Using ‘dollar per offer’ to identify opportunities for increased investment

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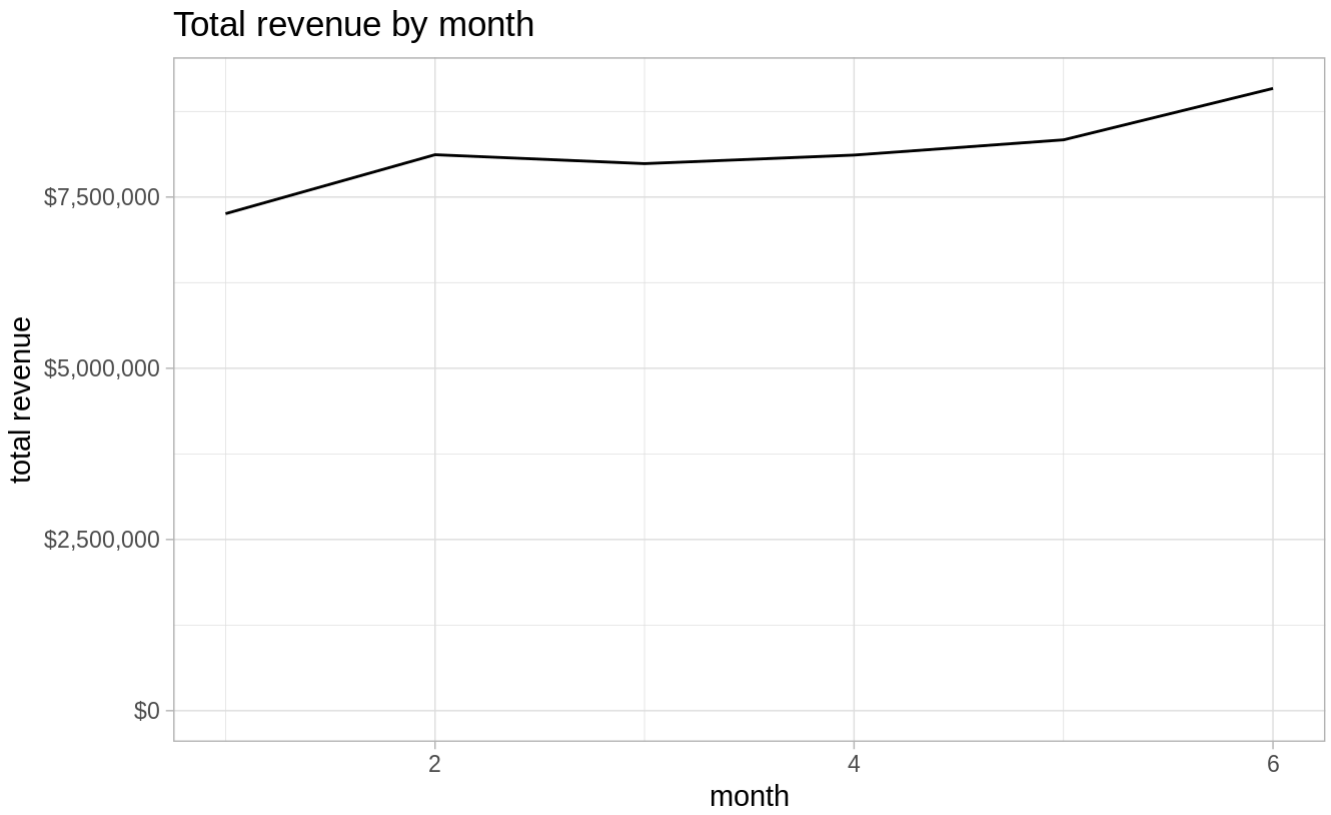
Overview

What are we examining?

