BASICS OF APPLICABILITY OF AI LINKED TO LEGAL ASPECTS

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Abstract: Artificial Intelligence indeed has its own significance in the present society. In fact it is embedded in every sphere and impacted effectively on every individual. Sometimes the principles linked to artificial paradigm is too complex towards operational because of the fundamental constraints linked to legal and ethical issues. Sometimes it has been seen that the active involvement of artificial intelligence may constrain the process of traditional principles of legal aspects. So to visualize the ethics as well as behavioral aspects of intelligent system, it may be essential to include the human safety centric regulations in the system. Accordingly, the embedded ethics along with intellectual rights can treat the intelligent agents as a utility in the society. The enhancement of intelligent system can also be prioritized based on technical interpretations of autonomy and philosophical analysis towards selection of originality. In this paper it has been thought to prioritize several aspects and issues encumbering in the society. In this regard, the intelligent systems deployed can perform better to overcome the challenges as well as ethical and legal concerns.

Key words: Artificial intelligence, copyright, ethical and legal concerns, machine learning, data privacy.

Classification-JEL: K2, K3

1. INTRODUCTION

The intelligence applied artificially is the study of how to prioritize the systems to do things which at the better results can be achieved. It is the simulation of human intelligence processed by machines, especially computer systems. Somehow in this work, it is focused on the applications of artificial intelligence involved in identifying the role and functions by noting the innovations linked to present technology based on legal aspects. Uncertainty lies in whether artificial intelligence can be treated as an object or subject of law. Accordingly, some specific points associated with the legislative efforts should be addressed during inclusion of Artificial Intelligence.

a. Ensuring better conditions towards application of artificial intelligence for the development and use of the innovative technology.

b. Implementation of AI systems in safe, transparent, traceable, non- discriminatory and environmentally friendly manner.

c. Prioritization of social scoring, because of essentiality to classify people based on

behavior as well as socio-economic status.

Intelligent applications usually facilitate in understanding several aspects of autonomy and intelligence, still it is required to acquire the idea of technological singularity. Also the expertise in legal aspects can aim to regenerate the thinking mechanisms. Usually, the systems may have confined storage allocations provisioning accessibilities to identify and monitor the instances over time. Therefore understanding the system behavior with normal thought process may be sometimes difficult on humans formed societies with social interactions. One possibility is there to observe the system as an experimental tool in which the communication can be directly celebrated within the provisioned parties offering legal framework without the requirement for any major changes. Accordingly, it may rely on the system assuming that anything issuing from the system can really show directly from its human controller, completely ignoring any autonomy.

2. ARTIFICIAL INTELLIGENCE AND ITS IMPORTANCE

The application of intelligent system is to focus on capabilities to perform the provisioned tasks through the computing systems and controlled by human intelligence. In other words, the intelligent system can be able to make surety of non involvement of mechanical processes through a "non-human" intelligence. Also incorporating the intelligence system can achieve better and can make it possible for machines to learn from experience by adopting new inputs and performing human-like tasks.

3. LITERATURE SURVEY

In some specific situation, the intelligent system may not be appropriate to decide and make an intelligent and reasonable choice on basis of these requirements. Therefore it is required to initially create a human-like intelligible technology that isadvance enough to deal with such issues as cited (10).

It was discussed in (5) that any experimentation as well as invention if not presumed on an idea then it cannot be termed as invention and the person giving it cannot be an inventor. Moreover, in case of any violation, it necessarily involves the human element as AI cannot be held liable.

Goodfellow, I. J et al.[6] in their work prioritized the application of block-chain technology. The cause for lack of flexibility and lack of reasoning is the absence of a human application. In this regard, AI is required to evaluate and scrutinize the work properly.

AI tools used in legal research include legal research databases, document review software etc.to answer legal questions. For example, ROSS Intelligence is an AI-powered legal research tool that uses NLP to understand natural language questions and provide relevant legal information (8).

Alam, M. N et al.[1] in their study focused on the implementation of intelligent systems in the law with legal aspects observing the potentiality and offering several benefits inclusive of increased efficiency, accuracy, and cost savings. The intelligent system can assist lawyers in performing repetitiveand time-consuming tasks, such as legal research and document review, allowing them to focus on more complex legal tasks.

