Artificial Intelligence and its Impact on our Contemporary Society

Chapman Eze Nnadozie

chapsuccess[at]gmail.com

School of Science and Technology, Department of Computer Science, Abubakar Tatari Ali Polytechnic, Bauchi, Nigeria

Abstract: *Artificial intelligence is rapidly transforming our lives in one way or the other. This study intends to investigate the positive impact, alongside the downsides, of the use of artificial intelligence on our contemporary society. The methodology adopted is the use of questionnaires administered electronically. The study findings show that AI applications benefits the society in several ways such as aiding people to perform their daily activities better, smarter, and more accurately; making learning more interesting; and aiding in the prevention/detection of crimes. On the other hand, the study reveals that the downsides include the resultant consequences of having job losses; the possibility of dubious persons using it to commit cybercrimes; and the utilization of it to intimidate some others.*

Keywords: artificial intelligence, positive impact, downsides, AI applications, cybercrimes

1. Introduction

Human life is consistently challenged by the rapid changes that occur in the environment from one era to another. These changes are often driven by technological advancements, the latest of which is artificial intelligence. No doubt, every transformation that occurs in the society comes with both positive and negative consequences.

Globally, the impact of artificial intelligence on our everyday life is rising due to the enormous benefits that accrue with its use. Today's civilized society is equipped with lots of intelligent systems that can perform tasks, even better than humans. Artificial intelligence has taken over several tasks like language translation, cancer detection and so on, thereby making our lives better [1]. This paper will be discussing both the positive and negative impacts of the use of AI applications on our contemporary society.

2. The positive impact of ai on our society

Artificial intelligence (AI) has impacted human lives positively in several ways. Over the last decade, there has been a very significant increase in the use of AI. ChatGPT, a generative pre-trained transformer, developed by Open AI has recorded over 100 million users within just two months of its launch. This is significant in that when you compare this with the users of social media like Histogram, it took it over two years to break the record that ChatGPT recorded in two months. ChatGPT is capable of taking and answering our questions [2]. AI is definitely making our lives easier, smarter and better in several ways as it does several tasks for us [3]. Available data collaborates with the fact that AI use has risen despite the fears that it may lead to job losses [4]. The application of AI in diverse fields brings about positive outcomes. For instance, in healthcare sector, AI can be deployed to manage hospital admissions, and also to easily detect diseases like cancer at its early stage. In the banking sector, people can easily transact using e-banking platforms as well as digital wallets [5]. In the area of crime control, the use of facial recognition technology, and fingerprints technology makes it easier for one to know who is who, and therefore, control crimes [6]. In education, both the educators and the students can access diverse contents on topics they wish to research on [7]. AI is capable of solving our complex problems thereby enhancing our productiveness [8] [9]. In the area of tourism, robot waiters can be deployed for transporting tourists from one point to another. Cybersecurity is enhanced through the use of AI and machine learning to detect cyber threats [4].

The need for both businesses and the society to adapt to these changes is imminent because some tasks or jobs done by humans are rapidly being taken over by AI as new roles/jobs are created [10]. This implies that employees should embrace the changes by upskilling themselves with new skills in order to remain relevant and grow in their jobs [8].

3. The negative influence of ai on our society

One negative impact of application of AI systems on the society could be that it may lead to loss of jobs, which eventually would imply increase in unemployment. Of course, rising unemployment would lead to increase in social unrest and crime rates [11]. AI should be viewed as a "job transformer" rather than a "job killer" as perceived in some strata of the society. With its enormous capability of processing huge data very quickly and accurately, the society can focus on other things that require higher judgment and diversity of thoughts [12]. Technologies like Alexa, Siri, and Google Assistance have transformed humans by aiding us in locating things easily in our devices [12]. The presence of chatGPT, an AI powered chatbot that is capable of performing tasks like writing essays, answering questions, and even arguing legal cases has heightened concern of looming job losses. It argues further that AI would lead to a greater replacement of human jobs to machines. However, jobs that are flexible will be difficult to replace [13] When AI is used for the right purpose, it is capable of changing our lives for a better and peaceful society. It digitizes our society and make it easier for us to get by whatever content we need to

meet our quest for efficiency. However, AI can also be used to perpetuate harm resulting to abuse of it. AI abuse in the society depends on who is using it. While many would need it to better their lives, some others would prefer to abuse it for dubious gains. Therefore, there is need to have a strong ethical context formulated to guide against the abusive use of AI by any personality, agent, government, or organization [12] [14]. A major unpleasant outcome is that AI can be used as a tool by the employers to monitor and direct its employees against their legitimate will [15].