- 14 products
- 4 sales channels
- 4 divisions
- Data provided on:
  - number of units offered
  - number of units sold
  - total revenue earned

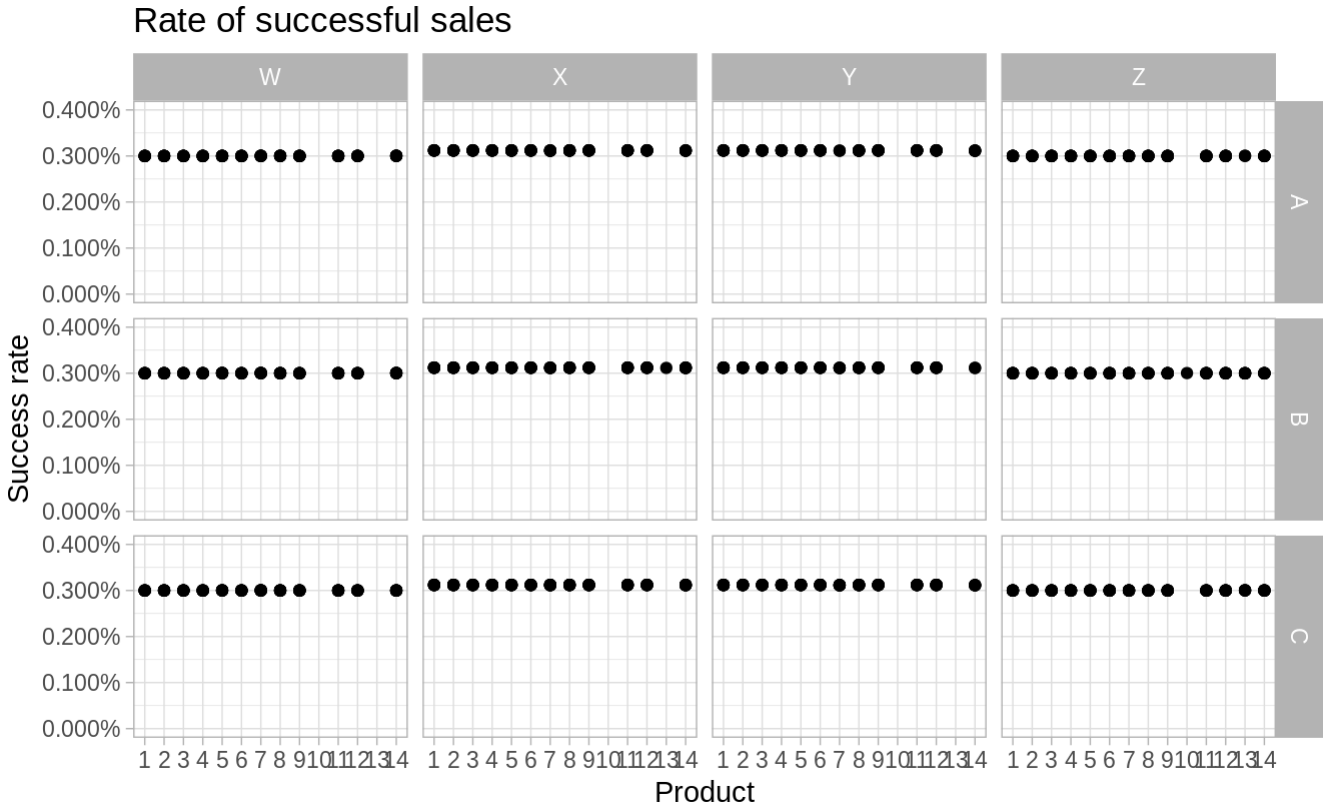
Changes over time



How should we evaluate the success of sales?

