Effective sales methods

Insights and actions for "Pens and Printers" sales strategy

mikjf 04/12/2023

Project overview and business goals

Background

The analysis was initiated in response to the launch of our new product line. Over a six-week period, the sales team implemented 3 distinct sales methods:

- 'Email': initial launch email + follow-up email 3 weeks after (minimal effort)
- 'Call': direct phone call to customers (30 min)
- 'Email and call': preliminary product information email + sales call (10 min) 1 week later

Business goals

- Identify the most effective sales methodologies to focus on in order to maximize revenue
- Define a performance metric for the business to monitor in the future



Methodology overview

Data validation

• Cleaning, examination and standardization of sales data to ensure integrity and usability

Exploratory data analysis

Analyze customer counts per sales method, revenue distribution and patterns investigation

Statistical experimentation

• Compare sales methods and evaluate impact on revenue, units sold, site visits and customer tenure

Customer segmentation

Analysis of customer behavior and geographic analysis of sales data by sales method



Analysis objectives and key questions

Objectives

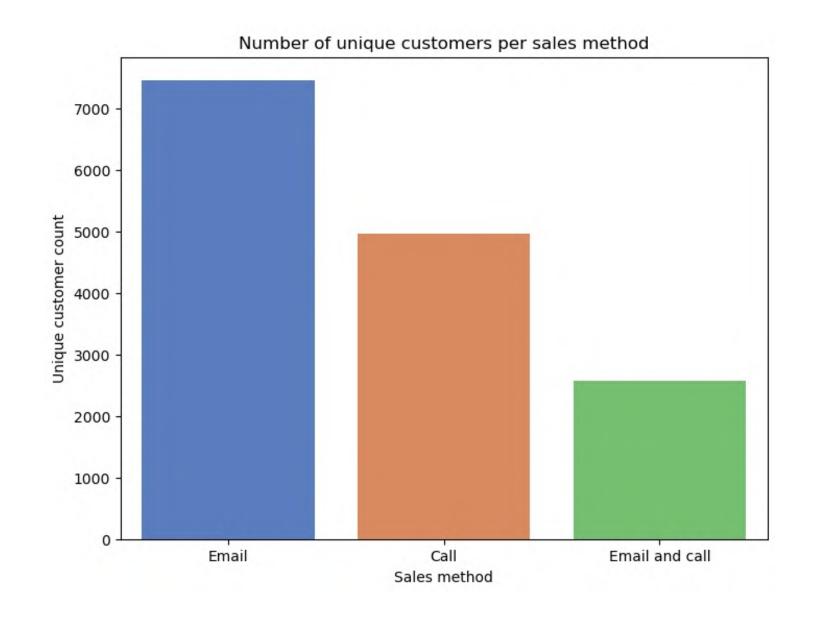
- Evaluate effectiveness of the 3 sales methods for revenue generation
- Analyze customer engagement and difference among customer groups
- Define the best sales approach
- Provide actionable insights and a key metric for ongoing performance assessment

Key questions

- Which sales methodologies are most effective?
- How do sales methods influence customer behavior and revenue?
- What patterns and trends emerge from different sales methods?
- What strategic recommendations can be made?



