A recommender system for job seekers to show up companies based on their psychometric preferences and Company sentiment scores

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Abstract— Recent statistics show an increase in staff turnover which has negatively impacted the organization as well as the employee. The reasons being company culture, working flexibility (work from home opportunity), no learning advancements and pay scale. In this paper, we propose an approach to study the available review data on IT companies (score their reviews based on user review sentiments) and gather information on job seekers which includes their Psychometric evaluations. Then presents the job seeker with useful information or rather outputs on which company is most suitable for the job seeker. The theoretical approach and the importance of such system will be discussed in this paper.

Keywords—Recommender Systems; Psychometric tests; Sentiment analysis; Hybrid Recommender Systems; Aspect based sentiment analysis

I. INTRODUCTION

"A lot of times, people don't know what they want until you show it to them: Steve Jobs"

In today's world, the job has become an important part of human's life where an average human spends around 40 hours a week [1] Recently there have been shifts in the job markets and employees have been resigning and leaving their jobs due to dissatisfaction in their job roles, organization, micro-management, culture etc., which has put a negative impression on the employee as well as the company.

In a survey of 2000 employees, almost half of the employees mentioned that they are on the lookout for a new job. The reason being the Corporate culture [2].

It was also found out that total employee quits have risen every year since 2010 [3]. Figure 1 illustrates the above.
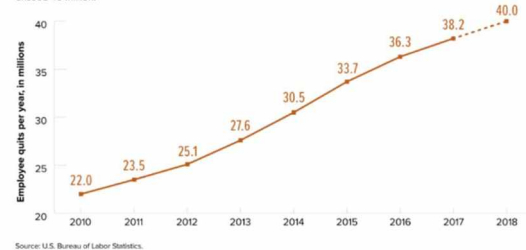
Fig. 1. *Employee quits chart*

Further, there were other reasons why employees quit a job and the major one being 92% of employees leaving a company because their bosses didn't show empathy [4] [5] and a few other reasons include employees leaving due to no work flexibility, learning culture and no future advancements.

The fundamental reasons for these problems are that,

- There are lacking guidance or support (basically recommender systems) which