Chapter 16
Artificial Intelligence and the Future of Employment in the World

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ABSTRACT

Artificial Intelligence is a representation of technical progress that has two implications for the nature of work. This chapter used a threshold regression model and a mediating regression model to objectively investigate how Artificial Intelligence (AI) advancements have affected the skill structure of employment. New teaching and learning methods created by AI are now being assessed in a variety of settings. AI is having a significant impact on value chains, labor markets, industry, agricultural practices, workplace design, and education. Training and education in vocational and technical fields support employment, respectable work, and lifelong learning—all advantageous to sustainable development. Even though education covers a wide variety of topics, AI is unable to adequately handle them all. Examining competency

DOI: 10.4018/979-8-3693-9795-4.ch016

development through collaboration should be one of them as it is well-known that collaboration is one of the best strategies for enhancing performance outcomes and since competencies are the way a learning activity can be verified as effective.

INTRODUCTION

Industrial reform, scientific and technological innovation, and other factors significantly impact the global economy and society. Innovation in science and technology and changes to the job structure have grown in importance as aspects of social and economic growth. The next wave of information technology innovation, such as cloud computing, intelligent machines, and 5G, is crucial for advancing economic growth, yet job growth and scientific and technological advancement are incompatible. For instance, a lot of individuals are looking for work, yet a lot of businesses are unhappy with this situation or are even unwilling to hire new employees. This partially reflects the detrimental impact that science and technical innovation has had on employment (Ma et al., 2022). In terms of prospective applications across all industries and functions, AI is arguably one of the most intriguing technologies now under research. In addition to potentially lowering labor costs and increasing inequality, it may also replace humans to increase productivity while creating new jobs (Acemoglu & Restrepo, 2019). This may lead to a decrease in the labor share as well as disturbances in many industries (Acemoglu & Restrepo, 2018). Because of this, economists and policymakers are highly interested in its impact, especially in economies where the proportion of the working-age population is declining, and productivity growth is below expectations. Nevertheless, not much is known about the extent to which businesses are utilizing AI technology, how deeply it has become embedded in particular professions, or how it will impact the labor market (Alekseeva, et al., 2023).

THEORETICAL FOUNDATIONS OF AI SKILL DEVELOPMENT

Artificial intelligence (AI) alongside automation technologies alongside other innovative technologies determines the direction employment will take in record and information management activities. The development of AI together with machine learning technology has extensively changed how work tasks are executed across record and information management fields. AI-driven system developments enhance operational efficiency by speeding up business procedures yet generate two major issues from job loss to skill adaptation requirements. Workers across this field encounter obstacles in job search because organizations must navigate between their