4. Objectives of the study

a) To identify the positive impact of AI use on the society.
b) To identify the negative influence that AI use has on the society.

5. Problem Definition

The society is mixed with divers of characters, motives and expectations. In essence, no matter how useful an intention is, there will still be people that would intentionally use to the detriment of others. This study intends to investigate the diverse impact of the use of artificial intelligence on our contemporary society, and how best we can be guided against falling victim to its negative consequences.

6. Research Questions

1. What are the positive impacts of the application of AI systems on the society?
2. What are the downsides of the application of AI Systems on the society?

7. Methodology

The use of questionnaires is the major tool used in conducting this research. Questionnaires were administered electronically and a total of seventy-two (72) respondents were randomly selected for analysis. The summary of the responses is presented in table I.

Table I: The questionnaire and summary of the responses

Sn	Question	Yes	No	Unc
1.	Is your daily life made better by the use of AI?	57 (79%)	13 (18%)	2 (3%)
2.	Is AI applications helping you to perform tasks smarter and more accurately?	59 (82%)	11 (15%)	2 (3%)
3.	Is AI applications making learning more interesting?	64 (89%)	7 (10%)	1 (1%)
4.	Can AI be used to prevent and detect crimes?	66 (92%)	1 (1%)	5(7%)
5.	Do you belief that AI application cannot be used	14 (19%)	54 (79%)	4 (6%)
6.	Can AI application be used to commit cybercrimes?	65 (90%)	3 (4%)	4 (6%)
7.	Can the growing use of AI lead to unemployment?	57 (79%)	9 (13%)	6 (8%)

8. Results and Discussion

The positive impact of AI on the society is enormous. Questions 1 to 4 are designed to answer the research question 1 which seeks to find out the positive impacts of artificial intelligence on the society.

Question 1 seeks to know whether the use of AI applications has made our daily lives better. The responses show that 57 representing 79% of the respondents said "yes". This assertion is in line with the finding of {1} which says that AI has taken over several tasks like language translation, cancer detection and so on, thereby making our lives better.

Question 2 seeks to find out whether AI is helping us to perform tasks smarter and more accurately. In response, 59 representing 82% of the respondents said "yes". This assertion is in line with the finding of [5] when it says that the application of AI in diverse fields bring about positive outcomes such as easy detection of diseases like cancer as well as its application in e-banking platforms like mobile wallets. Similarly, the finding of [12] is in line with the assertion when it says that AI has the capability of processing huge data very quickly and accurately.

Question 3 seeks to know whether the use of AI application is making learning more interesting. In answering the question, 64 representing 89% of the respondents say "yes". This assertion is in line with the finding of [7] when it says that both educators and the students can access diverse contents on topics they are researching on. Similarly, the finding of [2] is in line with the assertion when it says that chatGPT, which is an AI tool, is capable of taking and answering our questions.

Question 4 seeks to know whether AI is capable of being used to prevent and detect crimes. Majority of the respondents, that is 66 representing 92% said "yes". This assertion is in line with the finding of [6] which says that the use of facial recognition technology and finger prints technology make it easier for us to know who is who, and therefore, control crimes. Similarly, the findings of [4] is in line with the assertion when it says that cybersecurity is enhanced through the use of AI and machine learning to detect cyber threats. Figure 1 shows the bar chart displaying the responses obtained from the respondents in response to questions 1 to 4.
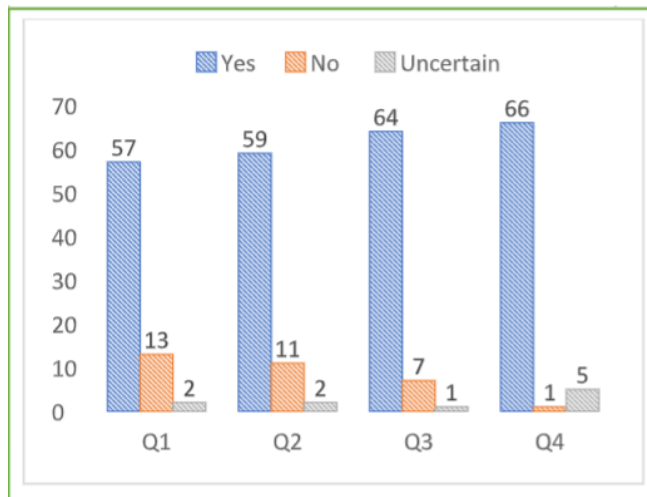
Figure 1: Bar chart displaying of responses to research question 1

