

Summary report of rejection email analysis

Davide Chiuchiu

October 14, 2020

1 Scope

This document contains my findings on the corpus of emails that I received during my job search. The email database contains

- emails that confirmed the application submission and possible next steps
- emails where companies rejected my candidacy
- emails with feedback on how I could become a better candidate.

2 I received more confirmation emails than rejection emails

Overall, I received more emails which confirmed the reception of my candidacy than emails where my candidacy was rejected (see Figure 1). This highlight that I have active review process at the moment, but also that some companies practice ghosting. Note also that only a few of the received emails corresponds to feedback. This means that I will ignore feedback emails when I will attempt machine learning on this dataset.

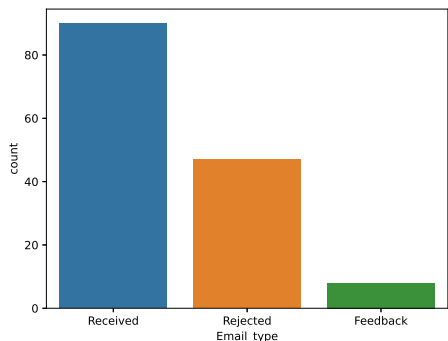


Figure 1: I received more emails which confirms that my candidacy than emails where my candidacy was rejected. Unfortunately, only a small subset of emails correspond to feedback from potential employers.

3 Feedback might suffer because rejection emails tend to be quite short

Unfortunately, rejection emails tend to be quite short and uninformative. Indeed, the emails which rejected one of my candidacy have the same number of sentences of the template emails which acknowledged my candidacy submission (2). This suggests that rejection emails are templates too, and those left me with no real understanding why I was rejected.

4 Different email types can be recognized from different keywords

A quick word count for each email type shows that keywords allows to distinguish emails where my application was rejected from emails that confirmed the reception of my candidacy (see Figure 3). More specifically, words like *candidate* and *unfortunately* uniquely identify emails where a candidacy was rejected. This makes classification with supervised learning possible even if the two email categories share some common keywords such as *apply*, *review* and *team*.

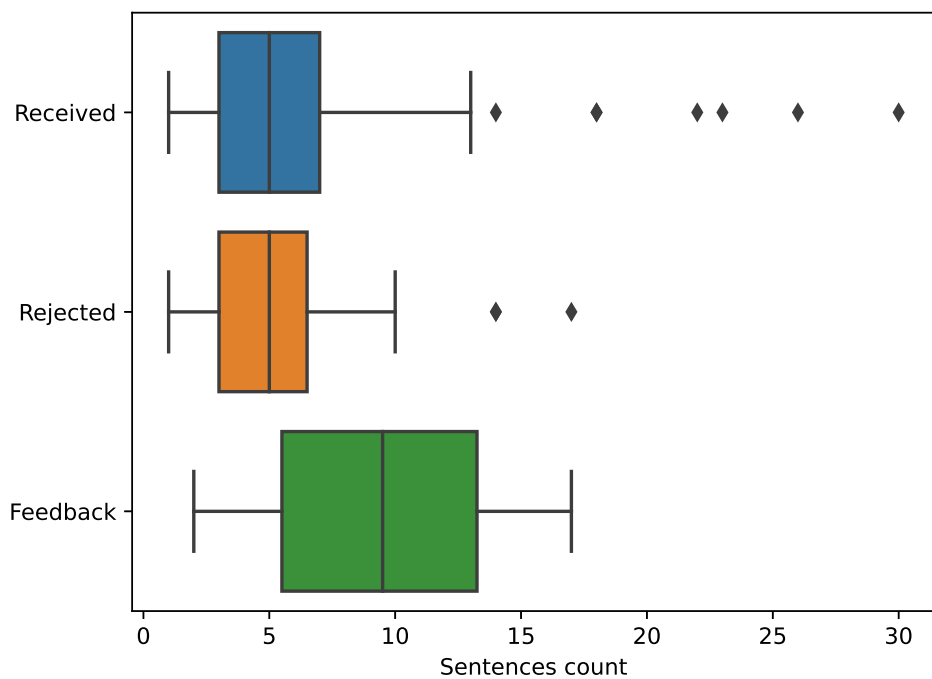


Figure 2: Emails where a candidacy was rejected corresponds to short templates with no real explanation why the candidacy was rejected in the end .

Word cloud for Received candidacy emails



Word cloud for Rejected candidacy emails



Figure 3: Different email types can be identified by specific keywords.

5 Large companies

The data indicates that company size greatly influence the time that pass before a candidacy is rejected. More specifically, the larger the company, the less it takes for a candidacy to get rejected.

For example, large companies tend to reject candidates in the first 10 days after the candidacy submission. Indeed, 50% of the submission in the sample were rejected in within 10 days, and half of those come from large enterprises with more than 2500 employee. Many of these large companies are among tech juggernauts or recruiting firms, which suggests that such efficiency involves sophisticated Application Tracking Systems that select only the most promising candidates.

Similarly, small-medium enterprises tend to reject candidates between 10 and 20 days after the candidacy submission. 25% of the submission in the sample were indeed rejected in this time window, and around 60% of the companies with such rejection times have less than 250 employees. This sharp transition, together with the difference in applicants volumes between enterprises with different sizes, may indicate that small-to-medium enterprises do not have access to technologies that automatically filters the best candidate. If confirmed, this could open market possibilities.

Regarding companies that takes more than 20 days to reject a candidacy, half of them are small/medium enterprises and half of them are large companies. In small companies, such long rejection times might reflect HR divisions that struggle to keep up with the company growth or that still need to find the right hiring procedure. On the other hand, such long rejection time in large companies clearly indicates outdated HR procedures that are inferior to those of some of their competitor. This might seriously influence the ability of such large companies to attract talents in the frantic job market of today.

On the applicant side, these results can help applicants to understand if they are ghosted or not. Applications to large companies that are older than 20 days are, most likely, being ghosted. This ghost-deadline increase to 50 days for small/medium enterprises.