

ChatGPT and Other Intelligent Chatbots: Legal, Ethical and Dispute Resolution Concerns

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Abstract: Day by day, new technologies are capturing our lives. ChatGPT and other intelligent chatbots are among the most promising ones. As an LLM based on machine learning, an intelligent chatbot represents a perfect human chatbot assistant that can give an answer to any question asked, write a poem, or analyze and improve the code. Despite its potential, ethical and legal issues of using intelligent chatbots, which also might be a reason for the disputes, are among the most significant concerns. Based on the idea of responsible innovation, this paper aimed to define critical ethical and legal issues arising from using ChatGPT and other intelligent chatbots and then attempt to overcome them to increase the trustworthiness of this technology. For intelligent chatbots to be actively and effectively used for the benefit of humanity while not undermining the credibility of LLMs, we have attempted to outline the technical, legal, and ethical problems, as well as significant dispute resolution concerns arising from the use of intelligent chatbots, and to make recommendations on how to minimize the risks and threats related to it. The results of this study can be used both in the process of law-making in the field of artificial intelligence and to contribute to the limited research in this area.

Keywords: ChatGPT. Legal Issues. Ethical Issues. Large Language Models. Human Rights. Safety. Intellectual Property. Data Privacy.

Summary: **1** Introduction – **2** Large Language Models Race and Advance of Intelligent Chatbots – **3** Intelligent Chatbots' Technical Concerns – **4** Ethical Issues around Intelligent Chatbots – **5** Intelligent Chatbots' Legal Issues – **6** Intelligent Chatbots' Dispute Resolution – **7** On the Way Towards Trustworthy ChatGPT – Conclusion – References

*Although the technology allows us to develop
a bot that behaves in just about any way,
that doesn't mean we should.*

(Rozga S., Practical Bot Development)

1 Introduction

When it comes to the advance of compelling technologies, we still consider it as a future. Meanwhile, those technologies are already entering our life and changing it daily.¹ Neural networks can design any image we want, nanorobots can do microsurgeries, and quantum computers can make the fastest calculations. Intelligent chatbots based on LLMs are conquering their positions in the list of those significant results of scientific progress.

AI chatbot represents one of the most promising technologies in this area. This technology has several applications: data search and structuring, completing assignments, movie making, customer assistance, health counseling, etc.² For instance, ChatGPT has successfully passed the Master of Business Administration (MBA) exam and a law school exam. Also, a judge confirmed that he used ChatGPT to resolve a dispute.³

At the same time, significant ethical and legal concerns about using ChatGPT and other intelligent chatbots in an illegal or immoral way are hard to prevent or control today. First, the possibilities this technology gives users can provoke them to lie. Thus, one of the most scandalous examples of using this technology is when a student wrote his dissertation using ChatGPT and succeeded in getting the diploma.

ChatGPT and other intelligent chatbots have no process to determine the difference between how the world is and how it is not.⁴ Recently, ChatGPT falsely accused an American law professor by including him in a generated list of legal

¹ GROMOVA E.A. & FERREIRA D.B. Tools to Stimulate Blockchain: Application Of Regulatory Sandboxes, Special Economic Zones, And Public Private Partnerships, *International Journal Of Law In Changing World*, 2(1), 16, 2023; GROMOVA E.A., PETRENKO S.A Quantum Law: The Beginning, *Journal of Digital Technologies and Law*, 1(1), P. 62, 2023.

² COOK UP AI. ChatGPT Use Cases, <https://cookup.ai/chatgpt/usecases> Access: 25.07.2023.

³ TAYLOR L. Colombian judge says he used ChatGPT in ruling, <https://www.theguardian.com/technology/2023/feb/03/colombia-judge-chatgpt-ruling> Access: 25.07.2023.

⁴ LADKIN P.B. Involving LLMs in Legal Processes Is Risky, *Digital Evidence and Electronic Signature Law Review*, 20, P. 40, 2023.

scholars who had sexually harassed someone, citing a non-existent report.⁵ This made scholars state that an issue must be actively addressed, if necessary, through government intervention.⁶ And it has happened already. Threats that the emergence of ChatGPT brought resulted in the ban of this technology in China, Italy, North Korea, Iran, Cuba, and Syria.⁷

The literature review showed that ChatGPT and other large language models (LLM) are of significant attention to researchers. Existing research has explored the potential for ethical and safe innovation of LLM,⁸ papers that outline potential risks,⁹ and papers identifying ways to mitigate potential harms.¹⁰

Although now ChatGPT remains the most popular, there are many its competitors as ChatSonic, Jasper Chat, Bard AI, LaMDA (Language Model for Dialog Applications), Bing AI, NeevaAI, Chinchilla, etc. And it is also important to study major legal, ethical and other concerns related to the use of mentioned intelligent chatbots, not just ChatGPT itself.

Nevertheless, to understand the technological advantages and downsides that intelligent chatbots can bring, we must assess technical, legal, and ethical issues arising from its use. It is also crucial to study possible disputes that might emerge as a consequence of use the intelligent chatbots, as well as finding the best way to resolve those disputes.

The aim of the paper is to outline the technical, legal, ethical problems, as well as major dispute resolution concerns arising from the use of intelligent chatbots, and to make recommendations on how to minimize the risks and threats related to it. Our research basis is the idea of responsible innovation¹¹ and the fact that it is essential to thoughtfully assess the potential benefits as well as potential

⁵ VERMA P., OREMUS W. ChatGPT invented a sexual harassment scandal and named a real law prof as the accused, <https://www.washingtonpost.com/technology/2023/04/05/chatgpt-lies/> Access: 13.07.2023.

