


The Social Impact of Artificial Intelligence

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INTRODUCTION

World is witnessing many developments that enter into the social life, thus societies are affected by the new elements that entering them, such as Artificial Intelligence (AI). It entered societies and developed to become, within several decades, the center of modern life. It is widely agreed that the computer scientists John McCarthy, Marvin Minsky, Nathaniel Rochester and Claude Shannon are the first who coined the term “Artificial Intelligence” in 1955. They use the term to describe the capability of machines to “use language, form abstractions and concepts, to solve kinds of problems now reserved for humans” (Liu, 2020, 3). Artificial Intelligence is increasingly embedded in our everyday interactions, starting from repetitive mechanized actions (Karnouskos, 2017, 23). This chapter reviews the social importance of AI, in addition to the fields that using it in the society sectors, as well as the requirements that AI achieves in society, by reviewing the effect of AI on society since the beginning to the present day, and reviewing its effect on different age groups, by shedding the light from a social point of view on the most prominent advantages and disadvantages of AI. This chapter also reviews the prominent challenges that the application of AI in the social field faces, and the expected future achievements by AI in society.

BACKGROUND

The authors will explore the impact of AI in society by reviewing its social impact in the societal sectors, in addition to explore the Importance of AI in both of developed and developing societies. AI also has an effect from its beginning to the present especially, by developing AI tools to achieve sustainable development in society. Generally, Artificial Intelligence is concerned with developing techniques that allow computers to act in a manner that seems like an intelligent organism, such as a human. (Raynor, 1999, 13). While on the other hand, Social impact refers both to the impact as experienced and provided by individuals, but also that of the organization as an organization, independently of any single member (Onyx, 2014, 5). Furthermore, Artificial Intelligence (AI) is best understood as a “Technosocial system,” from an anthropological view, meaning that the technical aspects of AI are intrinsically and intimately connected to its social aspects. Social values and assumptions shape how we perceive, design, and use AI, as well as inform our perceptions, hopes, and fears of these technologies (Hagerty; Rubinov, 2019, 4). In addition, AI in the recent time leading to future discussions about the existence of Artificial Intelligence in the world. The idea of creating AI is aimed at making human life easier (Shabbir; Anwer, 2015, 7). The authors will discuss the Advantages & Disadvantages of AI uses in different societies such as facilitating life matters of society members, accuracy of the processes in dealing with AI de-

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vices, while on the other hand some of AI Disadvantages appear in the lack of human interaction among society members, as AI has replaced humans in several fields. Then the authors will also examine the social challenges that are facing AI, such as the robots interacting with the elders. Although AI robots perform human functions, but they are programmed to provide services for the elders according to AI systems, so these robots are lacked to the emotional reaction, which may be needed by elders in certain situations and circumstances. This section will demonstrate the future perspective of AI by discussing the future vision of its social impact, thus many possibilities are rising in mind, such as the society future for reaching a better life to human societies in the AI age. Unfortunately, the reality of war, destruction, famine, diseases and poverty, especially in developing countries, how AI could mitigate these problems and contribute in humanity well-being in the future? Moreover, to these possibilities there are expectations about achieving sustainable development, that AI may provide better life for future generations. Accordingly, an important question arises: Is this future vision revolve about a possibility of the greatest benefit will be only prevailed in developed countries?

MAIN FOCUS OF THE CHAPTER

Issues, Controversies, Problems

There is existing research on Social Impact of Artificial Intelligence (Ertel, 2019; Hagerty & Rubinov, 2019; Holt, 2018; Liu, 2020; Majumdar & Chattopadhyay, 2020; Nadikattu, 2016; Naidu, 2019; Tai, 2020; Trappl, 1987). Although there are many studies that show the social impact of artificial intelligence, but the social aspect was chosen deliberately by authors in order to confirm its importance especially because of the change in social communication in society after the entry of social media, where the form of social communication has changed to be through screens and smart phones, which reduced of face-to-face social communication that eventually caused the social-media silence phenomenon. Most of literatures in AI highlighted on the Social Impact in societal sectors. Nevertheless, there is a little attention on studying the aspect of AI robots that are dealing with humans. The authors argue that these issues might face problems with the creation of emotions for robots that are dealing with people. On a similar note, there are relevant researches concerning in the Impact of AI on youth (Hasse, Cortesi, Lombana-Bermudez, & Gasser, 2019; Howley III, 2019; Penn, 2020; United Nations Children's Fund (UNICEF), 2012), but their results were before the spread of Covid 19 and imposing preventive measures by social distancing, thus during this period, social communication became virtual, which requires to research again and comparing the results if they will be the same or will have new results.

Chapter Lists

1. **The Importance of Artificial Intelligence in Society (IAIS):**
 - a. The Importance of AI in developed societies:

It is important to highlight on the importance of the privacy and safety issues of AI systems, so these issues have become even more important in the context of telecommunications and service provider networks, given their impact on society and the potential for harm to users (FCC's Technological Advisory Council, 2021, 19). The examples of the contribution of AI in the growth Global South are two areas: (1) supporting new businesses and innovation, (2) optimizing economic building blocks such as

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