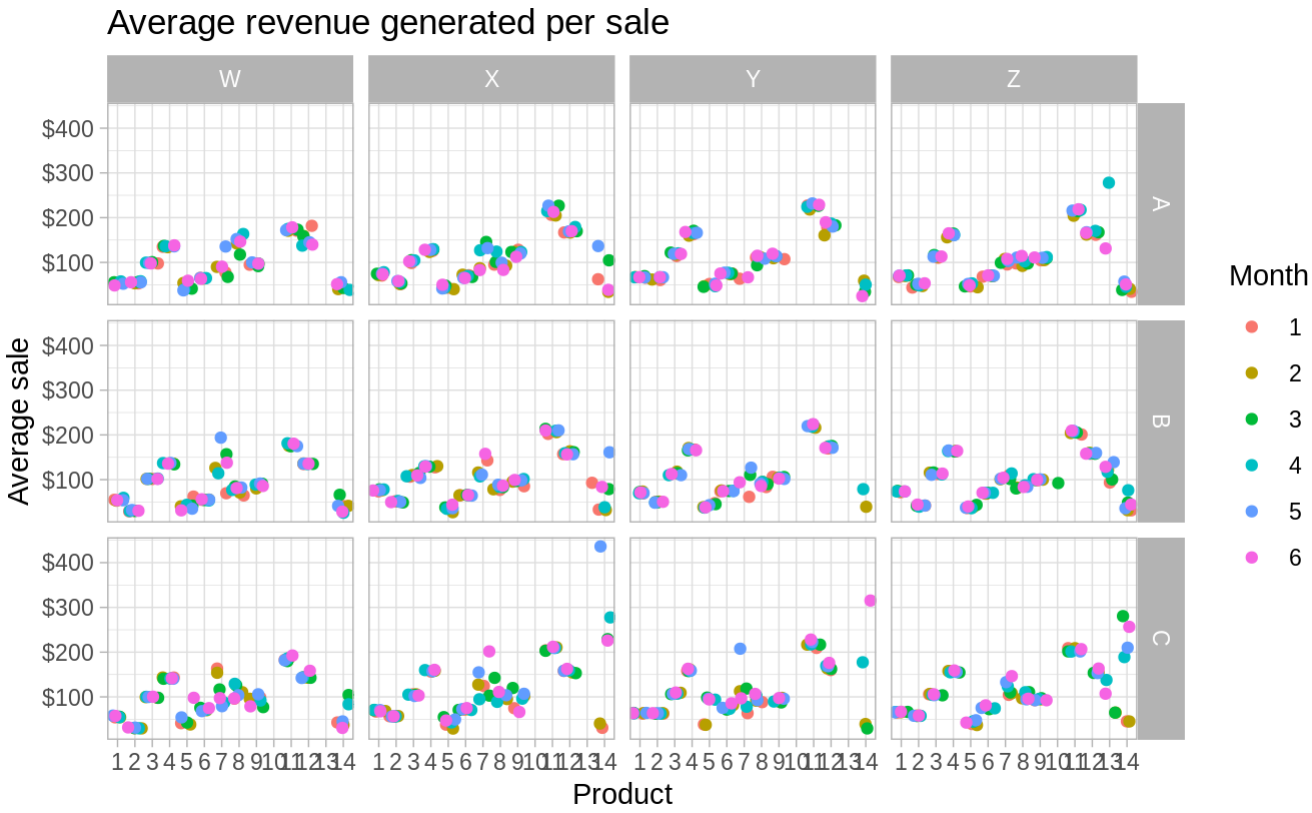
Success rate

- Sale rate is consistent across division, product, channel, month
- Accross all variables, .3% of products offered are sold



Average sale

- Revenue per sale driven mostly by product
- Consistent across month and division



Dollar earned per offer

- Closest possible to a ‘return on investment’ with the data available
- Will use this for remainder of presentation