⁶ LADKIN P.B. Involving LLMs in Legal Processes Is Risky, *Digital Evidence and Electronic Signature Law Review*, 20, P. 40, 2023.

⁷ KUMAR D. From China to Syria - Here's a list of countries that have banned ChatGPT. Know why, 2023 <https://www.livemint.com/technology/tech-news/from-china-to-syria-here-s-a-list-of-countries-that-have-banned-chatgpt-know-why-11680531688656.html> Access: 13.07.2023.

⁸ TAMKIN A., et al. Understanding the Capabilities, Limitations, and Societal Impact of Large Language Models, 2021 ArXiv abs/2102.02503.

⁹ BENDER E.M., et al. On the Dangers of Stochastic Parrots: Can Language Models Be Too Big?. Proceedings of the 2021 *ACM Conference on Fairness, Accountability, and Transparency*, 610, 2021; DINAN E., et al. Anticipating Safety Issues in E2E Conversational AI: Framework and Tooling, arXiv:2107.03451 [cs], <http://arxiv.org/abs/2107.03451>. arXiv: 2107.03451 Access: 25.07.2023; KENTON Z., et al. Alignment Of Language Agents, Arxiv:2103.14659 [Cs], 2021 [Http://Arxiv.Org/Abs/2103.14659](http://Arxiv.Org/Abs/2103.14659) Access: 25.07.2023.

¹⁰ SOLAIMAN I., DENNISON C. Process for Adapting Language Models to Society (Palms) With Values-Targeted Datasets, *Neural Information Processing Systems*, 2021; WELBL J. et al. Challenges in Detoxifying Language Models. ArXiv abs/2109.07445 (2021): pp. 2447-2469, 2021. Access: 25.07.2023.

¹¹ STILGOE et al. Developing a framework for responsible innovation, *Research Policy*, No 42, 1568, 2013.

risks that need mitigating.¹² Developing this idea, we propose the concept of smart and efficient resolution of the technology-related disputes as a part of the concept of smart regulation.

2 Large Language Models Race and Advance of Intelligent Chatbots

Intelligent chatbot represents a LLM that uses deep learning to generate human-like texts in response to prompts. From more evident perspectives, the Large Language Model is a machine learning model capable of handling various Natural Language Processing (NLP) use cases.

These machine learning models are in demand because of their ability to be pre-trained and self-supervised foundational models that can understand process and perform a wide range of natural language tasks. In simple terms, LLM can converse with humans on many topics and convert text documents into vector embeddings. These dense text embeddings can then be used for several tasks, preserving more semantic and syntactic information on words, leading to improved performance in almost every imaginable NLP task.¹³

In the 1980s, debug nets could handle a limited word order. But they took too long to learn and often “forgot” the previous words from the sequence. In 1997, scientists S. Hochreiter and J. Schmidhuber corrected the flaw. They invented the LSTM (Long Short-Term Memory) neural network technology, which processed the text of several hundred words and “remembered” the sequence data better. However, their language skills still needed improvement and were too costly to fix.

Year by year, training LLM is becoming cheaper, making them more prominent and influential. That is why, despite the relatively new technology, we can observe the evolution of large language models.

Thus, Recurrent Neural Network (RNN) models were state-of-the-art NLP models until 2017, usually applied for machine translation, general natural language generation, and abstractive summarization. RNN models process words sequentially in a context having its basis in Word2Vec and GloVe, which allows the representation of a term as a vector embedding while capturing the semantic meaning of the text. They are the two most popular word embeddings algorithms that bring out words’ semantic similarity by capturing different aspects of a word’s meaning. The main disadvantage of this model was its poor performance at maintaining contextual relationships across long text inputs.

¹² WEIDINGER L. et al, Ethical and social risks of harm from language models, 2021, arXiv preprint arXiv:2112.04359 Access: 25.07.2023.

¹³ LEBRET R. Word Embeddings for Natural Language Processing, 2016.

In 2017 a new generation of LLM appeared. What so-called “Transformers” were announced as a new architecture in NLP that aims to solve sequence-to-sequence tasks while efficiently handling long-range dependencies.¹⁴ Transformers demonstrated effective results quickly when modeling data with long-term dependencies.

Originally designed to solve NLP tasks, Transformers applied in various disciplines. Further, in 2018 enormous deep learning model GPT (Generative Pre-Training) was introduced by California-based company “OpenAI.” OpenAI’s GPT is one of the most critical AI language models ever developed. GPT-3 leverages the transformer architecture and is ingested with vast amounts of data from diverse sources, creating a general-purpose tool.

These technologies’ advances have led to the significant language models’ race. China entered the race in May 2021. Thus, Alibaba released the Multi-Modality to Multi-Modality Multitask Mega-transformer (M6) model. M6 represents 10 billion parameters pre-trained on 1.9TB of images and 292GB of Chinese language text.

To compete with Chinese innovation, Meta AI shared an extensive model with 175 billion parameters trained on publicly available datasets (OPT-175B). Microsoft and NVIDIA have recently released the Megatron-Turing Natural Language Generation (MT-NLG), boasting an excess of 530 billion parameters.

To stay in the game, on the 30th of November 2022, OpenAI released ChatGPT as the latest iteration of LLM capable of having ‘intelligent’ conversations.

ChatGPT is the latest model trained by OpenAI based on the GPT 3.5 architecture. It uses a training process called Reinforced Learning. The model has demonstrated human-like behavior to an extent never seen in any Artificial Intelligent Program.¹⁵

If we ask ChatGPT what it represents, it answers: “I am simply a collection of algorithms and data designed to generate helpful and informative responses based on the input I receive.”