Unique customers count per sales method



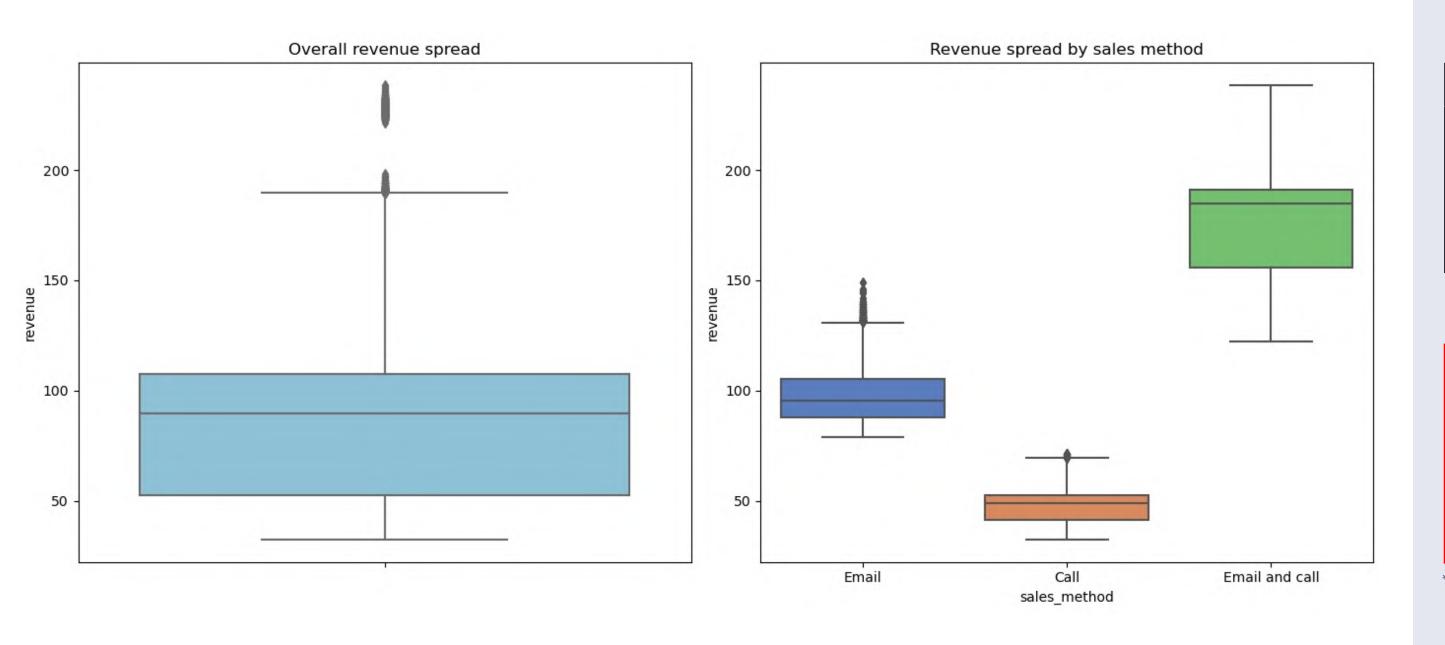
Customers by sales method

	Unique customers		
Email	7'466		
Call	4'962		
Email and call	2'572		
Total	15'000		

Key insights

- Data shows only successful sales
- Each customer has made one purchase
- Most sales through Email (49.78%)
- Count might be influences by sales method preference from each sales team member

