Since the business goal is to adapt the best sales approach to effectively sell the new product line in a way that meets the changing consumer behaviour, I would recommend we use **percentage average sales revenue for all sales method** as our metric. Although the Email and Call method brought in the most average revenue, The Email method and Call method are less variable, hence the need to track all the sales methods.

Tracking this metric over time can help the business identify trends & patterns and make informed decisions about each sales strategy.

Based on the data for the last 6 weeks, the percentage average sales revenue for the sales methods are:

Email and call = 53.98%

Email = 30.58%

Call = 15.52%

Recommendation

For the following weeks, I recommend that we focus on the following actions:

- Monitor key metrics to identify trends and patterns in order to assess the performance of our sales efforts and identify areas for improvement.
- Track the results of each sales method to determine which method is most effective for our new line of office stationery.
- Educate our customers about the new product and its benefits. We can do this through:
    - marketing campaigns
    - sales brochures
    - customer training programs.
- Collect feedback from customers to identify opportunities to improve the product and our sales strategy.
- Explore ways to reduce the variability of the "Email and Call" sales method. This could involve developing more targeted sales pitches or providing additional training to our sales team.
- Implement customer retention and loyalty programs, especially for customers who have been with us for 10 years or more. This will help us to maintain trust and long-lasting relationships with our customers.