Employment Analysis of Graduates Students Using K-Means

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INTRODUCTION

As the population growth rate keeps increasing each year, the employment rate must be in parallel with the population growth to ensure the future generation has a secure employment opportunity. Employment is referred to as a job or profession someone is currently engaged. Regarding the current situation in Malaysia, people seem to be competing to get a better career placement for their employment. The competition of employment has become one of the main concerns for a developing country like Malaysia. As the number of graduates is climbing each year, fresh graduates will also have tough competition within a moderate growth of the economy in Malaysia. They must equip themselves not only with technical skills but also communication and behavioural skills.

Thus, it is important to develop a career analytic application for fresh graduate students to help them in planning their careers for future development. Therefore, this study aims to develop a career analytic application and analyse the employment status of fresh graduate students according to the collected datasets. The results from this study will help the university to get a better understanding of the employment pattern and be able to devise strategies to improve the marketability of its graduates.

BACKGROUND OF STUDY

Employment is related to the demand for labour or human resources in an organization. It shows how people can commit to a job that they are currently performing. It is also known as a relationship or contract between two parties involving payments made by employers to work performed by the employees.

The employment rate in the near future can be affected by computerization. Employment may be declining in the future due to the substitution of labour force with computers. The declining rate of employment is highly affected by the occupations which consist of well-defined procedures of tasks that can easily be replaced and accomplished by advanced algorithms produced by computers [1]. Thus, technology and computerization have main effects on employment [2]. Besides, another factor affecting employment is because of incompatibility of qualifications with the employer's needs. The expectation set by employers is not being fulfilled by the current graduates [3]. The major reasons that can be seen are lack of experience, communication and interpersonal skills. The mismatch is caused by the deficiency of information on the transition between the higher education institution and labour market [4].

Youth is facing a future of irregular employment and informality [5]. The employment rate is seemed to be declining since the global recovery is weakening and affected the labour market today. In other words, the global youth unemployment rate is close to its crisis peak. The queues for available jobs have become longer and the labour market is having a job crisis. This prolonged job crisis makes the current generation to be less selective about the job they are going to get and many of them are being stuck in temporary employment and part-time jobs. However, to handle the employment crisis among the young generation, a global framework and improved policies are established. In order to create these policies or framework, the relation to national and local circumstances need to be considered to strike a balanced approach to help countries shaping strategic frameworks. The resolution of the framework is normally developed by International Labour Conference (ILC) which included five main policies to increase labour demand: there are employment and economic policies; education and training; labour market policies; entrepreneurship and self-employment; and labour rights.