

Choosing The Best Method for New Office Stationery Sales

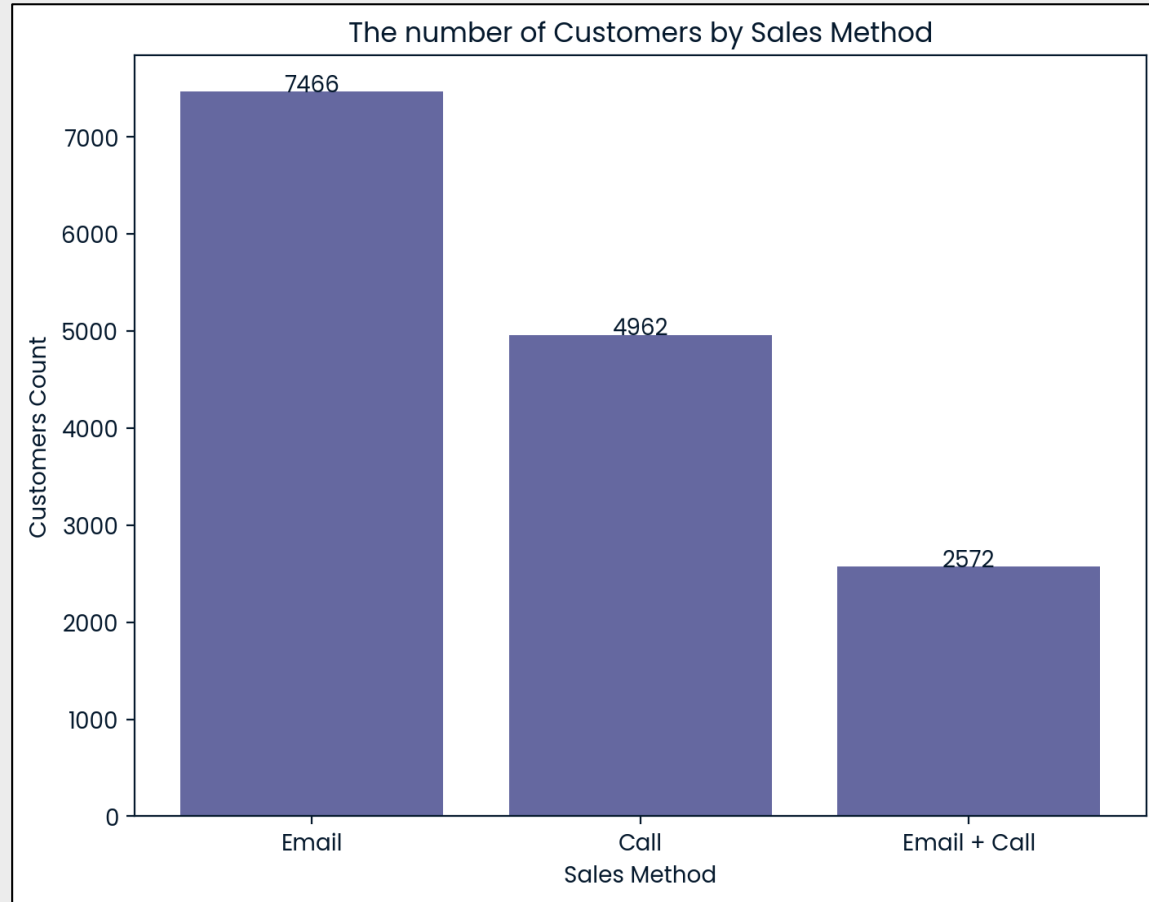
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Business Goals

- The sales team at Pens and Printers wants to ensure they are using the best sales method to sell the new product **effectively**.
- They have tested three different methods:
'Email', 'Call', and 'Email + Call'(a combined method of the two).
- The sales team want to know the following insights:
 - The number of customers for each sales method
 - The distribution of overall revenue and revenue for each sales method
 - The difference in revenue over time for each sales method
 - Other differences between the customers in each group
 - Recommendation for the best sales method