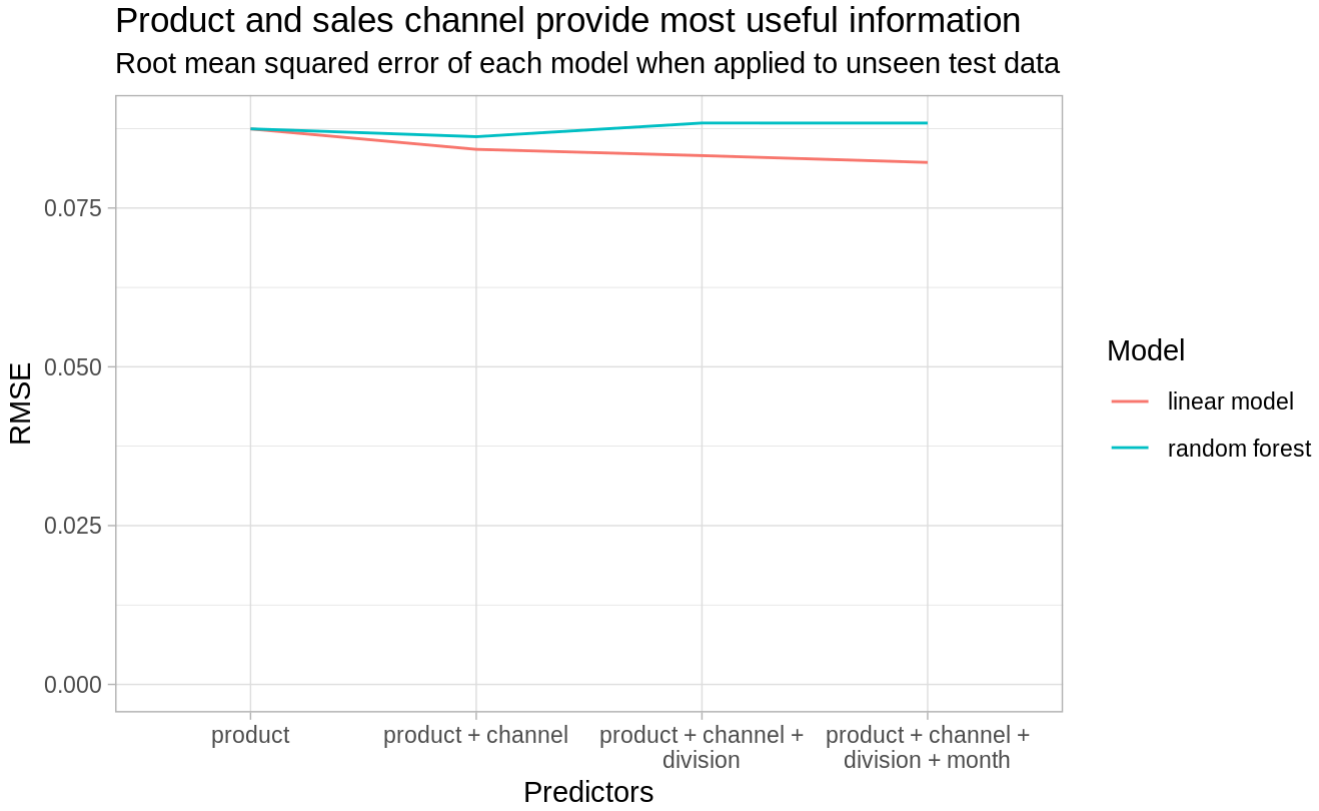
More about dollar per offer

- In practice, will resemble average sale for this analysis because the sale success rate is so steady across all variables
- This metric will be more flexible if / when success rate changes
  - Incoroprates cost which average sale cannot
- Ideally, future analyses examine individual level information to understand lifetime value of customers in realtionship to the investment made to make the sale
- However, this assumes a consistent cost to offer across products, divisions, and channels
  - If costs of offer vary substantially, this analysis can be adapted by adding / estimating those costs
- May be useful for identifying opportunities for increased investment or finding most efficient products / channels / divisions

What influences dollar per offer?

