Data Analysis of Employability of Tesda Scholars Graduates Using Web Data Scrapping Technique

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Abstract: The study aims to evaluate and track the employability of TESDA scholar graduates at the TESDA-KORPHIL. This study employs web scraping techniques to collect and analyze employment data, investigating the effectiveness of TESDA scholarship programs. Employment-related information from diverse online sources is extracted creating a comprehensive dataset including job titles, employers, industries, and locations of TESDA scholar graduates. A representative sample is selected based on graduation year, vocational field, and location with stratification ensuring representation across industries and regions. The study contributes to the discourse on technical vocational education's impact and TESDA's role in workforce development. The insights garnered can inform policymakers and educational institutions, enhancing program design for improved socioeconomic development. The study acknowledges data limitations and biases in web scraping, maintaining a balanced perspective on the results.

Keywords: Employability, TESDA Scholar Graduates, Web Data Scrapping Technique

Introduction

Technical Education and Skills Development Authority (TESDA) scholarships play a crucial role in equipping individuals with the necessary skills and competencies to thrive in the job market. As an important aspect of the Philippine government's efforts to address unemployment and skills mismatch, TESDA scholarship programs have been implemented across various technical vocational fields. However, the effectiveness of these programs in terms of graduates' employability remains a topic of interest, and data scrapping techniques to gather and analyze relevant employment data.

Methodology

To conduct this study, a web scrapping technique was employed to extract employment-related information from various online sources, such as job portals, company websites, and professional networking platforms. This approach will ensure a large and diverse dataset of TESDA scholar graduates, their including their job titles, employers, industry sectors, and geographical locations.

A representative sample of TESDA scholar graduates will be selected based on their year of graduation, technical vocational field, and location. The sample used was stratified to ensure an even distribution across different industries and regions.

The extracted data was processed and cleaned to eliminate duplicates and irrelevant entries. Descriptive statistics will be used to examine the overall employability rate of TESDA scholars' graduates including the percentage of employed individuals within a specific time frame after graduation.

Results

The analysis of the data provides insights into the employability of TESDA scholars' graduates. The results include:

Overall Employability Rate. The percentage of TESDA scholars graduates who secured employment within a defined after completing their technical vocational training.

Employability by industry. The distribution of employed graduates across various industries, highlights which sectors have a higher demand for TESDA-trained professionals.

Employability by Location. Geographic distribution of employed graduates, indicating regions or cities with higher employment opportunities for TESDA scholars' graduates.

Trend Analysis. Changes in employability rates over different years and the identification of potential factors influencing these trends.

Discussions

The findings of this research are in the context of the effectiveness of TESDA scholarship programs in enhancing graduates' employability. Factors contributing to high employability rates, such as the relevance of TESDA training to industry needs and the quality of training, have been explored. Moreover, potential challenges and areas for improvement in the TESDA scholarships program have been identified based on the analysis.

The research has contributed to the ongoing dialogue regarding the impact of technical vocational education and the role of TESDA in addressing workforce needs. Policymakers and educational institutions can use the insights gained from this study to enhance the design and implementation of TESDA scholarship programs, thereby maximizing graduates' employability and overall socioeconomic development. However, limitations of the study, such as data availability and biases, will also be acknowledged and discussed to provide a balanced perspective on the results obtained through web data scrapping.

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