

Sales Method Analysis

Practical Exam – Data Analysis
Project

Project Overview & Goals

- **Goal:** Identify the most effective sales method for new product launches.

(Email, Call, Email + Call)

- **Approach:**

1-Data validation:

I checked for duplicated rows or missing rows, and I analyzed every row separately while checking for inconsistencies. Then, I cleaned the data.

2-Exploratory analysis:

I addressed the points the sales rep required and i visualized the data using several histograms ,bar charts, box plots and line plots...

I did an in depth analysis and i compared each method looking for the post optimal one in terms of revenue.

3-Metric definition:

I defined a new metric called Average Revenue per Customer Sales Effort(ARPSE)

That determines which sales method is the most efficient in terms of revenue generated per unit of effort.

4-Recommendations:

I shared my recommendations for the company, on which sales method should be prioritized and which one should be discontinued.

- **Business Need:**

Increase revenue while balancing effort and efficiency.

Data Validation

- No duplicate rows found.
- Fixed category inconsistencies ('Email'/'email', 'Email + Call'/'em + call').
- Handled missing revenue values by imputing mean per sales method.
- Checked ranges and anomalies for all numeric columns.

Exploratory Analysis

- Analyzed customer count per sales method.
- Compared revenue trends over 6 weeks for each method.
- Observed 'Email + Call' shows steady growth.
- Identified regional and customer tenure patterns.

Key Metric

- I created a new metric:
ARPCSE: Average Revenue per Customer Sales Effort
- $ARPCSE = (\text{Total Revenue for Method}) / (\text{Number of customers} * \text{Sales effort})$
- Higher values indicate better sales productivity while taking into account the difficulty of each sales method.
- ARPCSE results show that Email has the highest value, followed by Email + Call and finally call.

Recommendations

- Our recommendations for the company, based on the findings from our data analysis, are as follows:
- - We should discontinue using the 'Call' method as a primary source of income. It requires the most labor hours, yields the lowest unit price, and generates the least total revenue.
- - We believe we should continue utilizing the 'Email' method, as it proves most effective for early adopters.
- - The best method to invest in appears to be 'Email + Call'. It has shown a consistent upward trend in revenue generation over six weeks, indicating its potential for continued success. Our analysis suggests that customers who were only contacted via call would have placed larger orders if the approach had been 'Email + Call'. Given its positive sales trend over time, this method is our best option.
- In conclusion, the 'Email + Call' method should be prioritized for sales efforts, as it demonstrates better customer engagement, consistent revenue growth, and a more sustainable balance between effort and return.

Conclusion

- 'Email + Call' offers best balance of effort and return.
- Data supports a shift in sales strategy.
- Ongoing monitoring is essential for sustained success.