Predicting dollar per offer

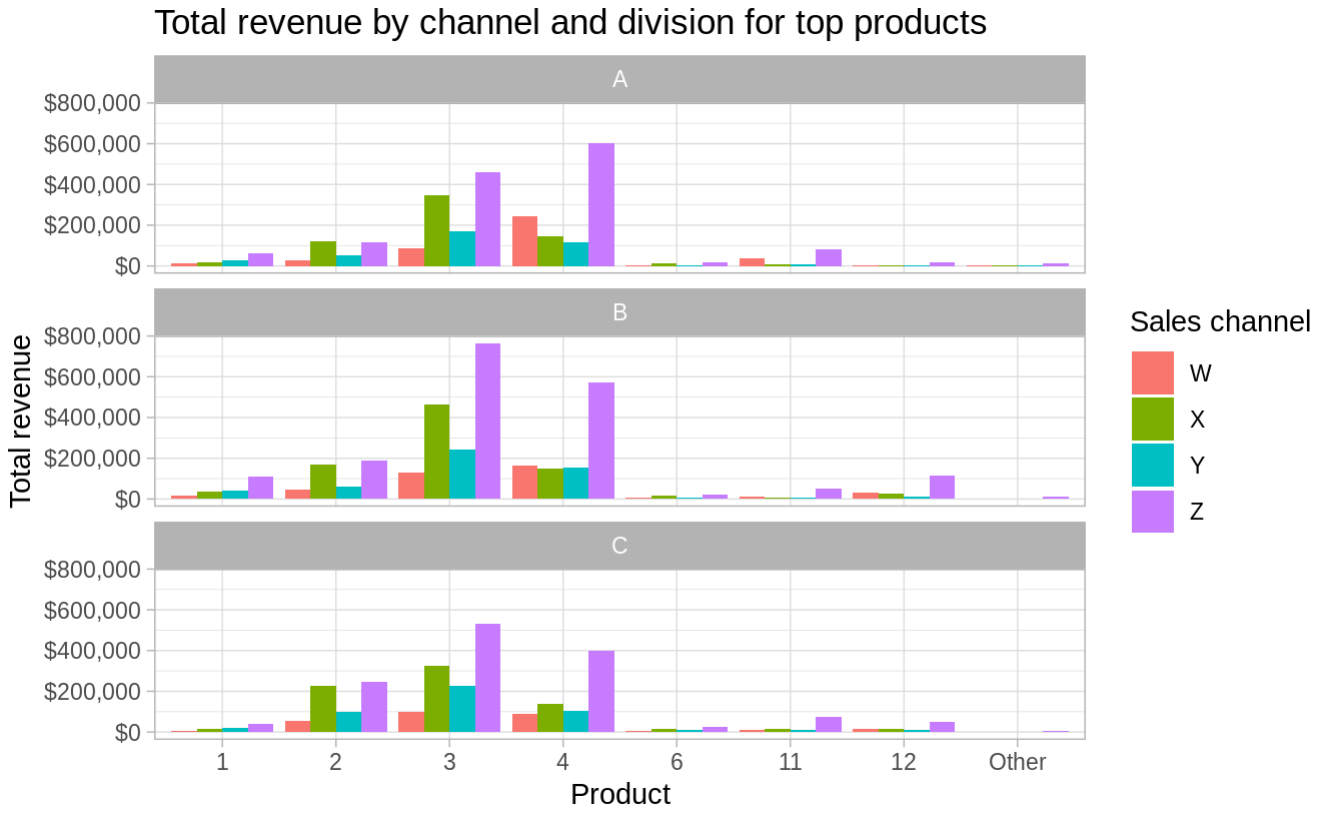
- I built two statistical models with four sets of variables each
- Product and sales channel provide most helpful information in predicting dollar per offer



What are the most profitable products?