ChatGPT and other Intelligent Chatbots have many skills in human-like response production:

1. Answer follow-up questions. Intelligent Chatbots can pick up references from previous conversations and use them to answer questions (unlike previous models, which treat each query as a singular entity);

¹⁴ MOTRO Y. The Current State of Large Language Models (LLM), <https://www.tasq.ai/blog/large-language-models/> Access: 25.07.2023.

¹⁵ TAIWO J. ChatGPT: Abilities, Limitations and Applications, <https://dev.to/teejay128/chatgpt-abilities-limitations-and-applications-o8b> Access: 25.07.2023.

2. Generate detailed responses. Intelligent Chatbots are capable of replying with the information that includes not just the information requested but also justifications for the outcome, along with any applicable examples;
3. Recognize errors in input data. Intelligent Chatbots can correct the errors (e.g., if any grammar ones) and provide a response based on the correct query version. That is useful for users who are not familiar with the English language;
4. Write a variety of content. The data used to train the model contains vast data containing diversified content ranging from books, songs, and poems to code, articles, and websites. This data allows the bot to generate text in various styles and topics.
5. Generate or analyze code. The training data of ChatGPT and other Intelligent Chatbots also contains some code. This code gives the ability to write code that can perform simple functions such as building simple applications or solving easy problems. It can also analyze simple code and explain its functionality.
6. Filter inappropriate queries. Intelligent Chatbots can filter responses that might be offensive, discriminatory, or inappropriate, preventing it from answering inconvenient questions.

Being a part of the Generative Pre-trained Transformer (GPT) models, ChatGPT is different from the previous models. Unlike previous ones, ChatGPT has more use cases and, that is also important, has unique use cases (such as the generation of responses in dialogues/conversation, explanation of complex subjects, concepts or themes, generation of new codes or fixing of existing codes for errors).

Analysis of the functions of its main competitors as ChatSonic, Jasper Chat, Bard AI, LaMDA (Language Model for Dialog Applications), Bing AI, NeevaAI, Chinchilla showed that these Intelligent Chatbots have similar capabilities.

Table 1. Intelligent Chatbots

	ChatGPT	Bert	Chinchilla	BARD	Jasper AI
Developer	OpenAI	Google AI	DeepMind	Google AI	Jasper AI Company
Size	1.5 billion parameters	340 million parameters.	70 billion parameters	137 Billion parameters	175 billion parameters
Functions	summarization - answering questions; sentiment analysis; language translation.	limited functions: answering questions; not capable of offering translation and summarization facilities.	learn from a diverse range of experiences, which allows it to adapt to new situations and challenges quickly is its ability to learn from both positive and negative feedback.	– generate text; – translate languages; – write creative content; answer questions.	over 50 templates; unlimited words; unlimited project folders & workspace documents; write long-form content; 1,500 character lookback (up to 10,000) jasper commands; re-phrase & explain it tool; customizable tone of voice; 30 + supported languages; Grammarly integration; plagiarism checker.

3 Intelligent Chatbots’ Technical Concerns

Critics have pointed out that ChatGPT has some serious technical issues as a large language model. Firstly, the system still “lacks the ability to truly understand the complexity of human language and conversation.¹⁶ It means that LLM were

¹⁶ SOLAIMAN I., DENNISON C. Process for Adapting Language Models to Society (Palms) With Values-Targeted Datasets, *Neural Information Processing Systems*, 2021.

trained to understand and can process natural language. But the fact that the algorithm could be better can lead to incorrect or inappropriate answers or even to some system defects.

Secondly, experts state that Intelligent Chatbots can generate incorrect information, produce harmful instructions or biased content and needs more knowledge because of the inputted data.¹⁷ That is the biggest problem of all algorithms today, and it mainly depends on the quality of the datasets used to prepare LLM.

Thirdly, T. Cheng points out another issue related to ChatGPT. ChatGPT uses limited datasets (because it works with uploaded information and it is impossible to upload all the existing data in the world). This limitation influences the quality of the information and, consequently, ChatGPT's answers to customers. To address this issue, they compared ChatGPT with a Xerox photocopier. The Xerox photocopier digitally compressed files in a lossy way and reproduced false data. Lossy compression is usually used in situations when absolute accuracy isn't essential. The fact that the Xerox photocopier used lossy compression instead of lossless is a problem because it becomes unreadable if the image is blurred. But if the image is readable but contains incorrect data – that problem must be solved.¹⁸

Despite the fact that mentioned comment relates to ChatGPT, we must assume that other Intelligent Chatbots being LLM based Generative Pre-trained Transformer (GPT) models, can have the same technical issues.

Data quality problem is one of the technical problems with enormous social implications. Misinformation can lead to various negative consequences, and legal and ethical issues are part of it. Nevertheless, technical problems are not the only ones that lift our eyebrows. There are also some legal and ethical issues related to the use of Intelligent Chatbots.

4 Ethical Issues around Intelligent Chatbots

Over the years, several concerns have been unearthed concerning underlying bias ranging from derogatory language, racial discrimination, and violent depictions to gender stereotyping in AI models.¹⁹ Intelligent Chatbots probably also inherited potential AI biases. As mentioned, one of the features of the Intelligent

¹⁷ EKE D.O. ChatGPT and the rise of generative AI: Threat to academic integrity? *Journal of Responsible Technology*, 13, 100060, 2023.

¹⁸ CHENG K. ChatGPT is a Blurry JPEG of the Web, <https://www.newyorker.com/tech/annals-of-technology/chatgpt-is-a-blurry-jpeg-of-the-web> Access: 25.07.2023.