Spread of total revenue



Median an IQR

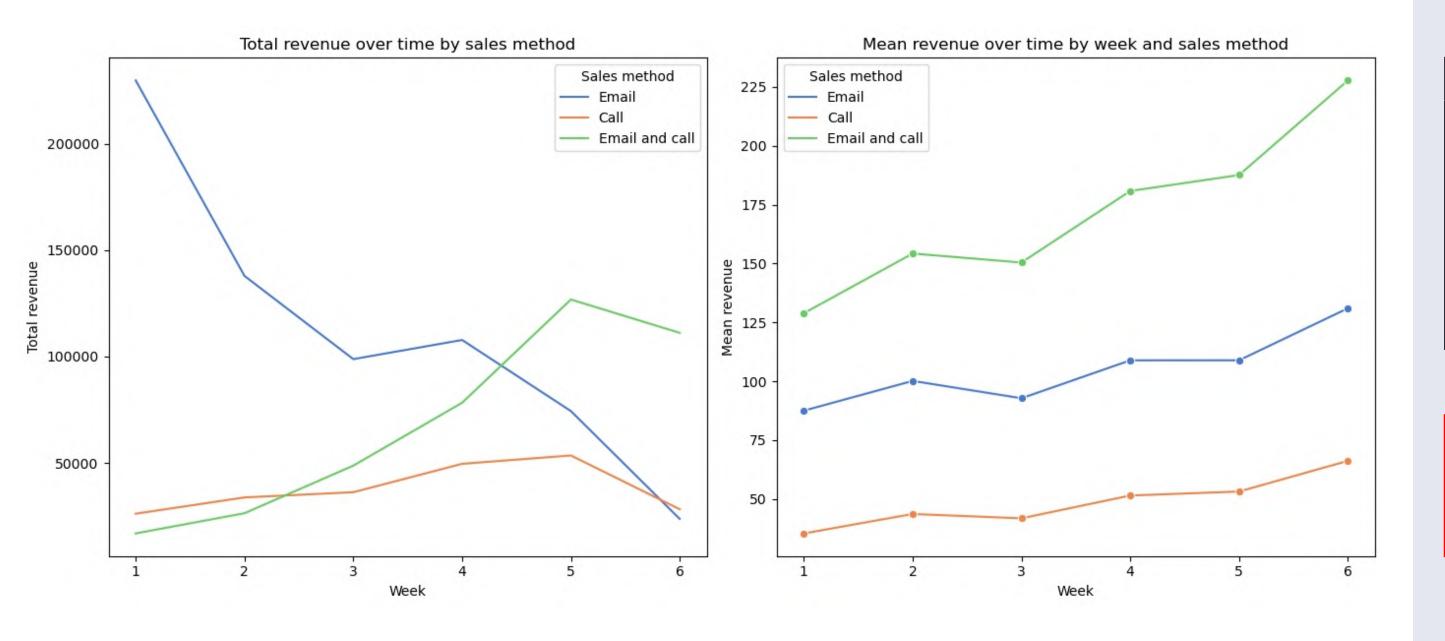
	Median Revenue	IQR
Overall	89.50	54.85
Email	95.58	17.29
Call	49.07	11.21
Email and call	184.74	35.33

Key insights

- Overall revenue: considerable spread
- IQR: Email and call > Email > Call
- Median revenue: Email and call > Email > Call
- E&C*: widest IQR but highest-revenue values, suggesting combined method effectiveness

