Chapter 3
The Rise of Artificial Intelligence: Its Impact on Labor Market and Beyond

Robert Niewiadomski
NYCDOE, USA

Dennis Anderson
St. Francis College, USA

ABSTRACT

Our inventions defined the work we engaged in for centuries; created new industries and employment opportunities around them. They, however, had often unforeseen consequences that affected the way we lived, interacted with each other, and redefined our societal rules. The established narration portrays the impact of major technological leaps in civilization on employment as temporary disruptions: Many find themselves without employment taken away from them by efficient, laborsaving inventions, but, in the long run, through gradual adaptations, improved education and gaining higher qualifications, everyone benefits. In this chapter, the authors explore the impact of the rapid expansion of artificial intelligence (AI) in relations to the labor market. The authors argue that this rather optimistic, even naïve scenario, collapses while confronted with the exponential growth of AI; in particular, with the potential arrival of syneoids – robotic forms of “strong AI” possessing, or even exceeding, the full range of human cognitive abilities.
The unique urge to create an artificial man has a long tradition dating back to the dawn of Western intellectual history, “Hephaestus, the master craftsman, grants a human voice (...) to his golden mechanical handmaidens (Gera, 2003, p. 114)” and Jewish folklore includes many versions of golems –anthropomorphic beings created from clay. Myths, religions, and popular culture displayed this obsession with varying intensity thorough history. Pamela McCorduck (1979), who investigated this phenomenon, concludes that, as humans, we have been engaged in this peculiar form of self-reproduction by attempting to fulfill the urgent desire, bypassing the ordinary means, in order to recreate what is the essential to us. Contemporary incarnation of this ancient desire can be observed in robotics.

Currently, we are on the verge of an unprecedented technological revolution involving intelligent robots powered by artificial intelligence (AI). It is important to note that what we are experiencing at this stage – Google self-driving cars, Apple Siri, Google Photo Search, robots exhibiting behavior similar to human- are examples of so called “weak AI (WAI).” The concept asserts that machines could act as if they were intelligent. It is a sort of limited intelligence. To the contrary, “strong AI” (SAI) is the higher level of AI, often referred to as “artificial general intelligence” (AGI) –it entails the possibility of machines actually thinking (Russell & Norvig, 1995). According to this view SAI would possess the full range of human cognitive abilities. Such AI, would, as predicted, experience exponential growth, and quite swiftly reach a level exceeding human capacities – a point often referred to as “singularity.” If we assume a physicalist position regarding the nature of human consciousness, we ought to also seriously consider the possibility that SAI would be, at some point, able to genuinely experience subjective mental states such as consciousness. The emergence of consciousness in SAI could be perhaps an incremental process, similar to varying degrees of mental capacities in animals. The terminology attempting to capture this phenomenon varies and it does not quite reflect its full nature and scope. For the purpose of our investigation, we will refer to it as the syneoid –a term derived from Greek συνειδητός (corresponding to English conscious) and the suffix –oid suggesting “likeness” or “form of” as well as bearing resemblance to android (human-like robot).

www.igi-global.com/e-resources/library-recommendation/?id=77

Related Content

Framework for Threat Analysis and Attack Modelling of Network Security Protocols
www.igi-global.com/article/framework-for-threat-analysis-and-attack-modelling-of-network-security-protocols/182702?camid=4v1a
Awareness-Based Recommendation toward a New Preference: Evaluation of the Awareness Effect
www.igi-global.com/chapter/awareness-based-recommendation-toward-a-new-preference/126018?camid=4v1a

Proficient Clustering algorithm for Wireless Sensor Networks
www.igi-global.com/chapter/proficient-clustering-algorithm-for-wireless-sensor-networks/244008?camid=4v1a

Design and Experimental Investigation of a 2-DOF Planar Micro-Positioning Table
www.igi-global.com/article/design-and-experimental-investigation-of-a-2-dof-planar-micro-positioning-table/90299?camid=4v1a