¹⁹ NADEEM et al. Stereoset: Measuring stereotypical bias in pretrained language models, in *Proceedings of the 59th Annual Meeting of the Association for Computational Linguistics and the 11th International Joint Conference on Natural Language Processing*, 1, 5356, 2021.

Chatbot as a large language model is its ability to anticipate and mimic humans. Technology is learning from humans by reading vast amounts of text from the Internet. Thus, 570 GB or 300 billion words of data trains ChatGPT. By processing this data, the model looks for statistical patterns, understanding which words and phrases are related to others. This ability has one significant disadvantage. Because the information on which the language model was trained was taken from unfiltered open data, the developers cannot avoid “bias problems”.²⁰ Certain highlighted problems are that information on which Intelligent Chatbots are prone to regressive bias, filters used to make the dataset better are not 100% accurate, and researcher data needs to be more diverse as people majorly control it.

Research made by several experts showed that technology has several bias-based ethical issues. Researchers have noticed that a large language model tends to use the words “whimsical” and “playful” regarding women. Men also lend themselves to stereotypical descriptions of being “lazy” and “sucked up.” Thus, technology can indeed be sexist.²¹

ChatGPT and other LLM also need some help in the religious context. Findings show that “Islam” often appears next to the word “terrorism.” “Atheism” is more likely to occur with words like “cool” or “right.” Technology also named Syria, Iraq, Afghanistan and North Korea “terrorist-producing countries’.²² According to the experiment results, a fictional 25-year-old American, John Smith, who visited Syria and Iraq, received a risk score of 3 – “medium” or “moderate security risk.” While the fictional 35-year-old pilot “Ali Mohammad” was given a higher risk score of 4 by ChatGPT only because “Ali” is a Syrian national.²³

Experts also state that ChatGPT is not free from racial biases as well. Thus, asking about the value of human brains from different races, ChatGPT valued a white person’s brain at \$5,000, an Asian’s at \$3,000, and a Pacific Islander’s at \$1,000.²⁴

Political bias is also evident. ChatGPT rejected to write a poem praising former U.S President Donald Trump but was straightforward to write it for Kamala Harris and Joe Biden (ROSADO, 2023).²⁵

²⁰ KIRK H.R. et al., Bias out-of-the-box: An empirical analysis of intersectional occupational biases in popular generative language models, *Advances in neural information processing systems*, 34, 2611, 2021.

²¹ EKE D.O. ChatGPT and the rise of generative AI: Threat to academic integrity?. *Journal of Responsible Technology*, 13, 100060, 2023.

²² BIDDLE S. The Internet’s New Favorite AI Proposes Torturing Iranians and Surveilling Mosques, <https://theintercept.com/2022/12/08/openai-chatgpt-ai-bias-ethics/> Access: 25.07.2023.

²³ BIDDLE S. The Internet’s New Favorite AI Proposes Torturing Iranians and Surveilling Mosques, <https://theintercept.com/2022/12/08/openai-chatgpt-ai-bias-ethics/> Access: 25.07.2023.

²⁴ EKE D.O. ChatGPT and the rise of generative AI: Threat to academic integrity?. *Journal of Responsible Technology*, 13, 100060, 2023.

²⁵ ROSADO D. ChatGPT Political Bias, <https://davidrozado.substack.com/p/political-bias-chatgpt> Access: 25.07.2023.

TechCrunch investigation results showed that LLM can be “toxic” and contains almost all existing human biases. The mentioned biases examples are evidence that ChatGPT can generate offensive or defamatory content, which could lead to legal action against its users. It is an inevitable consequence as ChatGPT learns to write like humans “with all the best and worst qualities of humanity”.²⁶

To overcome this issue, experts insist on applying the provisions of a standard ISO/IEC TR 24027:2021 to prevent bias and discrimination. It needs to be clarified if Open AI follows that standard.

We need to develop ethical regulation of AI and AI-based systems to solve the mentioned ethical issues. Ethics in AI is essential to weed out inherent bias from the machine learning algorithm while human programmers create more AI-based systems. Due to the increasing popularity of ChatGPT and other LLM, we should develop ethical guidelines on using appropriate datasets to train and create trustworthy AI-based LLM.

5 Intelligent Chatbots’ Legal Issues

The fact that Intelligent Chatbots can generate answers based on uploaded datasets can potentially lead to legal issues, including the violation of human rights. It is the most crucial and dangerous issue to address for the use of Intelligent Chatbots can lead to the data breach, privacy and intellectual property violation and even threaten human life and personal safety.

Possible threats to personal safety. The problem here is that the use of Intelligent Chatbots can threaten safety. Thus, it uses available data that might contain personal information (e.g., address, phone number or bank account information). Illegal or inappropriate use of this information can lead to crimes, including cybercrimes and cyberbullying, stealing, burglary, etc.

Another “dark side” here is that the safety of a person who can be emotionally unstable at the moment of communication with Intelligent Chatbots can also be under threat. Similar LLM have this vulnerability. For instance, GPT-3 has urged at least one user to commit suicide (though it was within the experiment by a company assessing the system’s utility for healthcare purposes). Another large language model, trained for giving ethical advice, initially answered as an affirmation, “Should I commit genocide if it makes everybody happy?”²⁷

Data Protection Issues. This issue contains two related topics: Firstly, we will discuss the problems connected with data uploaded to a large language model

²⁶ TADDEO M., FLORIDI L. How AI can be a force for good, *Science*, 361, 6404, 2018.

²⁷ LIWEI J. et al. Can Machines Learn Morality? The Delphi Experiment, 2022.

to learn the technology. Secondly, we will discuss the issue related to the data received by Intelligent Chatbots during communication.