Questions 5 to 7 are framed to be used in answering research question 2 which seeks to find out the negative influence that AI has on the society.

Question 5 seeks to know whether AI applications cannot be used for intimidation. Responding, 14 representing 19% and 54 representing 75% said "yes" and "no" respectively. This implies that majority belief that AI applications can be used by the upper class to suppress the subordinates by way of monitoring and controlling them. This assertion is in line with the findings of [15] which says that AI can be used as a tool by employers to monitor and direct its employees against their legitimate will.

Question 6 seeks to know if AI applications can be used to commit cybercrimes. In response, 65 representing 90% of the respondents said "yes". This assertion is in line with

the findings of [12] and [14] when they say that AI can be used to perpetuate harm resulting to the abuse of it.

Finally, question 7 seeks to find out whether the growing use of AI would lead to unemployment. Responding to this question, 57 representing 79% of the respondents actually belief that is very possible. This assertion is in line with the finding of [4] which points out that AI use has risen despite the fears that it may lead to job losses. Similarly, the finding of [11] asserts the assertion when it says that AI adoption may lead to loss of jobs which eventually would imply increase in unemployment. Furthermore, the assertion is in line with the finding of [13] when it says that the presence of chatGPT has heightened concern of looming job losses. Figure 2 shows the bar chart displaying the responses of the respondents on questions 5 to 7 which seeks to answer the research question 2.
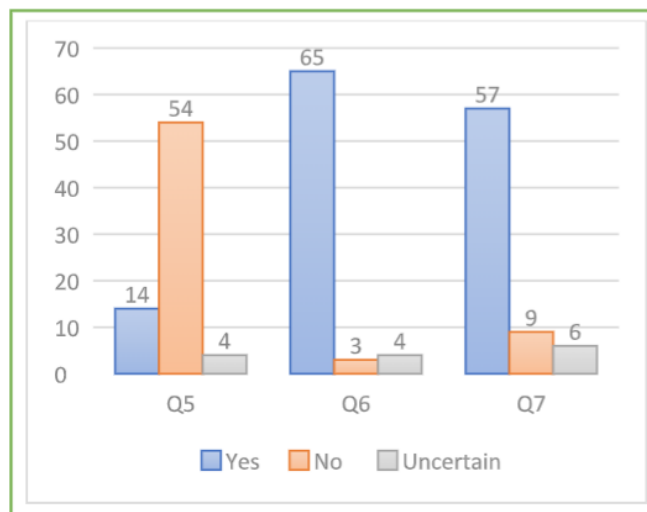

Figure 2: Chart displaying response to research question 2.

9. Conclusion / Recommendation

Artificial intelligence use is very beneficial to the society. The study has shown that it aids people to do tasks better, smarter, and very accurately. With its use, the society can develop sound interest in learning, and crimes can be easily detected/prevented. However, the negative effect of its use includes that it can lead to losses of jobs; dubious

persons can use it to perpetuate cybercrimes; and intimidation can be meted out on the subordinates by their superiors against their will. The positive impact of AI on the society should be made to prevail against all odds. In order to promote the positive use of AI in the society, there is need to enhance data security laws through appropriate legislations by the government and all stakeholders to discourage its abuse.

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Author's Profile

Chapman Eze Nnadozie is an awesomely endowed Lecturer in Computer Science. He holds both B.Sc. and M.Sc. degrees in Computer Science from the prestigious University of Nigeria Nsukka (UNN). He also holds a PGD in education from the University of Maiduguri. He has written several standard computer text books, and also has to his credit several international journals publications. He is proven to be passionate in the impartation of computing knowledge on his students and the society in general.