Project Title: SKILL/JOB RECOMMENDER

Project Design Phase-I - Solution Fit

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Define CS, fit

1. CUSTOMER SEGMENT(S)

This article presents a recommender system that aims to help job seekers to find suitable jobs. First, job offers are collected from job search websites then they are prepared to extract meaningful attributes such as job titles and technical skills. Job offers with common features are grouped into clusters. As job seeker like one job belonging to a cluster, he will probably find other jobs in that cluster that he will like as well. A list of top n recommendations is suggested after matching data from job clusters and job seeker behavior, which consists of user interactions such as applications, likes and rating.

6. CUSTOMER CONSTRAINTS

The lack of right data: Input data may not always be accurate because humans are not perfect at providing ratings. User behavior is more important than ratings. Item-based recommendations provide a better answer in this case.

5. AVAILABLE SOLUTIONS

Explore AS,

There are many platforms available for job recommendation but the growth in the number of users makes the existing system inefficient. The increase in the number of users is directly proportional to need of memory storage. So, this factor makes the pre-existing solution inefficient.

The model can only make recommendations based on existing interests of the user. In other words, the model has limited ability to expand on the users' existing interests.

Focus on J&P, tap into BE, understand RC

2. JOBS-TO-BE-DONE / PROBLEMS

J&P

Thousands of companies post jobs and job details. At the same time, millions of candidates and job seekers post their resumes on these websites. The better a website can match these jobs to the respective seeker, the better the chances of a conversion, and the more popular will the website become through referrals and word of mouth. So, when the number of customers increases the storage is an important factor. To maintain record for individual users, we planned to use cloud as a service.

9. PROBLEM ROOT CAUSE

RC

Scalability: As the number of users grow, the algorithms suffer scalability issues. If you have 10000 customers and 1,000 jobs, you will have to create a sparse matrix with 1,00,00,000 elements. So, to store all these records a large amount of storage is needed. Here implementation of cloud improves the system.

7. BEHAVIOUR

BE

Our customer uses pre-existing job recommendation platforms to get recommendation, which does not use cloud service so, it is not that much effective for individual recommendation.

Identify

3. TRIGGERS TR

The Pre-existing model can only make recommendations based on existing interests of the user. In other words, the model has limited ability to expand on the users' existing interests.

As the number of users grow, the algorithms suffer scalability issues.

4. EMOTIONS: BEFORE / AFTER EM

Before implementation of cloud in recommendation, customer can’t get personalized recommendation because, it requires a huge memory storage, if you have 10000 customers and 1,000 jobs, you will have to create a sparse matrix with 1,00,00,000 elements. After the implementation of cloud service, our customer can get personalizes experience in recommendation because, we can store a large amount of sparse matrix in cloud which helps to recommend job in better way.

10. YOUR SOLUTION SL

If we implement cloud as a service, the user and their information are stored in the Database. An alert is sent when there is an opening based on the user skillset. Users will interact with the chatbot and can get the recommendations based on their skills. We can use a job search API to get the current job openings in the market which will fetch the data directly from the webpage.

8. CHANNELS of BEHAVIOUR CH

8.1 ONLINE

Customers ask suggestion from their online friend, or internet community like Quora, Reddit etc..,

8.1 OFFLINE

To get personalized job recommendation, customers ask suggestion from their trustful persons.