The first relates to the fact that ChatGPT and other Intelligent Chatbots can share personal data from its training datasets with the users. Scholars state that this functionality means the technology could probably breach most of the world's data protection laws.

Intelligent Chatbots pose a risk to the confidentiality of any data it considers. Thus, inputted personal data might be retained and used by software developer or collected and shared.

Intellectual Property Issues. This issue splits into two groups of problems. The first relates to the ownership of the content created by Intelligent Chatbots. The second refers to the infringements of intellectual property rights.

The first question here is who will be the copyright owner of the intellectual property created by Intelligent Chatbots. The answer primarily depends on the legal system. Thus, U.K. intellectual property law provisions constitute that for computer-generated works which involve no human author, the author and first copyright owner is taken to be 'the person by whom the arrangements necessary for the creation of the work are undertaken.'²⁸ This is to be contrasted with the position of other countries. For instance, Australian law states that copyright protects certain subject matters, which are expressions of ideas, including 'literary works,' being materials expressed in print or writing, provided they are 'original.' The work must have originated from a 'human author' who has applied some 'creative spark,' 'independent intellectual effort' or 'skill and judgment,' and not be copied from another work.

Another issue is that Intelligent Chatbots can generate a response copied from any material, including academic papers or books. In this case, a user who reproduces or distributes such a response without the copyright owner's permission may violate copyright, and a user who fails to identify the author or edits the response in a way that damages the author's honor or reputation may violate intellectual property rights.

Another problem is that Intelligent Chatbot does not use specific sources to generate responses but somewhat broader training data, and its processes are generally unknown to the user. Therefore, it is likely to be challenging to determine where there is a risk of infringement or even identifying the copyright owner and/or author.²⁹

²⁸ UKIPO's public consultation on AI and IP – computer-generated works (Part 1), <https://copyrightblog.kluweriplaw.com/2022/03/14/ukipos-public-consultation-on-ai-and-ip-computer-generated-works-part-1/> Access: 25.07.2023.

²⁹ EKE D.O. ChatGPT and the rise of generative AI: Threat to academic integrity?. *Journal of Responsible Technology*, 13, 100060, 2023.

It is worth stressing that there are lawsuits already claiming the infringement of intellectual property rights by the developers of AI-based technologies that used data to train A.I. In the U.K., Getty Images has brought a copyright infringement action against Stability AI, the developer of A.I. image generator Stable Diffusion, claiming that the processing of images in which Getty Images owns the copyright to train Stable Diffusion infringed the copyright in those works (*Stable Diffusion vs. Getty Images*).³⁰

Unfair competition practices. The significant potential of Intelligent Chatbots made it possible to be used as a tool for businesses to promote their products or services. At the same time, technology can pose risks for unfair competition.

Users can ask Intelligent Chatbots to generate a text of commercial based on the incorrect comparison between two products that can discredit the competitors.

Another form of unfair competition may occur because of the ability of Intelligent Chatbots to generate names and logos. If the model generates a name or logo similar to an existing trademark and the company starts using it, it could constitute trademark infringement.

The ability of ChatGPT to generate text raises concerns about its potential to create fake news or other misleading content. In case of unfair competition, inappropriate use of this feature can damage a competitor's reputation by spreading misinformation.

Lack of transparency and explainability. Transparency and explainability are also significant legal issues related to Intelligent Chatbots. The problem is that developers must explain the datasets they use to train LLM. Moreover, how they train the algorithms needs to be made clear. At the same time, we need to understand these processes. For that, we need specific regulations to ensure that AI systems are transparent and explainable and that individuals can challenge AI's decisions.

Issues arising from the Terms of Use. Analysis of chosen Intelligent Chatbots' terms of use showed some vulnerabilities that may create asymmetry in users' and developers' rights and duties. This asymmetry may become a reason for human rights violations.

Every software has its Terms of use (End-user license agreement – EULA). It is a legally binding contract between a consumer and a service provider. More so, it is a “take it or leave it” contract of adhesion where the consumer must accept the terms if he wants the software. Only a few consumers³¹ will read before accepting

³⁰ STABLE DIFFUSION vs. GETTY IMAGES LAWSUIT, <https://www.theverge.com/2023/1/17/23558516/ai-art-copyright-stable-diffusion-getty-images-lawsuit> Access: 25.07.2023.

³¹ STEINFELD N. I agree to the terms and conditions': (How) do users read privacy policies online? An eye-tracking experiment, *Computers in Human Behavior*, 55, 992, 2016.

any EULA. They want the product,³² and clicking yes without reading seems the only option. EULA presentation style can affect users' comprehension (e.g., legal information presented in an abbreviated manner across multiple windows).³³

Thus, for instance, regarding the Open AI Terms of Use, both Input and Output (collectively representing a Content) users own all content. Thus, it is worth mentioning that clause 3 of the Terms of Use, named "Content," contains provisions explaining who is responsible for the content. The user is primarily responsible for the content, including ensuring it does not violate any applicable law or these Terms. At the same time, the Terms of Use claim that OpenAI can use all the inputted content because the user's consent is given when accepting the terms (provision 3a).

Terms of Use allow using content to improve services. OpenAI may use the content as necessary to provide and maintain the services. Provision 3c addresses the use of content to service improvement. Deployers state they might use content to enhance services, and users agree and instruct about that. Users can forbid using the content by contacting OpenAI support and naming the organization ID. It is supposed to think that all users first agree that their content may be used for product improvement.

Another concern is that the Terms of Use need to clarify what it means to use content to improve services. The ability of machine learning to develop itself by using all data uploaded means that all content can qualify for potential service improvement. At the same time, the user still is the one that is responsible for content.