In Lex Machina [7], it has been discussed that natural language processing is a subset of artificial intelligence that enables the systems to understand, interpret,and generate human language. In the legal profession, the natural language processing can be used to assist lawyers in review of files.

Surden, H et al.[9] in their research observed the significance of the artificial intelligence development with machine learning concepts and of course the concept of deep learning is

today's demand, in which systems learn from experience and enhance their performance over time using algorithms.

Zimmermman, E. J et al.[12] in their work discussed the accessibilities of the active learning algorithms with training labels to obtain optimality on the desired inputs. In the research, it has been considered the feasibility of unsupervised learning as the learning algorithm has the provision to protect the data and permit the accessibility. Being provisioned with unlimited information resources, prediction on system performance can be done implementing unsupervised learning mechanisms.

Vladeck, D et al.[11] in their work observed that consideration of intelligent systems as agents can be more provisioned to focus on the legal issues associated with the machines without important modifications.

Brock, C et al.[4] in their research prioritized the solution of the imposition of liability based on situation as arguments may occur as to recognize agents with constitutional rights and to be consider as a legal person. The technology in this context is based on the difficulties and getting solutions from intelligent machines.

Ballas, G et al.[3] in their work discussed that the intelligent systems usually can be distinguished not only by their appearance but also by application and shape, size as well as locomotion.

Alexandre, F. M et al.[2] in their research discussed regarding artificially of intelligent agents and consideration to separate legal entities which may require to be preceded by the interrogations. As for artificially intelligent agents, the rationality should be maintained provisioning separate legal status and possessing the capacities to act autonomously.

4. ETHICAL ISSUES

There are four ethical issues to be considered i.e. inclusion of informed consent on implementation of data, adoption of transparency, accuracy and consistency in algorithm as well as biases and data privacy with all important factors. As reflected in figure-1, the intelligent system can travel from being extremely intelligent to extremely naive in an instant. All portions of intelligent systems can have the limits, even if the provisioned bias is managed. The human decision- maker must be aware of the system's limitations, and the system must be designed so that it fitsthe demands of the human decision-maker.
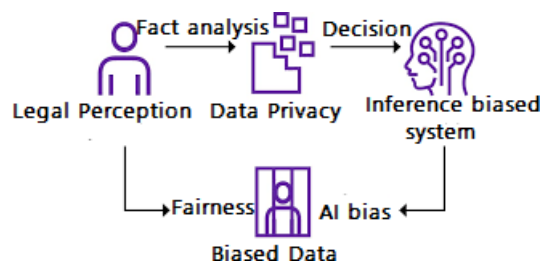

Figure-1: Legal perception on biased data

5. SECURITY ASPECTS CONCERNED WITH INFERENCE SYSTEM

Usually the initial input data are concerned with some additional provisioned information that enhances the parameter of the original input data. Accordingly, the modified data should be properly interpreted towards making the inference system more flexible. Therefore designing the inference system may be quite crucial. Again the legal issues linked with artificial intelligence may impact on development inference system. Sometimes the modernization with

recent technology may not be so effective due to consistent inclusion of provisioned protocols. In such situation, approximation on processed data through the inference system can enhance the decision making process with pure logic using supervised learning as reflected in figure-2.
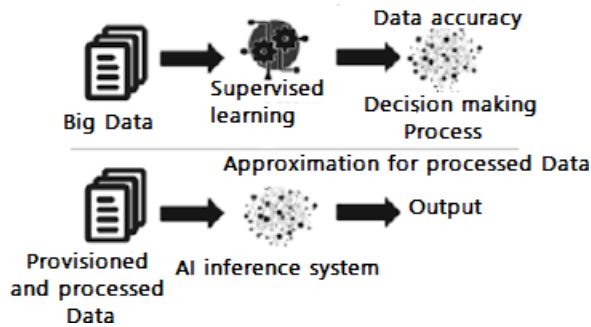

Figure-2: Decision making implementing inference system

As far as the privacy of big data is concerned, along with the intelligent system, it is used towards decision- making process as per the requirement of expanded database. Using supervised learning, potentiality maybe gained to adapt the conventional systems to enhance performance as it may be exposed to more provisioned data.

