# How Do We Increase Positive Responses to Emails? (B to B sales)

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CSPB 4502

## Description

I will look into the data being uploaded into the Sailes database to discover any interesting trends that are negatively impacting positive email response. I will look into questions like -

- 1. What is the most common job title?
- 2. Do job titles vary by region or company size?
- 3. Do different industries have different varieties of job titles?
- 4. What job title(s) responds positively to emails most often? (break this out between Signals, referrals, and follow-ups)
- 5. Response rates between industries?
- 6. Does the email content or order affect responses?
- 7. Is there a variance in day of the week or month responses?
- 8. What metrics affect positive responses the most?
- 9. Is non normalized data affecting responses?

#### **Prior Work**

- Overall research competed by Sailes CTO ML to Targeting: Optimizing Positive Engagement
  - This research did not look into individual industries, any potential data normalization issues, or production software issues (ex. Is the internal software that our AI/API runs on providing the intended search inputs?)
- I have noticed some variance in the data as part of my role as our Data Ops Specialist, these insights and domain knowledge will help guide my investigation.

#### **Datasets**

- Sailes /Athena data lake
  - I will access this via QuickSight
  - Main source
  - The data lake has all client and contacts data in various tables
- I will meet with my CTO and engineering team to see if there are any additional internal databases that might be useful for this investigation

## **Proposed Work**

- Data cleaning
  - Review and clean the contacts data
  - Normalize values (the data is sources from 3+ external sources)
- Data preprocessing
  - Initial thoughts are that the number of job titles in the analysis set will need to be reduced to discover impactful trends
- Data integration
  - Will be completed in QuickSight Analysis view
- Meet with engineering team to gain any insights and knowledge of the layout of our data
- Review data mining algorithms and utilize any fits
- Discover patterns in the data and revise investigation as necessary
- Job titles and data normalization will be the initial focus of the data cleaning and subsequent knowledge discovery steps

### **List of Tools**

- Sailes Athena Data Lake
- Amazon QuickSight
- VS Code
- Excel spreadsheets

#### **Evaluation**

- This largely depends on the trends and patterns discovered.
- I will relay any knowledge gains to my operations and engineering teams, help implement any updates/changes to our workflows, and then see if there is an increase in positive responses to emails.