

- Who benefits from categorizing job applicant fitness?
 - Job Seeker
 - Identify correlation between applicant features and fitness
 - Identify new jobs one is fit for
 - Hiring Managers
 - Increase efficiency of finding fit applicants
 - Guide expectations for hiring process
 - Indeed
 - Identify trends in user's fitness
- Who benefits from categorizing job applicant deadline?
 - Job Seeker
 - When likely or not likely to be reviewed for a job?
 - Hiring Managers
 - How long to expect before finding right candidate?
 - Indeed
 - Forecast how long job will remain on portal
- What is our method?
 - Assume hiring managers hire on rolling basis
 - Aggregate indeed data by specified parameters to categorize job
 - Find relationship between applicant fitness and job application deadline using:
 - Expected # Reviews by Employer
 - Job Age
 - Cumulative Job Applications

Slide 3

Blue line in graph is total number of expected reviews by employer. Once the cumulative reviewed applications rises above this line, a jobseeker should expect on average not to be considered even if they are fit for the job. The red line represents the cumulative number reviewed assuming 100% review rate. The green line represents the cumulative number reviewed assuming 50% review rate. The places where these lines intersect the blue line are the expected dates by which the job will have been filled. The percent reviewed is identical to the minimum percentile of an applicant in terms of fitness for being reviewed. This model gives us a map between percentile and deadline.

Slide 4

We use our simple model to identify the first relation below and rearrange for the second relation, which gives the minimum applicant percentile as a function of data in indeed's DB. Our third relation comes from plotting our data using calculated percentiles and finding that the relationship is close to linear when one takes $\exp(1/\%)$. Thus we can find the day a job is filled.

$$TR = \% * CA(DF) \quad | \quad \% = TR/CA(DF) \quad | \quad DF = K * e^{(1/\%)} + C$$

R = Expected total reviews

% = Minimum percentile of applicant

CA = Cumulative applications received

DF = Expected age of job when filled