Outcomes

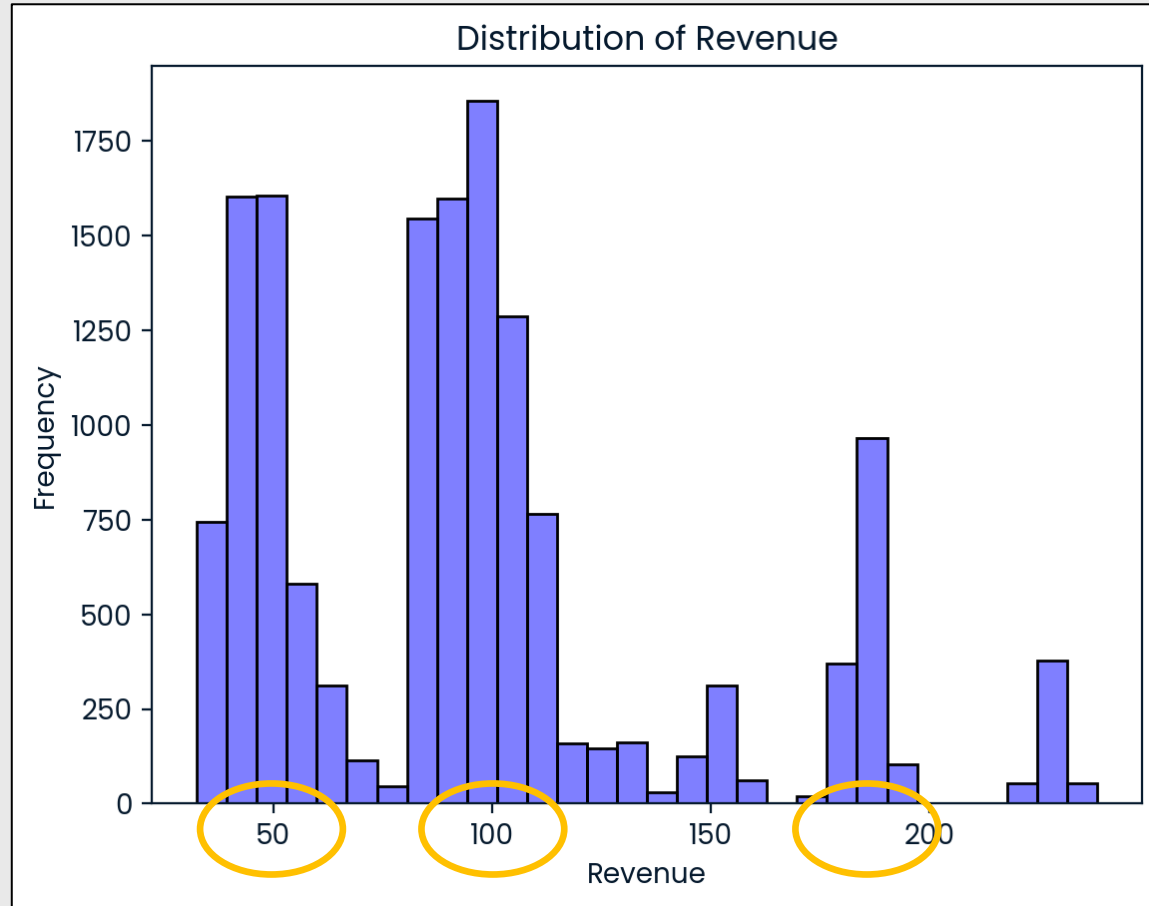
The number of customers for each sales method



- According to the bar chart, Email is the most commonly used method, followed by Call, and the least common method is Email + Call.
- The total number of customers is 15,000.
- Email accounts for about 50%, followed by Call's 33%, while the proportion of the combined method Email + Call is only about 17%

