



LAW & AI: A STUDY OF REGULATORY CHALLENGES AND OPPORTUNITIES

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ABSTRACT

Artificial Intelligence is a computer system able to perform tasks that ordinarily require human intelligence. Artificial intelligence systems are powered by machine learning which involves garnering the rules and information for using the data. As the Artificial Intelligence is based on data service industries so it has become very popular and necessity.

Artificial intelligence is a technology that is impacting our lives in a positive manner. It is also taking part in our daily issues as reminder for meetings, suggesting articles and news of our in-terest. Artificial Intelligence has the potential, to modify the manner that human interact. It is not only modify the manner with the digital world but also with one another, through their work and other socio economic institutions.

To ensure that, the impact of Artificial Intelligence will be positive, it is essential that all stakeholders do participate in the debates surrounding Artificial Intelligence.

Keywords: artificial intelligence, big data, cognitive computing, decision making, expert system, machine learning, recommender system

I. INTRODUCTION

Artificial Intelligence is developing rapidly like Alexa and other virtual assistant to Self Driving Cars. The term Artificial Intelligence was found by John McCarthy in 1956 who was an American computer scientist. According to Merriam Webster's, "**Artificial intelligence is a branch of computer science dealing with the simulation of intelligent behaviour in computers**". It is portrayed as robots with human intelligence.

Artificial intelligence has transformed every professional sector including legal profession. Software solution replacing paperwork and data management. Globally, Legal business having rapid growth and technology advancement. Everything is open to be replaced by technology except some services which depends on the experience and judgement. According to the company named 'Deloitte' "Over 100,000 jobs in the legal sector have a big chance of being automated in the next twenty years"

II. BENEFITS OF ARTIFICIAL INTELLIGENCE IN LEGAL PROFESSION SECTOR

Artificial Intelligence is finding its ways in the legal profession as there are many software available which can replace the monotonous and tedious work done by the lawyers. Artificial Intelligence helps the lawyers in the repetitive and routine jobs which indeed saves their time and also help them to focus on important aspects.

Legal Research

A legal practitioner spends lot of time on legal research. New lawyers takes much time to learn about legal research. Its also takes time to find the correct legal authority which could help them in their argument. A Good research plays a very crucial role in winning the case for a lawyer .

Due Diligence

The lawyers are supposed to do a primary task to confirm the facts on behalf of their clients. which is on the basis of the information they tell their clients as what they are supposed to do or can proceed further with the case.

Due diligence is a time-consuming procedure which definitely yields a positive result in the long run. Artificial Intelligence system helps to do the same task in a faster way. Artificial Intelligence makes through checks of the facts and evaluates the previous decisions given in the similar situation. It helps in providing effective counselling to their clients.

Prediction Technology

When a client approaches a lawyer to discuss for any dispute, he always asked the first question is “Should I Settle the case?” or “What are the chances for winning the case if he goes for trial?”

Artificial Intelligence technology has the capability to help the counsel in answering these type of questions. It can also forecast the result. It also evaluates previous decisions given by the judge in the same cases.

Legal Analysis

Analysing and reviewing the documents in a file is a time-consuming process. Artificial Intelligence software improves the efficiency of lawyers when they review the documents by putting them in a required order. Artificial Intelligence software flags the documents which has. of high-risk.

Artificial Intelligence software not only help in the reviewing the case files but also the contracts which companies signs. Law firms are mostly involved in reviewing the contracts which their clients sign. They identify the risks or issues involved with the contract and edit those clauses as required by their clients.

Contract Preparation

Artificial Intelligence software helps the companies in drafting standard and routine legal contracts. Artificial Intelligence software helps in preparing templates which can later be customised as per requirement of clients.

Patent Application

Most of the time Intellectual Property lawyers are engaged in analysing large Intellectual Property to draw an insight from the available content. Filing a patent application is a long and tedious job. The process of filing Patent application involves checking of hundreds of documents, which this software can do in a faster way. Artificial Intelligence helps the patent application in formatting, drafting and reviewing .

III.LEGAL ISSUES WITH ARTIFICIAL INTELLIGENCE

Artificial Intelligence are having various legal issues all over the world. Artificial Intelligence software uses large data to generate a significant amount of information. This data laws are evolving all over the world. USA has faced various legal issues between government and the technology companies .These legal issues are likely to grow with development of software and passage of time .

Amazon Inc. has faced search warrants to provide data in a murder case relating to Artificial Intelligence powered Echo device. There are various related laws to Artificial intelligence which can be relied upon the data privacy laws.

