THE DIGITAL ECONOMIC IMPACT ON THE CHARACTERISTICS OF EMPLOYMENT IN INDONESIA 2018

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Abstract

Digital technology has fundamentally changed how people and businesses work together. The changes also affects how workers do their job and make job shifting. Digital technology can give rise to new types of jobs or eliminate existing jobs. The mastery of Information and Communication Technologies (ICT) by labor force is fundamental to changing job characteristics in Indonesia. This paper aims to explain the characteristics of jobs in Indonesia where workers use internet to do their jobs. The variables studied to explain the characteristics of jobs are gender, disability, education, status (employee or entrepreneur), and length of work. The analytical method used in this study is quadrant and regression analysis. Indonesia labor force survey 2018 is applied to make the analysis. The data showed that the digital economy has impact on characteristics of employment are education and length of work.

Research Highlights

The mastery of Information and Communication Technologies (ICT) by labor force is fundamental to changing job characteristics in Indonesia. This paper aims to explain the characteristics of jobs in Indonesia where workers use internet to do their jobs. The variables studied to explain the characteristics of jobs are gender, disability, education, status (employee or entrepreneur), and length of work. The analytical method used in this study is quadrant and regression analysis. Indonesia labor force survey 2018 is applied to make the analysis. The data showed that the digital economy has impact on characteristics of employment in education and length of work.

Research Objectives

The objectives of the research is to explain the characteristics of jobs in Indonesia where workers use internet to do their jobs.

Methodology

The National Labor Force Survey (NLFS) or also known as Sakernas (Survey Angkatan Kerja Nasional) data is applied to this research as data source. We applied descriptive and inference
analysis for this research. The inference analysis is applied to see the relationship between the uses of internet for work to the characteristic of worker. The model proposed for this analysis is as follows:

\[ \text{Log Worker} = \beta_0 + \beta_1 \text{MALE} + \beta_2 \text{DISABILITY} + \beta_3 \text{EDUCATION} + \beta_4 \text{EMPLOYEE} + \beta_5 \text{INTERNET} + \beta_6 \text{LENGTH} + \varepsilon_i \]

Where Log Worker is number of people who work by occupation, MALE is percentage of male worker, DISABILITY is percentage of disability worker, EDUCATION is percentage of worker with high school education and above, EMPLOYEE is percentage of worker as employee, INTERNET is percentage of worker using internet to do their job, LENGTH is percentage of worker who work more than a year.

In order to know the impact of the digital economy to the characteristic of worker, we conduct partial analysis by using simple linear regression of number of worker who work in the city and using internet to characteristics variable gender, disability, education, and length of work.

**Results**

The share of ICT sector in Indonesia has reached 5.17% of the country’s GDP in 2018. Taken from the number of working people, 15.2 percent Indonesian worker use internet to do their job. Worker who use internet for their job mainly work in Wholesale and retail trades, repair of motor vehicles and motorcycles sector. According to the occupation of worker who use internet to do their job on the top three are: executive officers, administrative and staff. professionals, technicians and other personnel; operational production equipment and transport equipment, rough worker. High education worker and worker using internet to do their job significantly influence employment. The digital economy has impact in high education worker and the length of the worker work in their job.

**Findings**

Percentage of worker with high school education and above and Percentage of worker using internet to do their job significantly influence employment in Indonesia. The digital economy also has strong impact on two characteristic of worker on how they do their work, namely high education and worker who work more than a year.
References


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