Outcomes

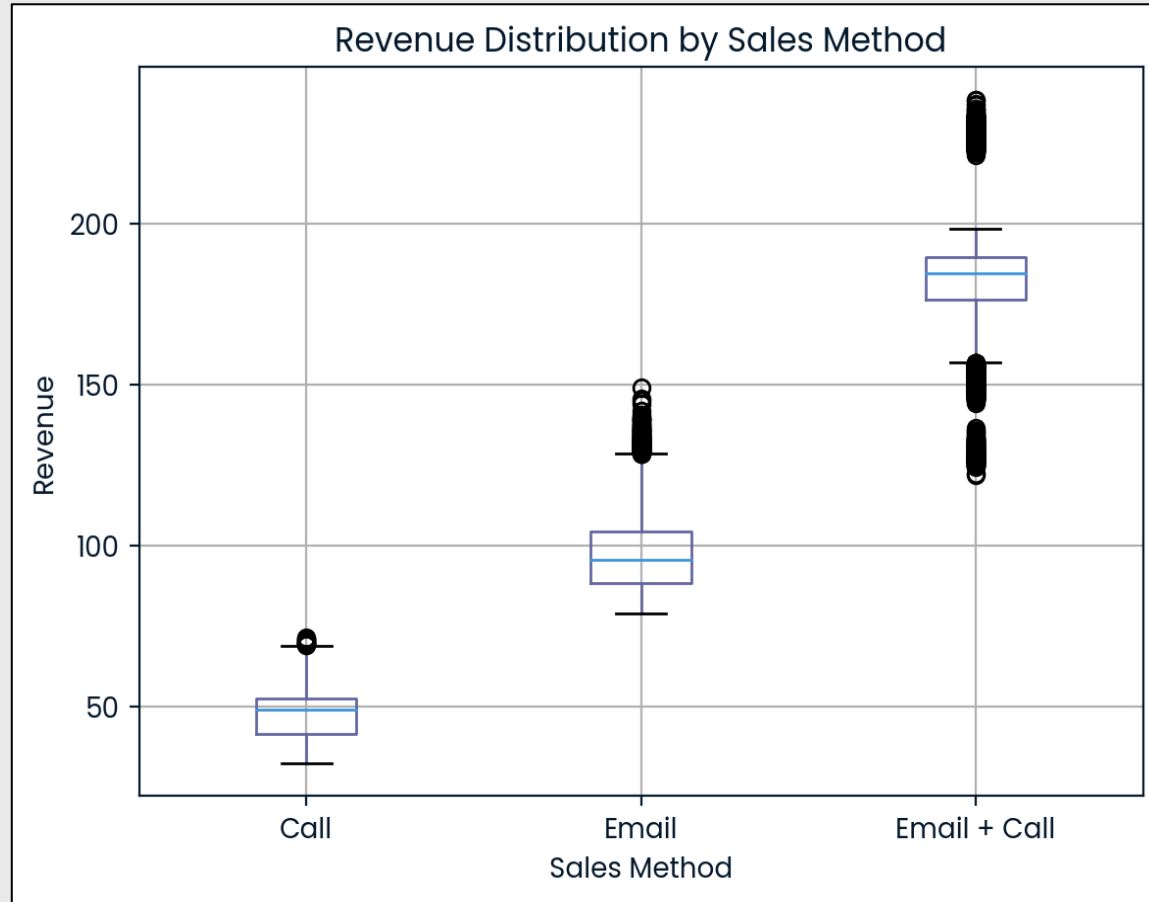
The distribution of overall revenue



- According to the histogram, revenue is primarily concentrated around 50 and 100, with a moderate distribution around 180.