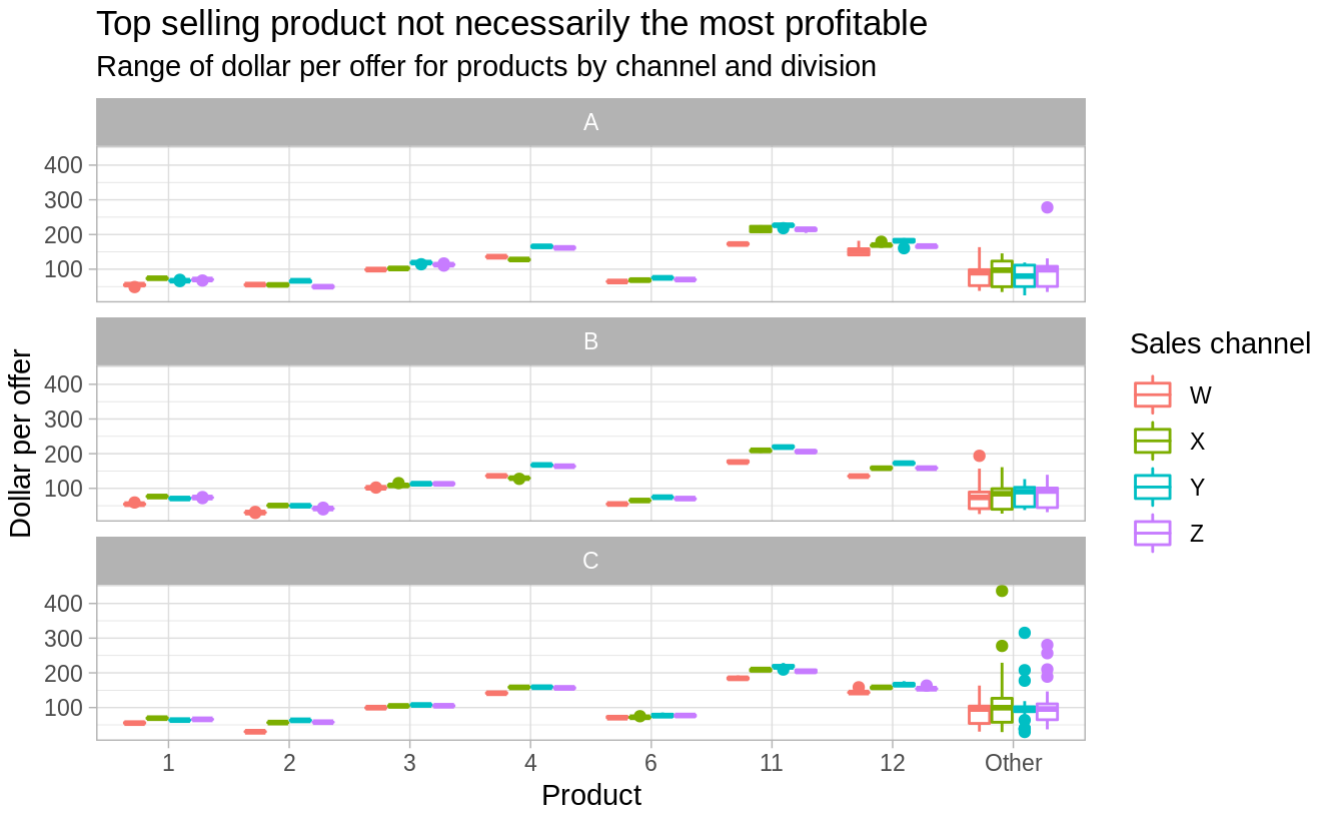
Most revenue driven by a few products

- Products 3 and 4 are the highest selling, offered most
- Channels Z and X generate the most revenue



Revenue vs efficiency

- Channel Y tends to offer a higher return on investment
- Products 11 and 12 also have a higher dollar per offer but generate fairly low amounts of revenue



Next steps

Recommendations

- Explore opportunities for increasing sales in Channel Y and for Products 11 and 12
  - These tend to offer the highest return on investment even though they represent a relatively small proportion of revenue
- Investiagte whether Product 3 and Channel Y should continue to represent the highest proportion of revenue
- Best to explore these questions are randomized experiments
  - Establish key metrics (dollar per offer or something else)
  - Increase / decrease offers in one or more of the above areas and measure if revenue increases or decerases

Outstanding questions

- What is the cost of each offer? Is it consistent or variable?
  - If variable, need to incorporate this information before making recommendations
- Why is success rate so consistent?
- Conduct deeper analysis using individual level information about customers
  - What does it cost to acquire a customer?
  - Can we predict a customer's lifetime value?
  - Do some products / channels / divisions have better customer retention?