IV. IMPACT OF ARTIFICIAL INTELLIGENCE ON INDIAN LEGAL INDUSTRY

Indian Legal system has always been labour intensive. In India, people are not aware of the artificial intelligence. A Canadian machine learning software provider , Cyril Amarchand Mangaldas was the first Legal firm to sign an agreement with Kira Systems in 2017. to improve the efficiency and accuracy of the firm's delivery model for legal services.

The Supreme Court has digitised its record which resulted into an adoption of Artificial Intelligence technology by more law firms.

The legal firms in India would be different from what it is today.

There are some light on the modern legal firms which would resemble:

1.Innovations in Servicing Clients

The manner in which customers are treated today, would change later on. Legal industries would take a look at the way how they deal with their customers. Artificial Intelligence would change , this pricing method of Legal firms and would implement a Performance-based pricing methodology for the benefit of their customer:

2.Change of focus from Revenue to Maximum profits

Legal firms always concentrate on expanding income whereas the competition between legal industries have been increasing rapidly. The legal sectors of the future would be concentrating on maximum profits rather than income.

3.Change of Technology for Growth

By using Computerisation in drafting of a Contract a different legal technology will come up to increase the level of an Attorney. The utilisation of Innovation in legal firms is still low. Artificial Intelligence programming will help law offices to be more productive. It would potentially reduce the expenses with increase in maximum benefits.

4.High Focus on Brand value

Legal firms has to focus on to its customers. The law office of the future would focus on their brand. It would concentrate on investing in innovative solutions and making workplace an advancement of a key.

Artificial intelligence would not replace a lawyer

There is a question in the mind of the lawyers that whether by Introducing of Artificial Intelligence in legal sector, lawyer would be replaced. Artificial Intelligence-based solutions would increase the efficiency and productivity of law firms and Lawyers as well.

Artificial Intelligence based software never target a lawyer's job but the Intelligent Automation based software are increasing the authenticity and accuracy of result oriented research and analysis. Artificial Intelligence based software can reduce the time of a lawyer. It can also help the lawyers and law firms to give more result oriented suggestion to their clients.

V. IMPLICATIONS

Benefits of Artificial Intelligence in Indian Legal Industry

There are followings benefits of Artificial software in Legal Sector of India.

1.Time Saving

Resolving legal cases is a time-consuming factor in India. Its time consuming from filing a case upto deciding the case. Development of Artificial Intelligence, technology , the speed of handling cases can be improved. Persons involved in case including lawyers and judges can save their time .

2.Focusing on Work

By using of Artificial Intelligence software, legal tasks of the lawyers could be better focused on aspects of their cases. Lawyers will not have to think about their regular and repetitive tasks because this software will solve the cases.

3.Minimisation of Cost

Artificial Intelligence technology would better perform of legal tasks with cost effective manner. It will also reduced to produce printed documents. It would also save space and money as well.

4.Skill Development

In legal field, legal practitioners spend many years to become perfect in law. It is due to the legal research and doing legal studies. Artificial Intelligence software simplify the case and also helps to gain nuances of law in lesser time.

5.Analysis of Contract

Artificial Intelligence legal software applications are not only helpful for lawyers for doing work fast but in gaining trust of their clients. It can also be used to analyse legal contracts in a logical order. This software can also be used to analyse business contracts and its risk factors.

6.Generation of Contract

A lot of businesses are also making use of AI equipped legal software to develop new contracts. They can frame contracts while playing it safe and evading legal pitfalls involved with the process when such specialised software is used. This can include a contract with another company or an important client or supplier.

VI. TOP 10 TRENDS OF ARTIFICIAL INTELLIGENCE

1.Reinforcement Learning

Reinforcement learning is a framework that does not use the data recognition techniques. It uses experience driven decision making. This method interacts with the environment to learn and move towards a goal. In a game playing algorithms use reinforcement learning and it determines that how to win the game by moves of computer.

2.Ethical views in Artificial Intelligence

There are debates about Artificial Intelligence that it would replace human jobs. This question needs to be answered.

Are the autonomous and intelligent systems being designed in a manner that includes individual, community and society's ethical values?

There are some ethical design of Artificial Intelligence applications :

- Legal Accountability
- Policies

3.Quantum Computing

Quantum computers compute calculations faster than any super computer today. It also can use Quantum bits to store information.

In 2020, we would see more research on quantum computers and how to create strategies to reduce the error rates to make meaningful computations possible.

The unsolvable problems like climate change, presence of earth-like planets in the galaxy or our body's ability to destroy cancer could be solved.

4. Convergence of AI and other Emerging Technologies

In 2020, we would see more examples of the convergence of Artificial Intelligence.

