Analysis of Issues of OpenAI Report

1. ## Company Introduction and Background

Open AI is an artificial intelligence research and development company. It consists of non-profit OpenAI incorporated and profited OpenAI limited partnership.(Wikipedia, 2023)

ChatGPT, the most famous product of OpenAI, which was released in November, 2022 and it solves the problem of generating content for employees and students. Besides, OpenAI has another big platform called Dall-E which is a generative AI model that can generate creative images by analyzing human users' natural language inputs. Moreover, a speech-to-text API which uses the Whisper model to recognize, transcribe and translate speech in more than 100 languages. (Hashemi-Pour, 2023)

2. ## Issues facing

Behind the running and engagement of those high-tech tools and services, there are still a lot of problems that should be handled. Here are the list of potential issues OpenAI and its services are facing:

   a. Lack of transparency;
   b. Concerns of privacy and data leaking;
   c. Threats to the work's headcount;
   d. Challenging education;
   e. Outdated training dataset.

The issues appeared ahead ranging from the perspective of stakeholders of OpenAI, researchers and users. (WU, 2023)

3. ## Consequence of issues

   a. Lack of transparency will directly make it hard for other scientists to replicate and validate the algorithm's efficacy; (Gershgorn, 2020)
   b. All data being collected from users might be used to apply on some illegal businesses and the privacy of users cannot be guaranteed;
   c. As the development of ChatGPT and Dall-E, contents and images could be easily generated just by inputting specific instruction or questions, which will let some careers like lawyers, journalists, writers and even programmers facing disruption problem;
   d. Generating content easily will prevent students from thinking deeply. More seriously, cheating and plagiarism will appear massively;
   e. The training dataset of ChatGPT was collected until September, 2021, thus, some requests related to current events cannot receive up-to-date answers.

4. ## Alternative solutions

   a. OpenAI could make some of the models for their products to be open sources like Google's Tensorflow and Facebook's Pytorch. Besides, they can provide detailed information about the underlying algorithms, data sources and model architectures used in their systems;
   b. To implement robust privacy protocols and practices to protect the privacies of users. Then, OpenAI can also establish strict access controls, data anonymization techniques and they are combined with regular security audits to safeguard user data. Also, give the user's rights to delete

cookies or data remained in the chat is necessary if user does not want the dialogue to be the training dataset of ChatGPT;

c. OpenAI can invest in research of human-AI collaboration technologies that lead to job creation and new opportunities like **AI auditor**, **AI trainer** etc.;

d. OpenAI can establish educational platforms that enhance the learning experiences of students and focus on personalized learning systems;

e. OpenAI should actively collect and incorporate new data from diverse sources and sampling legally from the dialogues with real users and keep models stay relevant and up-to-date.

5. <u>Decision criteria and evaluation of solution</u>

    5.1 Decision criteria

    a. **Transparency**;

    b. **Privacy and Data Security**;

    c. **Workforce considerations**;

    d. **Educational Impact**;

    e. **Up-to-date content**;

    f. **Ethical considerations**.

    5.2 Evaluation:

    a. **Lack of transparency**: making some models to be open sources could let other scientists, learners to study with the help of those, which could possibly prompt the development AI systems vastly;

    b. **Concerns of privacy and data leaking**: by making the access of data be more strict, this will efficiently reduce the possibility of misusing user's personal information. Then, giving users the right to delete the session record provides them with assurance and this makes the use of retainment information legal and reasonable.

    c. **Threats to the work's headcount**: the solution promotes job creation, which could generate more possibilities rather than take the place of employees;

    d. **Challenging education**: give solutions with personalized learning system could avoid time-consuming and enhance learning experience;

    e. **Outdated training dataset**: Absolutely reasonable solution, updated database and trained model can generate more up-to-date contents.

6. <u>Implementation</u>

In this case, I choose to implement the solution to the issue: **concern of privacy and data leaking**.

First of all, in the landing page of all platforms of OpenAI. They should set a button to clear the history of chatting/order done by users. After clicking it, OpenAI could not access that history whether for doing analysis or for merging to the training dataset.

Then it is the degree of compliance with relative regulations worldwide. For example, OpenAI's products cross over the law announced by the Italian regulator. Although they changed their privacy policies after, some issues also break some rules in GDPR. So modifying the usage of data collection according to laws and regulations is mandatory for OpenAI's products to run smoothly.

7. <u>Conclusion</u>

Products of OpenAI help us in every aspect of our lives greatly and they directly enhance the efficiency in our work and study nowadays. However, some mentioned or some other not mentioned issues should be considered carefully by OpenAI to avoid serious judgements and criticisms from the audiences.

<u>References:</u>

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