*E&C = Email and call sales method

Revenue over time by sales method



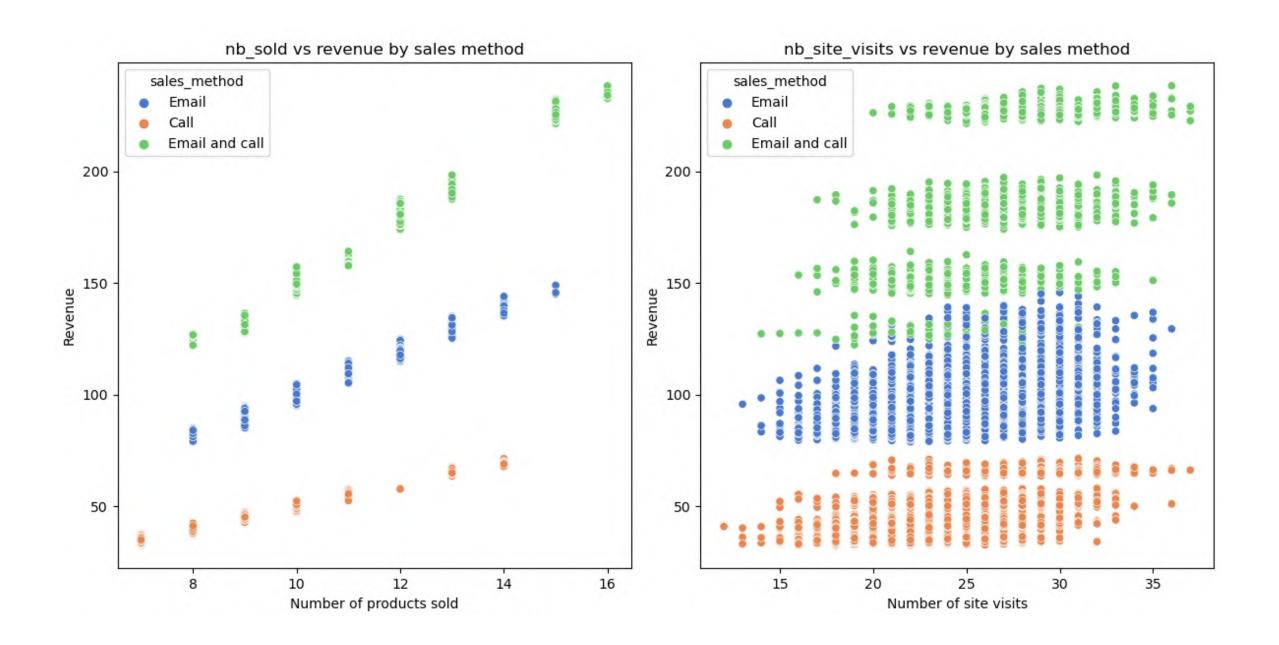
Mean revenue over time

Week	Email	Call	E&C
1	87.50	35.35	128.90
2	100.14	43.60	154.25
3	92.76	41.76	150.42
4	108.88	51.45	180.82
5	108.89	53.15	187.59
6	130.98	66.17	227.77

Key insights

- Email total revenue by week: negative trend
- E&C positive trend and highest mean revenue
- E&C capitalizes on combined approach

Email and call is best at all levels



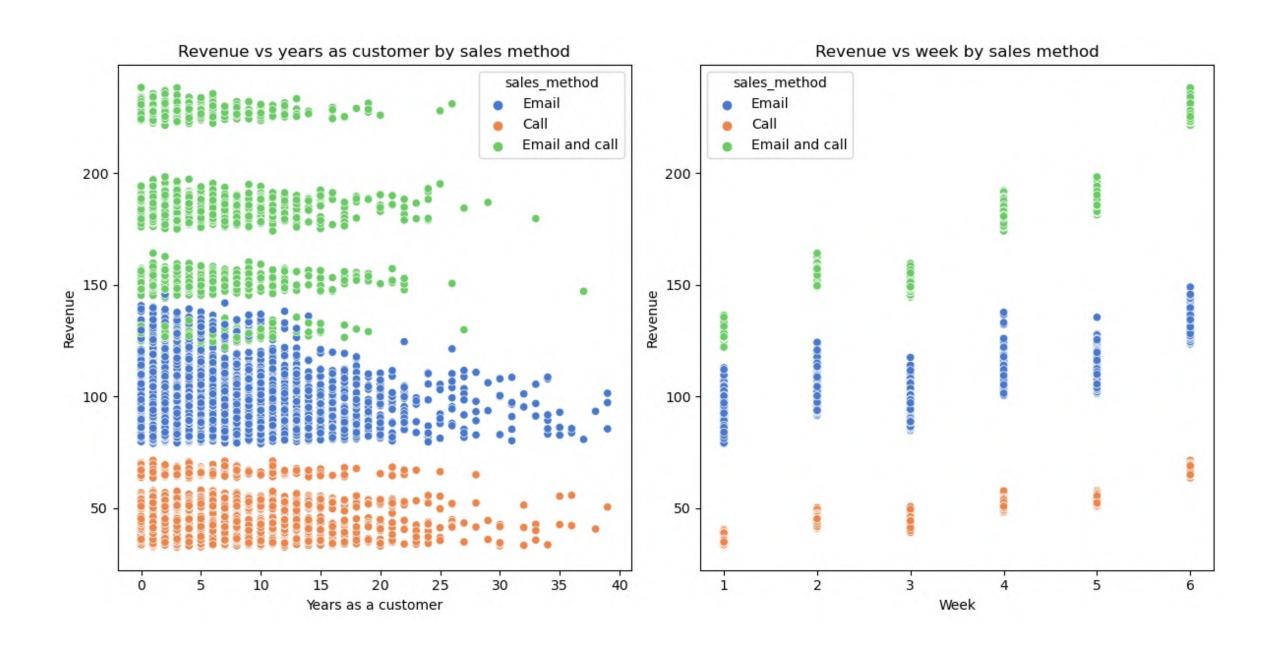
Units sold vs revenue

- Positive relationship
- E&C has the highest values at all units sold levels (more ffective)