Outcomes

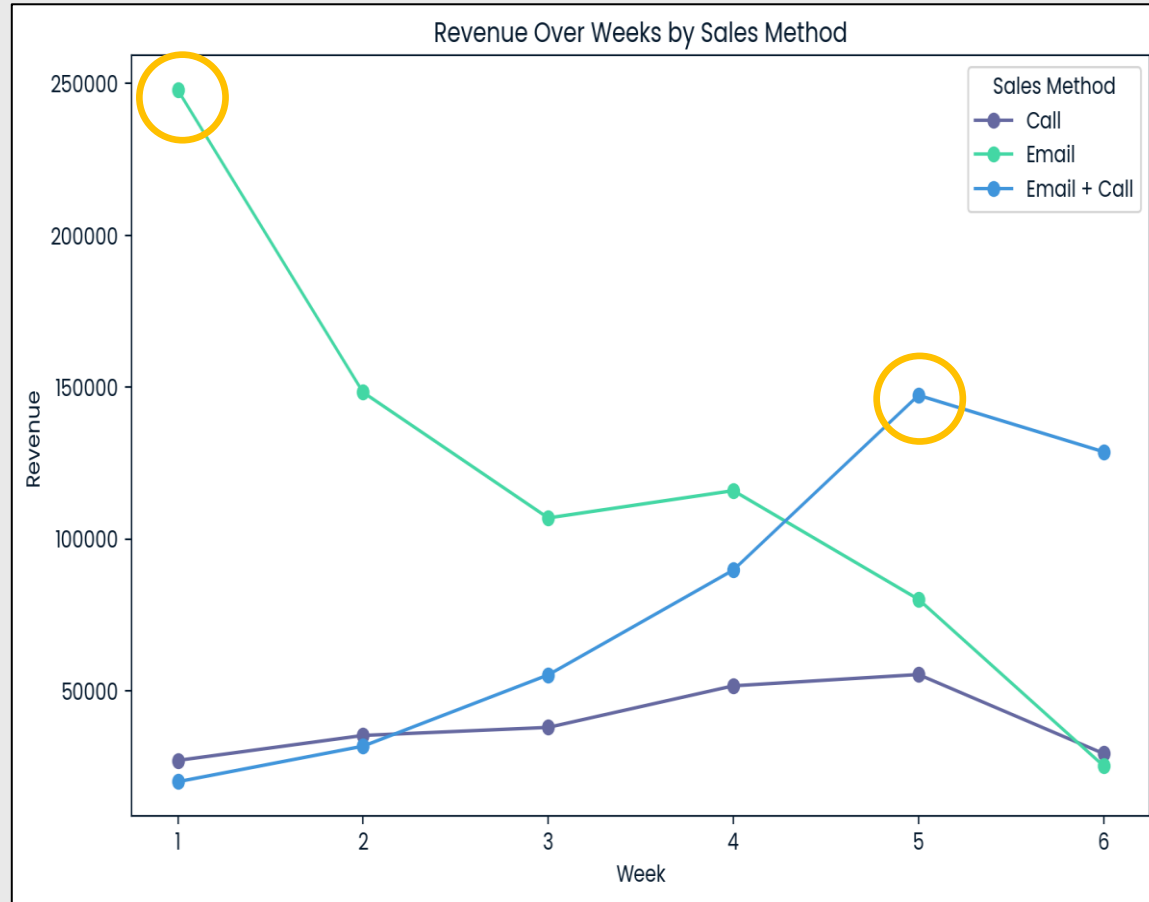
The distribution of revenue for each sales method



- The median for Call is approximately 50, for Email it is around 90, and for Email + Call, it is about 180.
- Three median values correspond to the three peaks shown on the previous slide.
- In summary, the revenue distribution is clearly differentiated by sales method