6 Intelligent Chatbots' dispute resolution

The mentioned legal issues might become the reason for the disputes between Intelligent Bot's users and developers. In this case, parties to the conflict will follow the provisions of the law, and they will check the Terms of Use of the mentioned Intelligent Chatbots.

Every EULA contains (if well drafted) a dispute resolution clause. This non-negotiable clause directs any dispute to one or more (hybrid or multi-tiered clauses) dispute solution types (negotiation, mediation, arbitration or a country's judicial court). A thoughtful and conscious consumer will read any EULA before installing software and the dispute resolution clause. Reading the dispute resolution clause

³² BEN-SHAHAR O. The myth of the 'opportunity to read' in contract law, *European Review of Contract Law*, 5, 1, 2009.

³³ WADDELL, et al. Make it simple, or force users to read? Paraphrased design improves comprehension of End User License Agreements, *CHI '16: Proceedings of the 2016 CHI Conference on Human Factors in Computing Systems*. New York: Association for Computing Machinery, 5252, 2016.

reduces the risk perception to accept the services, for the consumer becomes aware of who to look for if any problem arises and if it is an impartial and independent ADR provider in the case of arbitration.

For instance, ChatGPT's previous EULA (effective until December 14, 2023) brought its dispute resolution clause in provision 8. It provided a multi-tiered clause that imposed a 60-day negotiation (provision 8b) before mandatory arbitration (provision 8a). The users could and still can in the current EULA (but certainly will not because they did not read the terms of use) opt out of the mandatory arbitration by filling out a form within 30 days of agreeing to the terms of use (provision 8a of the previous EULA, and Paragraph 1 of the current Dispute Resolution Clause). Opting out is a straightforward procedure for users only to fill in a four-question Google form (Name, account email, organization ID and Organization Name – the last two only if applicable – this form remains the same in the previous and current EULA).

The previous EULA (published on March 14, 2023, and effective until December 14, 2023) appointed ADR Services, Inc. (provision 8c), a private arbitration provider from San Francisco, California, as the arbitration forum and elected the laws of the State of California as the governing law (provision 9L). That meant the following: to discuss the terms of use, a user should do it exclusively in the federal or state courts of San Francisco County, CA (provision 9L), and in the case of a dispute, the user needed to negotiate for 60 days before requesting mandatory and binding arbitration at ADR Services in San Francisco with the arbitration proceeding regulated by this provider arbitration rules.

The current EULA replicates the 60-day negotiation dynamics before initiating mandatory arbitration. Nevertheless, OpenAI elected another arbitration institution. ADR Services from San Francisco is not the company's arbitration forum anymore. Now, it is a New York Alternative Dispute Resolution provider named National Arbitration and Mediation ("NAM").³⁴

The current and previous terms of use also bring a class action waiver provision (Paragraph 3 of the current Dispute Resolution Clause and provision 8f of the previous EULA), meaning only individual basis disputes can proceed. According to Paragraph 5 of the Dispute Resolution Clause (provision 8e in the previous EULA), customers can also file a claim in small claim courts, which would only work smoothly for American users. Nevertheless, that must happen in San Francisco federal and state courts, which is an unbearable burden to international users (the

³⁴ NATIONAL ARBITRATION AND MEDIATION ("NAM"). Retrieved from <https://www.namadr.com/resources/rules-fees-forms/>. Access 17.11.2023.

governing law did not change with the Terms of Use update. The applicable law is California law).

The world is already using ChatGPT in multiple languages—nevertheless, disputes needed to go to an ADR provider in California with English as the procedural language. In the current EULA, parties must recur to NAM, a New York ADR provider. They must comply with the *Comprehensive Dispute Resolution Rules and Procedures* applicable to consumer disputes.³⁵ Most international users feel uncomfortable discussing a dispute resolution in their non-native language. Language familiarity can affect the consumer's ability to present the case properly and influence its outcome.³⁶ The consumer can use an interpreter. Still, as provided by Rule 28 of the ADR Services' 2021 Arbitration Rules,³⁷ the party *must make arrangements directly with the interpreter and shall pay for the costs of the interpreter's service*. NAM Rule nº 16 provides that *in the event any translation, interpreting or other services are requested as a result of a hearing which is to be held in a language other than English, expenses for such services will be borne by the party which requests them*. This language barrier is mitigated if the consumer chooses to be represented. ADR Services Rule 16 of the 2021 arbitration rules forced the consumer to hire a lawyer: *Where a party to the arbitration is a natural person, he or she may be represented by counsel of that party's choosing or may represent themselves in propria persona. However, ADR Services reserves the right to decline to administer an arbitration in the event a party opts to proceed in propria persona*. NAM's Rule nº 5 is more flexible and allows the consumer to act on its behalf: *Parties may act on their own behalf or may be represented by a person with authorization to act on their behalf. The name, address and contact information of such persons shall be communicated to NAM and all other parties at least thirty (30) days prior to the scheduled hearing or conference*.

ADR Services Rule 39 states the filing fee is due upon filing the arbitration claim. Accordingly, according to its General Fee Schedule,³⁸ there is a U\$450,00 initial filing fee plus a U\$ 750,00 non-refundable administration fee cost per party, a cost that the ChatGPT user would have to bear to commence an arbitration proceeding. The counsel, not the represented party, will be held responsible for paying all charges (Rule 42), meaning the user must be represented and hire a lawyer. As a comparison, we can cite The Independent Betting Adjudication Service

³⁵ See the rules at <https://www.namadr.com/content/uploads/2023/07/Comprehensive-Rules-as-of-7.1.2023.pdf>. Access: 17.11.2023.