Self-driving cars is not a practical possibility without Internet of Things working closely with Artificial Intelligence. The sensors used by a car to collect real-time data is enabled by the Internet of Things and the programs used for decision-making is powered by Artificial Intelligence models. The other powerful feature is that, these autonomous vehicles would have the ability to communicate with each other for optimisation of traffic.

5. Recognition by Face

Facial recognition technology would continue to grow in 2020. Facial recognition is a form of Artificial Intelligence application that helps in identifying a person using their digital image or patterns of their facial features. In 2020, we would see an increase in the usage of this technology with higher accuracy and reliability. dTheiPhoneX is already using facial recognition as a digital password.

We would also see in rise like payment processing through security checks as well as for law enforcement. This image recognition technology can be used for healthcare purposes and for follow through clinical trials as well as medical diagnostic procedures.

6. No place for Bias

Machine learning models are being used for decision-making such as Hiring, Mortgage, and for social service benefits. There are some biases are conscious while some are unconscious due to data which is used for training. The historical data of employment can show that women getting less promoted than men and hence create discrimination Artificial Intelligence application.

7. Neural Networks

Neural networks emulate human brain. It store all data in a digital format. Neural network uses in robotics, prediction of stock market and to diagnosis of medical problems.

Neural network technologies will be improved in 2020. By Neural network Artificial Intelligence will be more sophisticated because there would be better training methods and network architectures.

Neural network is useful in helping autonomous vehicles, fraud detection and also to look for signs of cancer. The year 2020 would continue to increase the research which will be used in neural network. By doing so, we can take advantage of the power of these applications for life-altering situations.

8. Socio Economic

There is a question, which everyone think that Artificial Intelligence will take the job of many persons. The answer of this question is "it depends". Artificial Intelligence would take away mundane jobs where there is a scarcity of resources. It would also develop new jobs with different skills.

There are discussion going on on this topic by governments, United Nations and World Economic Forum.

Artificial Intelligence applications develop new skills and jobs. Three are possibility that Artificial

Intelligence automation may remove the requirement of certain jobs. There would be demand for high tech jobs like Customer service representatives, Teachers and Caretakers etc.

Re-distribution of programs would continue to be the focus of attention for law makers and also it would be subject to debate and discussions in 2020.

9. Deep Learning

Machine learning is the most popular form of Artificial Intelligence. It would become challenging when the number of dimensions of data increases. It would translate our voice into text.

Self driving cars, Voice control and image recognition is the technology of Deep learning. Apart from Amazon's Alexa and Google home, there are wide range of voice-enabled applications which use natural language processing algorithms which is also an example of deep learning.

10. Privacy and Policy

This is important to protect privacy and also to ensure organisations approach data privacy earnestly.

In the year 2020, it would continue to be importance of privacy and policy of Countries and legislators. Artificial Intelligence is new and it needs further understanding. Every Country around the world would continue to work on strategies and initiatives to guide the development of Artificial Intelligence. All the standards which are critical to ensure for safety, transparency and awareness of the complex Artificial Intelligence technologies would also be developed.

VII. CONCLUSION

Artificial Intelligence will not decline in near future. Artificial Intelligence will grow in the year 2020. The focus will not only on the new technologies and applications in the industry but also will be on its intersects with the society and heralds in technology for the better prospects.

The technological development has change the framework where it uses in the legal sector. It is difficult to consider the future of legal industry without thinking about the Artificial Intelligence software. Currently, the legal business is customer oriented. Legal information is just a click away and the Legal research is done through online software. Lawyers and firms are taking help of these software to draft and review the contracts and the case documents as well.

Artificial Intelligence has benefited the lawyers and small law firms by providing them with the information and resources. It is bringing them at par by well-established law firms in terms of resource. Because of technology, legal research is the most important aspect of practicing law. Journals and reporters to CD-ROMS and Online software and legal technological innovation has changed the way of rendering legal services.

The technology advancement helps the lawyers to complete their task efficiently and quickly. By doing so, it does not mean that this technology is going to replace the lawyers.

The Indian judiciary might be slow to the prospect of digital tech and Artificial Intelligence, but the Indian judiciary has realised the benefits of the technology.

It will be better for the Legal Industry if the govt takes the initiative to clarify the norms for Artificial Intelligence adoption and defines its scope in the Legal Sector.

VIII. REFERENCES

- 1.Katz Daniel Martin, A general approach for predicting the behaviour of the Supreme Court of the United States, 2017
- 2.Gunashekher Raj, Use of AI for legal services in India,CAM pioneers, 2017
- 3.LohrSteve, A.I. Is Doing Legal Work. But it Won't Replace Lawyers, Yet, N.Y. Times,2017