Outcomes

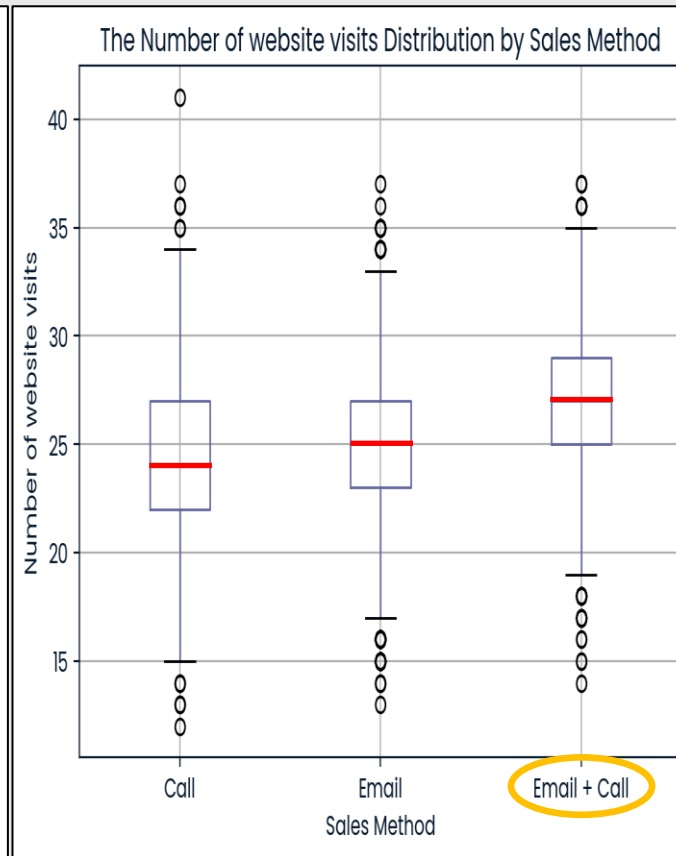
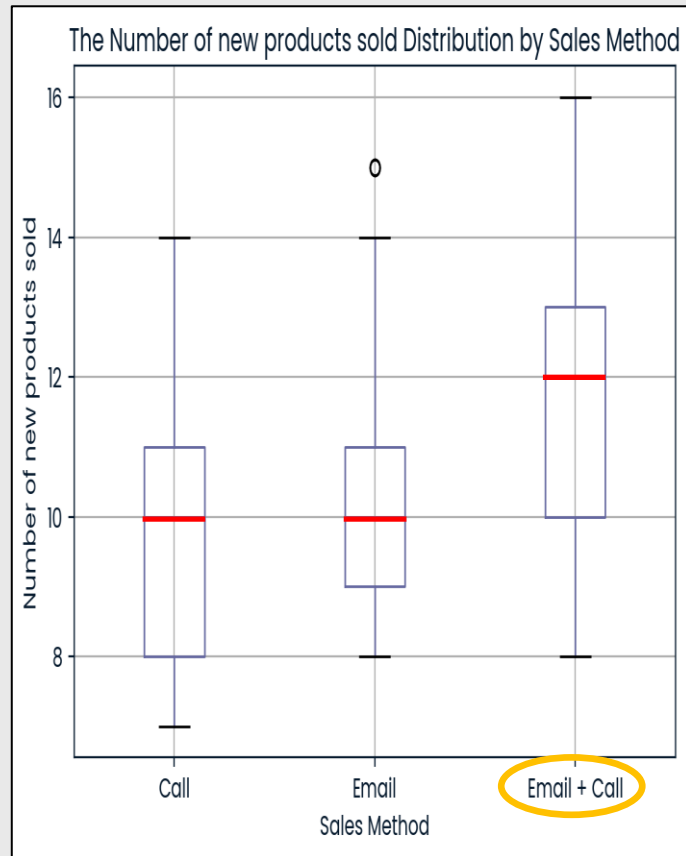
The difference in revenue over time for each sales method



- Email line initially shows significantly high revenue but exhibits a decreasing trend over time.
- Call line shows its revenue increasing slowly but remaining low overall.
- In contrast, Email + Call line starts with the lowest revenue initially, but demonstrates a substantial increasing trend up to week 5, followed by a slight decrease in week 6, but it still remains at a moderately high value.

Outcomes

Other differences between the customers in each group



- The median of new products sold for Email + Call is 12, compared to the median of 10 for both Email and Call.
- The median of website visits for Email + Call is 27, which is greater than 25 for Email and 24 for Call.
- Using the Email + Call may lead to an increase in website visits, which appears to positively influence the higher number of new products sold.

Business Metric

Definition of a metric for the business to monitor

$\text{sales_efficiency} = (\text{subtotal_revenue}) / (\text{customer_count} \times \text{time_required})$

sales_method	sales_efficiency	subtotal_revenue	customer_count	time_required
Call	1.59	236445.16	4962	30
Email	16.17	724313.35	7466	6
Email + Call	12.25	472730.95	2572	15

- This metric is defined by considering the subtotal revenue, the number of customers and the average time (in minutes) required to handle one customer for each sales method.
- As the intuitive name suggests, sales_efficiency refers to the revenue generated per minute by each method. When the sales team spends one minute on Email, they generate 16.17 in revenue. For Email + Call, one minute results in 12.25 in revenue. In contrast, spending one minute on Call yield just 1.59 in revenue.
- As a result, Email is the most efficient sales method.

Recommendation

Email + Call is recommended as the best sales method

- Email is the most efficient method in terms of time efficiency, but it doesn't mean that Email generates the highest revenue.
- Email just generates quick revenue during the early stage of a new product launch, but its revenue decreases over time and doesn't maximize revenue per customer.
- Email + Call may take more time to generates revenue than Email, but this method allows for maximizing revenue per customer, which leads to **the maximum total revenue with reasonable time efficiency.**