³⁶ ADR SERVICES, INK. Retrieved from <https://www.adrservices.com/services-2/arbitration-rules/>. Access: 25.07.2023.

³⁷ ADR SERVICES, INK. Retrieved from <https://www.adrservices.com/services-2/arbitration-rules/>. Access: 25.07.2023.

³⁸ LAI et al. The Importance of Language Familiarity In Global Business E-Negotiation, *Electronic Commerce Research And Applications*, 9, 537, 2010.

(IBAS), an ADR provider approved by the U.K. Gambling Commission responsible for managing arbitration proceedings between consumers (local and international) and gambling operators (virtual casinos and sports bet operators). The IBAS service is free of charge to consumers, which makes it easier for consumers to file their claims.³⁹ NAM Rule nº 7 refers to the Fee Schedule, which in this case is the *Comprehensive Fees and Costs*.⁴⁰ The *Comprehensive Fees* schedule sets an initial administrative fee of U\$740,00 and a final administrative fee of U\$640,00 for claim amounts less than U\$75.000. The claimant must pay both administrative fees. The arbitrator hearing time will be charged at the designated hourly rate for the NAM arbitrator.

According to the previous terms of use (Provision 8d), the arbitration procedure will be conducted by telephone, based on written submissions, video conference,⁴¹ or in person in San Francisco as a rule. The current EULA also provides the videoconference possibility and adds that the hearing could occur in the consumer's county. Indeed, this would only apply to U.S. residents.

The arbitration proceedings will be conducted by a sole arbitrator appointed by the chosen arbitration chamber. ADR Services neutral panel, for example, is composed of 100 professionals, of which 61 are retired judges, a common practice in the U.S. but less common in other countries. ADR Services, Inc. works on a closed list arbitrator appointments system, meaning that the parties cannot appoint an arbitrator whose name is not in their neutral panel. Closed lists go against arbitration's best international practices that privilege the party's autonomy in selecting the arbitrator. Unfortunately, that is what happens in consumer contracts of adhesion.

NAM's Rule nº 22 provides that NAM *shall appoint the arbitrator (s) as promptly as possible* and that *if the claim amount is for \$10,000 or less, the NAM Administrator shall appoint the arbitrator (s)* (Rule nº 22 A). For claims over U\$ 10,000,00, NAM will forward the parties a list of three names so each party may strike one name off the list and number the remaining names in preference

³⁹ ELISAVETSKY A., MARUN M. V. La tecnología aplicada a la resolución de conflictos: su comprensión para la eficiencia de las ODR y para su proyección en Latinoamérica", *Revista Brasileira de Alternative Dispute Resolution*, 2, nº 3, 51, 2023; FERREIRA, et al, Online Sports Betting in Brazil and conflict solution clauses, *Revista Brasileira de Alternative Dispute Resolution*, 4, nº 7, 75, 2020. FERREIRA, et al, Arbitration Chambers and trust in technology provider: Impacts of trust in technology intermediated dispute resolution proceedings", *Technology in Society*, 68, 101872, 2022.

⁴⁰ See the Comprehensive Fees and Costs at <https://www.namadr.com/content/uploads/2023/06/Comprehensive-Fees-7.1.2023-updated-6.26.2023.pdf>. Access: 17.11.2023.

⁴¹ FERREIRA, Daniel. et al, Arbitration Chambers and trust in technology provider: Impacts of trust in technology intermediated dispute resolution proceedings", *Technology in Society*, 68, 101872, 2022. See also: FERREIRA, D. B., GIOVANNINI, C., GROMOVA, E.A., Jorge Brantes FERREIRA, J.B. Arbitration chambers and technology: witness tampering and perceived effectiveness in videoconferenced dispute resolution proceedings, *International Journal of Law and Information Technology*, Volume 31, Issue 1, Pages 75–90, 2023. <https://doi.org/10.1093/ijlit/eaad012>.

order. Then, NAM's Administrator will choose the sole arbitrator from the list (Rule nº 22 E). NAM has two neutral rosters: state and national federal. Many of the neutral are former judges in the state roster, and all the 13 (thirteen) neutrals of the National Federal Rosters are retired judges.⁴² The arbitrator hourly rate will vary according to the designated arbitrator. Like the previous provider, NAM works on a closed-list arbitrator appointments system.

ChatGPT is an app already used worldwide in multiple languages; nevertheless, its terms of use elect an American ADR provider (ADR Services previously and NAM currently) with clear common law and American litigation patterns. That is a barrier for international consumers to solve conflicts, which tilts toward the company. It means that OpenAI will play as the home team in a dispute.

We can name the challenges for an international ChatGPT user to file an arbitration claim against OpenAI: 1. Arbitration in the U.S.; 2. Language barrier; 3. Arbitration costs (administration fees and arbitrator's fees); 4. Probable U.S. counsel fees; 5. Closed list arbitrator appointment; 6. Common law tradition and U.S litigation prevailing practices.

A local ADR provider with local practices is hardly the best option for a large-scale international service such as ChatGPT. Therefore, a global provider is better for providing the best conflict solution service to worldwide ChatGPT users. Also, an ODR-centered (online dispute resolution) and experienced provider would work best for international users because the information technology would facilitate communication.

Similar services' terms of use, like ChatSonic, do not even provide a dispute resolution clause.⁴³ Jasper Chat, for example, elects a AAA (American Arbitration Association) as its Alternative Dispute Resolution (ADR) provider. AAA has vast international experience (AAA-ICDR) and follows the best arbitration practices and is a better option for this service type.

