Identification of Personality Traits for Recruitment of Unskilled Occupations using Kansei Engineering Method

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Identification of Personality Traits for Recruitment of Unskilled Occupations using Kansei Engineering Method

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Abstract—**Job recruitment portals become the main recruitment channel in most of the organizations nowadays because they offer many advantages to recruiters and job applicants. An outstanding recruitment system should be able to filter and recommend the best potential candidates for a job vacancy so that it can avoid hiring of inappropriate individuals or miss out the good candidates. Nevertheless, most of the existing job portals do not cover the unskilled job sectors. Matching unskilled jobs to applicants is challenging because the selection criteria can be very subjective and difficult to specify in terms of professional qualifications. In this paper, Kansei Engineering (KE) Model is applied to find the most prominent personality traits that are preferred by employers in different unskilled job categories in Malaysia. We have identified most prominent 20 Kansei words related to personality traits that are important to six main industries of unskilled workers. The six unskilled sectors involved are construction, hotel, manufacturing, restaurant, sales, and service. 60 employers from the six sectors were interviewed to rank the 50 personality traits identified. Those ranked personality traits can potentially be used for recruitment selection and filtering of unskilled job applicants.**

Index Terms—**E-recruitment; Kansei Engineering; Personality Traits; Unskilled Occupation.**

I. Introduction

The advancement of information and communication technology has transformed how organizations and recruitment agencies recruit employees. E-recruitment is the process of using web-based platform for identifying, attracting, and selecting potential job applications from online database for an employment [1]. E-recuitment benefits both human resource recruiters and job seekers because of its cost effectiveness, time savings, and accessibility. Thus, it becomes a popular choice of Human Resource Management (HRM) practitioners.

However, automated candidates job matching is a notoriously challenging task. It requires both filtering and ranking of applicants. On one hand the recruiters should identify the relevant criteria for the selection and once that are available those criteria are to be weighted in terms of their importance to a job. Traditional online recruiting portal normally apply only simple Boolean operations to compare the requirements from both employer and candidates [5]. However, this simplistic method returns many false hits.

Based on the *Malaysia Standard Classification of Occupation 2008*, an unskilled occupation only needs workers to perform simple and repetitive duties [3]. Unskilled job categories include all the elementary occupations, such as promoter, driver, cleaner, general worker, cashier, clerk, waiter, waitress, operators etc. Currently, only handful of job recruitment portals offer recruitment of unskilled job categories. One of the possible explanations is that it is difficult to objectively evaluate unskilled workers for different job positions since there is no fixed evaluation criteria can be specified unlike in skilled professions. For example, skilled professions have certificated qualification and formal resume while those are not necessary needed for most unskilled workers.

Nevertheless, unskilled occupation is important as well in recruitment and selection. Most of the temporary and high turnover jobs is from the unskilled occupations, for instance part time promoters for some events and road shows. Large numbers of unskilled workers are needed by some job sectors like manufacturing and construction. Therefore, it is necessary to include the unskilled jobs in job portals so that it is easy for unskilled job sectors to recruit suitable job candidates.

One of the methods to evaluate unskilled workers is based on the personality traits since they are related to job performance. For example, the big-five personality traits are amongst the commonly used for job candidate evaluation criterion. Knowing the personality traits requirements of a job can help to filter and rank the unskilled applicants. However, a particular job would need evaluation based on multiple requirements on personality traits, thus, Fuzzy Multiple Criteria Decision Method is needed to effectively score an applicant based on the criteria specified. The aim is to rank and filter the unskilled job applicants based on the different weightages given to each of the personal traits requirement. In this study, the Kansei Engineering (KE) method is used to identify personality traits relevant to the recruitment of unskilled workers in different sectors. By using the KE model, we can calculate the Kansei words (i.e. traits) preferences by the employers.

II. Background

A. Current Issues of Job Recruitment

Companies are facing recruiting obstacles ascending from acute working tasks, short of workers, competition for job applicants, workforce diversity, and turnover job [1]. E-recruitment system has given huge impacts on both employers and job hunters. Due to technology advancements, competitions between organizations and limited labour