**Draft Email to Cameron - Candidate 2114990**

Hi Cameron!

Hope you are doing well!

I have investigated each of the questions you brought up and have included my responses below.

1. Regarding your question about how candidates are progressing through the recruiting process across different departments, I have included a screenshot of the final output of the recruiting funnels I have created to answer this specific question.

A table of numbers and text

Description automatically generated with medium confidence

This screenshot is pulled from the file titled “DE Shaw Take Home Assessment Question 1 Recruiting Funnels” which have detailed department level volumes of applicants at each level of the process (New Application, Phone Screen, In-House Interview, Offer Sent, and Offer Accepted). Conversion rates are calculated by taking the number of applicants at each stage divided by the number of applicants from the previous stage. For example, if 100 candidates are in the “New Application” stage, and 20 candidates are in the “Phone Screen” stage, the Phone Screen Conversion Rate is 20/100 = 20%.

In the summary tables I have put together, it appears that Engineering and Product PhD Applicants have the highest chance of receiving a phone screen. Across all departments, it seems that the In-House Interview conversion rate is the highest, which means that applicants who receive a phone screen are very likely to receive an In-House Interview Invitation. Interestingly, despite the initially high Phone Screen conversion rates for Engineering PhD candidates, the Offer Extended rate for these candidates is quite low compared to the Offer Extended rates for Engineering Masters and Engineering Bachelors candidates. Additionally, for Finance Masters and IT Masters candidates, there weren’t any applicants who were in the In-House interviews, potentially a result of their rigorous filtering during the Phone Screen stage for these 2 departments.

I included the conversion rates for Phone Screens, In-House Interviews, and Offer Extended only, because I believe that these are the processes that are most within the control of the recruiting team. Candidates who received an offer may have various external reasons for accepting or declining so that metric may have some confounding variables.

1. To help answer your question about Application source effectiveness, I have included a PDF of a Tableau dashboard looking at Percent Accepted Offers and In-House Interview Rates by Application Sources (DE Shaw Take Home Question 3 Dashboard).

I included In House Interview Rates and Accepted Offer Rates as my 2 metrics of measuring effectiveness because these give the recruiting team an idea about how far along the process a candidate can progress. Additionally, I split the information by years because there may be changes in policy or larger market shifts that could affect the effectiveness of certain application sources. I also included the absolute volumes to give the percentages some context. Application sources with less volume can have higher shifts in percentages.

In 2016, the highest offer acceptance rate application sources were Campus Events and Outsourced. However, in 2017 and 2018, it appears that Agency applications have the highest offer acceptance rates compared to other sources, while Campus Events and Outsources application sources saw their offer acceptance rates decrease drastically. This could be due to a shift in the internal recruiting policies and transitioning some external/consulting roles into internal roles. The applicant volume from these sources were low compared to Campus Job Boards and Career Fairs, so the shift could also be attributed to smaller volumes.

Advertisements, Campus Job Boards, Career Fairs, and Websites were consistently the lowest sources across 2016 to 2018 in terms of offer acceptance rates. For Campus Job Boards and Career Fairs, this low percentage could be a result of the large number of applicants. The absolute volumes of candidates for Campus Job Board and Career Fairs appear to be increasing from 2016 to 2018. Depending on the goals of the recruiting team, resources can be shifted away from Advertisements because it has a lower volume of applicants in addition to lower offer acceptance rates compared to other application sources.

Offer acceptance can be confounding as candidates may have various external reasons for accepting or declining an offer, often independent of their experience with the interviewers or with the recruiting process. The In-House Interview rate is a better metric because it more accurately represents a candidate’s fit with DE Shaw from each hiring department’s perspective.

From 2016 to 2018, Agency, Website, and Internal Referral sources demonstrated the highest increase in In-House Interview Rates. Internal Referral In-House rates are the highest amongst all application sources in 2018. This makes sense as internal referrals generally implies a DE Shaw team member can vouch for a candidate’s profile and sees a great fit. However, the volumes of candidates who were internally referred are the lowest across all years so it may not be worth deeper investigation.

Between 2016 and 2018, Campus Events saw a decrease in In-House Interview Rates. However, the volume for Campus events more than doubled from 2016 to 2018, which means that the perceived decrease in In-House Interview Rates is a response to the higher number of applicants. Campus Job Board and Career Fair sources also saw higher applicant volumes from 2016 to 2018 without large changes in In-House Interview Rates, which indicates that these sources are effective at bringing a similar proportion of qualified candidates. Thus, Campus Job Boards and Career Fairs appear to be worthwhile investments for the recruiting team to bring in more qualified candidates.

1. When considering candidates that come from Career Fairs or Campus Events, between 2017 and 2018, there is a significant decrease in In-House Interview rates. When comparing 2016 and 2018, there is also a decrease in In-House Interview rates, although this difference was not statistically significant. This could be due to a reflexive tougher interview process given the higher volume of applicants in 2018. This trend could also mean that Career Fairs and Campus Events bring in more applicants, but the number of ideal candidates remained the same. This could warrant further investigation into how best to reinvest resources into these Career Fairs and Campus Events.

Regarding the data, the Offer Response Data could include the position that the applicant accepted. Although it is possible to find the position that a specific candidate reached the “Offer Sent” stage in the Recruiting Activity Data and join that to the Offer Response Data, there could be some ambiguity there. Additionally, the recruiting team can limit applicants from applying to multiple roles across departments. While a candidate may be a good fit for multiple roles within a single department, having the same candidate in multiple departments can be confounding if that applicant is included multiple times in departmental analyses.

Please let me know if these findings make sense or if there are other areas you are interested in!