In the tables below, we can observe the dispute resolution clause and the applicable law of 10 (ten) intelligent bot providers.

⁴² See the list at https://www.namadr.com/content/uploads/2023/01/NAM_Roster_Federal_1-18-23_x1a.pdf. Access: 17.11.2023.

⁴³ CHAT SONIC, https://chatsonic.pro/terms-and-conditions/#Reservation_of_Rights. Access: 25.07.2023.

Table 2. Dispute resolution clause

Intelligent Bot	Dispute resolution clause
ChatGPT	ChatGPT Terms of Use provide a multi-tiered clause that imposes a 60-day negotiation before mandatory arbitration. The terms appoint National Arbitration and Mediation (“NAM”). (New York) as the arbitration forum.
BERT	Disputes must be resolved exclusively in the federal or state courts of Santa Clara County, California, USA.
XLNet	No provision
PaLM 2	No provision
Chinchilla	Disputes must be resolved exclusively in the federal or state courts of Santa Clara County, California, USA.
Jasper AI	Disputes shall be resolved through binding arbitration conducted in accordance with the rules of the American Arbitration Association – AAA.
ChatSonic	No provision
Bing AI	No provision
BARD AI	Disputes must be resolved exclusively in the federal or state courts of Santa Clara County, California, USA.
CONTENTBOT AI	Disputes shall be resolved through binding arbitration conducted in accordance with the rules of the American Arbitration Association – AAA.

Speaking of applicable law, we can see that developers mostly choose California law due to the fact that they based companies there (See table 3). Only Jasper AI and CONTENTBOT AI established Rules of the American Arbitration Association as applicable law.

Table 3. Applicable Law

Intelligent Bot	Applicable law
ChatGPT	California law
BERT	California law.
XLNet	No provision
PaLM 2	No provision
Chinchilla	California Law.
Jasper AI	Delaware Law
LaMDA	California Law
ChatSonic	No provision
Bing AI	No provision
BARD AI	California Law
CONTENT BOT AI	California Law

Further analysis showed that only three (30%) of the Terms of Use have Arbitration clause (see table 2). Thus, as it was mentioned above, ChatGPT previous Terms of Use appointed ADR Services, Inc., a private arbitration provider from San Francisco, California, as the arbitration forum. The current EULA (effective in December 14, 2023) changed the provider to a New York state based company, the National Arbitration and Mediation (“NAM”). The EULA also elects the laws of the State of California as the governing law. That means the following: to discuss the terms of use, a user must do it exclusively in the federal or state courts of San Francisco, CA, and in the case of a dispute, the user must negotiate for 60 days before requesting mandatory and binding arbitration at the NAM with the arbitration proceeding regulated by this provider arbitration rules.

Jasper Chat elected the American Arbitration Association (AAA) as its ADR provider. Its Terms of use state that Intelligent Bot-related disputes shall be resolved through binding arbitration conducted in accordance with the rules of the American Arbitration Association.

Summarizing the section, we should assume that most Intelligent Bots have dispute resolution clauses (6 out of 10) that take the disputes to binding arbitration or the State and Federal courts. The preferred applicable law is the Californian law, chosen by 6 (six) developers.

At the same time, only some of them (3 out of 10) provide arbitration clauses. Meanwhile, arbitration represents a quick, cost-effective, professional way to resolve disputes; choosing arbitration would provide users, developers, and third parties with efficient legal protection towards exercising their activities related to using Intelligent Bots. Only by delivering legal guarantees for the mentioned subjects will make possible further development of technology while making it more responsible.

7 On the way Towards Trustworthy ChatGPT

For Intelligent Bots to be actively and effectively used for the benefit of humanity while not undermining the credibility of LLM, it is already necessary to work actively to address the problems associated with using such technologies.

We offer the following recommendations to address the above legal and ethical problems.

1. OpenAI and other developers of LLM should set up special tools for data security and intellectual property protection. It's also important to follow any rules or laws that are in place to protect the data we're using. By doing these things, we can use chat AI to get lots of information safely without causing any problems.

2. We need to develop ethical regulation of AI and AI-based systems to solve the mentioned ethical issues. Due to the increasing popularity of Intelligent Bots and other LLM, we should formulate ethical guidelines on using appropriate datasets to train and create trustworthy AI-based LLM.
3. It is necessary to design special rules for using the datasets to train AI for LLM. This can be standards and ethical principles. Thus, to prevent bias and discrimination, LLM designers must apply the provisions of a standard ISO/IEC TR 24027:2021.
4. The terms of use should align with the interests of users and developers. It primarily concerns users' rights to content, including the terms of its transfer to improve the Intelligent chatbot experience.
5. Moreover, to provide the best conflict solution service to worldwide Intelligent Bots users, an international provider, let alone an ODR (online dispute resolution) centered provider, would be a better option. A local ADR provider with local practices is hardly the best option for a large-scale international service such as ChatGPT and other Intelligent Chatbots.

Conclusion

The emergence of technologies such as Intelligent Bots can change our lives in many ways. The advent of perfect assistants, chatbots capable of answering any question, tells us that the future based on technology has already arrived. However, like any new technology, Intelligent Bot is not flawless, and its use is fraught with ethical and legal violations. In this regard, to implement this technology prospectively and effectively in our daily lives, it is necessary to work to minimize the risks of human rights violations and violations of existing legal provisions resulting from the use of this technology. In this article, we have outlined the technical, legal, and ethical problems, as well as significant dispute resolution concerns arising from using intelligent chatbots and made recommendations on minimizing the risks and threats related to it. The results of this study can be used both in the process of law-making in the field of artificial intelligence and for further research in this area.

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