6. PERSPECTIVE ANALYSIS

Indeed application of artificial intelligence deals with human intelligence and reasoning. Butin case of more accuracy on reasoning, smart system is needed. So while prioritizing the bias, the technique of accumulation of data with proper handling should be impartial and transparent. Also to minimize the redundancy on data and inference system, validation and verification of AI systems should be encouraged. In general, application of prioritizing the legal and ethical issues in AI system is only possible if the limitations of human application as well as reasoning make reality as shown in figure-3. Of course a consistent framework with good coherent ethical standards may guide some portion of ethical risks with unexplainable outputs used in specific operations.
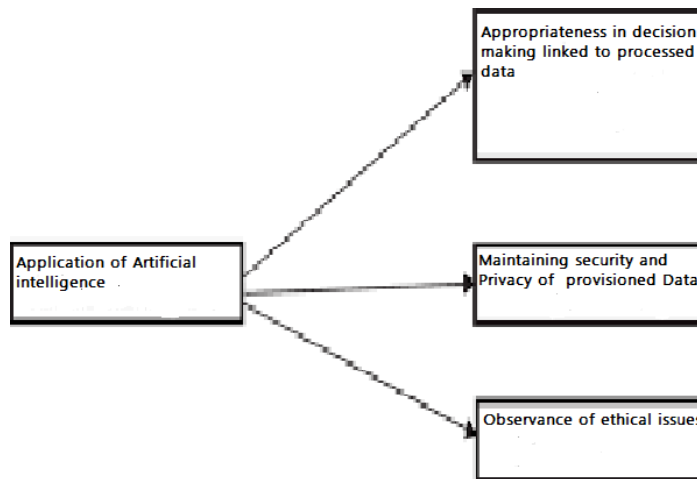
Figure-3: Application of AI maintaining security and privacy

7. LEGAL SANCTIONS LINKED TO ARTIFICIAL INTELLIGENCE

The analytical aspects of intelligent system associated with any concerned liability cannot be considered exhaustive without proper evaluation of the punishment implementing suitable intelligent system. Sometimes, some concerned liability can be accompanied by the application of sanctions, but sanctions can be aimed at rehabilitating those who commit a violation of the law. In such situation, it may be a challenge for Artificial Intelligence applications linked to sanctions. So regarding minimizing the challenges, parallelism should be maintained within the applications of the intelligent systems.

8. FUTURE LEGAL CHALLENGES LINKED WITH ARTIFICIAL INTELLIGENCE

In the present situation, the application of intelligent system is being commonly implemented in every sector of life and supplementing the procedures performed by common user provisioning legal regulation. To maintain consistency, it is essential to deploy more robotic applications that may give a range of rights and obligations and obtaining the autonomy in decision making. Also the usage of technology may be associated with legal challenges guaranteeing the data protection and cyber security. Not infrequently the technology may be misused causing cyber attacks and misuse of data generated through the intelligent systems. The major inclusion of inference and intelligent system in many cases can minimize the threats towards privacy and cyber security.

9. CONCLUSION

In many aspects the artificial intelligence has been demonstrated clarifying the legal frameworks and understanding the development of the intelligent system. Of course completeness and advancement of intelligent system is essential as far as specific jurisdiction is concerned. The intelligent system in the present situation can be observed everywhere, in all its forms of manifestation. However, inaddition to the many advantages that intelligent systems have brought to our lives, we are aware that the implementation of intelligent system is also associated with major disadvantages. From the analysis of the possible legal personality and the functionality of intelligent system, the appropriate model of determining the legal responsibility should be programmed effectively and the same logic can work in terms of civil liability. As implementation of intelligent system can be autonomous by which it may be difficult to ensure about irregularities or security aspects of the assigned tasks, accordingly the response time of the systems may be comparable with conscious programming tasks or un-scalable programming tasks. Designing of intelligent systems may impact on the safety and may not be enough to presume the tasks. Also it is to be accepted that artificial intelligence has the potential to overcome the difficulties by providing the opportunities to focus on pre-assigned as well as provisioned tasks.

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