N. site visits vs revenue

- N. site visits does not impact directly revenue
- E&C is the highest revenue sales method at all n. site visits levels

Email and call is best at all levels



Revenue vs years as customer

- No significant relationship between revenue generated and the n. years as a customer
- E&C confirms better revenue generation

Revenue week over week

• E&C sales method is again the best performer, generating higher revenue per sale

Customer insights

Best sales method by state

• Email and call method always greatly outperforms other sales methods

Purchase volume segmentation

• 34.33% are considered 'High volume' buyers as they purchase more than 10+ items (median value)

Customers and revenue by geographical location

>50% of both customers and revenue come from 9 states only (CA, TX, NY, FL, IL, PA, OH, MI, GA)

Impact of sales methods on revenue, units, site visits and years as customer (statistical experimentation)

• Significant difference in mean revenue across method comparison → tangible effect on revenue generated



Business metric to monitor: Moving median revenue per sale

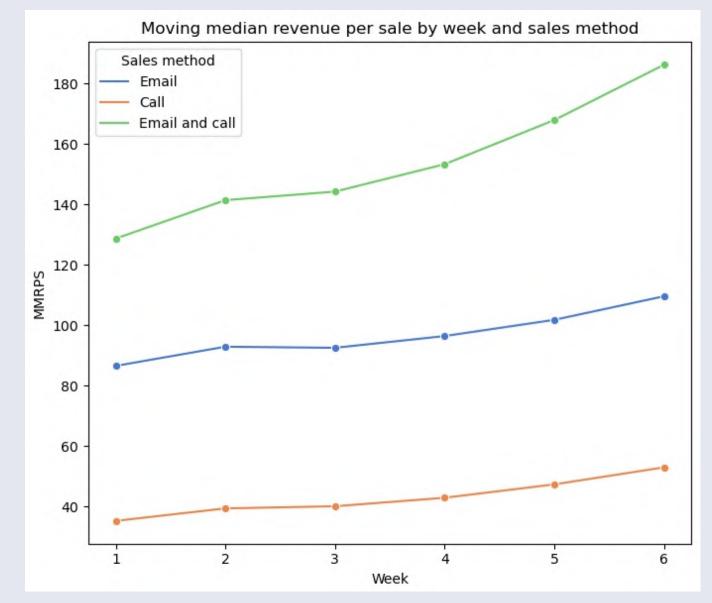
Considerations about data

- Data only shows successful sales but no missed opportunities
- Initial sales figures could be inflated due to initial interest
- No insight about repeated purchases (one sale per customer)

MMRPS with initial 4-week rolling period

- Identifies most lucrative sales method in terms of revenue
- Reflects impact on strategic changes allowing agile decisions
- Adaptable rolling window depending on business needs (i.e. business cycle, seasonal trends and specific strategic goals)
- Keep track of weekly time by sales method to confirm the most lucrative sales method generates the most total revenue





MMRPS (4-week rolling period) initial values

	sales_method	1	2	3	4	5	6
0	Call	35.20	39.33	40.04	42.85	47.29	52.92
1	Email	86.54	92.89	92.53	96.42	101.79	109.59
2	Email and call	128.72	141.44	144.27	153.34	167.96	186.27



Final recommendation: focus on Email and Call sales method

Superior revenue generation

• Highest median and moving median revenue per sale, indicating more effective sales per customer

Consistent performance growth

Strongest week over week improvement, reflecting increasing sales efficacy

High-value transaction focus

• Outperforms in securing high-revenue sales, demonstrating strategic importance

Cost-benefit advantage

• Time invested in Email and subsequent 10 min. call justified by higher revenue outcomes

Data quality improvement

Implement routing data validation process to check for and address missing entries and discrepancies

