

Impact of Artificial Intelligence on legal practice in Sri Lanka

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Abstract – Artificial Intelligence (AI) a machine-based system used to ease the human work load, has been popular globally and its influence can be seen even in developing countries like Sri Lanka. Although it has dominated areas such as machine problem detecting, calculating and speech recognition, it is questionable whether this sophisticated technology can address the traditional roles of legal practice. The research aims to explore the positive and negative influence of artificial intelligence in legal field. while determining the degree to which this technology should be incorporated in legal sector in Sri Lanka. The research was carried out as a literature survey with a comparatively analysis of other jurisdictions. Currently many countries including USA have used AI based tools such as LawGeex, Ross Intelligence, eBrevia and Leverton in the legal practice due to the efficiency, accuracy and ease of use. Artificial Intelligence can be used even in Sri Lanka for legal research, preliminary legal drafting and codification of law. But according to the prevailing economic and social background of Sri Lanka it will be discriminatory to totally rely on an Artificial Intelligence-induced legal system since it may create barriers for equal access of legal support to common masses. Also, excessive dependency on artificial intelligence will be a barrier for innovative legal actions such as Public Interest Litigation since it would not assess the humanitarian aspect. Hence, it is concluded that Artificial intelligence should be used in Sri Lankan legal practice with limitations.

Keywords— Artificial Intelligence, AI based legal practice, Digitalization

I. INTRODUCTION

Artificial Intelligence (AI) is a very popular technology based invention which has made drastic changes in many sectors such as health, transport, communication, education, engineering, computer science and statistics around the world (Angwin et al., 2016). Currently many countries have shifted to artificial intelligence to ease their workload. Since, Artificial Intelligence is programmed to perform the tasks that should be implemented using human knowledge, intelligence and labour, this discovery has created revolutionary change in the whole world.

Mainly, AI can also be used in cases where it is risky to have direct human involvement. Artificial intelligence has become a blessing for space explorations, disaster

mitigation and other risky operations. Hence, AI can also be used as a mode which enhances the value of a human life. The ultimate motive of Artificial Intelligence is to execute the duties independently without minimum errors and even to perform the tasks which are difficult to be completed by human beings.

However, as a developing country Sri Lanka is still facing the initial stage of this technology. According to 2020 Government AI readiness index published by Oxford Insights Sri Lanka is still in 90th position among 172 countries (Oxford Insights, 2020). This depicts that still Sri Lanka is lagging behind when compared to the other countries and our country is going through doubts and constraints in embracing Artificial Intelligence as a part and parcel of modern sophisticated society.

II. RESEARCH PROBLEM

AI is used today by many countries such as USA, Russia and Estonia even in the legal sector. One may see AI as a good substitute for the human beings in legal practise. However, when considering about the history and evolution of legal profession, it is evident that the versatile and capable legal practitioners are born only after years of practice, dedication, hard work and expertise. Legal practise is so highly time-consuming that, we cannot create a talented legal practitioner overnight. Moreover, due to the special expertise of a lawyer a client may have to pay a higher sum as consultation fees, drafting fees and appearing fees. Hence, when looking on this situation in a profound angle, people may be persuaded to seek the support of Artificial Intelligence instead of the conservative role of a human lawyer. Thus it is important to investigate the degree to which the AI should be incorporated in Sri Lankan legal practise, while focusing on the positive and negative impact of this sophisticated technology.

III. METHODOLOGY

This research was conducted as a qualitative study by using a comparative legal study by analysing the prevailing use of Artificial intelligence in legal practise. Scholar articles, research and conference papers, AI related legislation and news bulletins were used as the data sources when carrying out this study. The research was basically carried out in two phases. In the first phase the advantages and disadvantages

of incorporating Artificial Intelligence to the legal practise, were analysed. In the second phase the barriers and constraints for applying an AI friendly legal system were discussed with examples from comparative jurisdictions.

III. RESULTS & DISCUSSION

When human beings are capable of making creative and innovative changes in the world since the ancient times, it may create a doubt why the Artificial Intelligence should be used. When analysing this situation, it can be identified that there are several advantages of using AI in the field of legal practise as well.

A. Advantages of AI to the legal practise

Rather than relying on human legal practitioners if the people shift to seek the assistance of Artificial Intelligence many advantages can be gained. AI is more efficient when compared to human lawyers and judges and there are many other advantages of AI as well.

1) Legal Research and Document Analysis Through AI

One of the main advantages that can be gained through AI, is that it will be very helpful in carrying out legal research. Artificial Intelligence can cope with a massive load of data and through this modern technology it will be easier to find a specific detail within a comparatively very short period of time. Specially when a lawyers wants to research about the past case law it will be an extensive effort which consumes more time and labour. But, by using Artificial intelligence he can pinpoint the relevant case law within a very short period of time. The other important feature is that Artificial Intelligence can be used as a supportive tool for legal libraries, case databases and archives with legal literature.

Furthermore, AI can be utilized for the purpose of analysing documents within a short time duration with more accuracy. AI is capable of synthesizing and summarizing long, descriptive legal reports and that will be a great advantage for the legal practitioners when they are preparing for their case.

2) Contract Analysis and Due Diligence

In contract law, the parties may enter into very elaborated versions of agreements with complicated terms and conditions. In some occasions a lawyer may struggle to identify, understand, compare and contrast aforementioned terms and to draft the legal documents in favour of his client. But by effectively using Artificial Intelligence, this hardship can be minimized to a greater extent. Through Ai contracts can be deeply analysed and the due diligence of the parties can also be assessed.

3) Predictive Analysis through algorithms

Another key advantage that can be gained through AI to the legal practice, is the predictive analysis. As human beings we are unable to make predictions very accurately. Even if the predictions are made based on the past experiences there is a possibility for them to go wrong. Hence, there is no

guarantee that the human predictions will be correct. But in contrast the AI can help the legal sector with more accurate predictions using the algorithms.

4) Legal chatbots and Virtual Assistants

In developing countries like Sri Lanka, the clients who get appointments from lawyers will face issues when their waiting time is long, to meet their counsel or attorney. But modernized Legal Chatbots and Virtual Assistants empowered by artificial intelligence can be used for answering the basic questions raised by the clients (Mannes,2017). Also, this assistance can be used in preliminary consultations.

5). Data Driven Decision Making

AI helps to come into the decisions based on the data which is very useful in legal arena. Moreover, it will be difficult to expect a human lawyer to come into the decisions by analysing a heavy load of data because it is not practical.

B. Disadvantages of AI to the Legal Practise

Although AI is a heavily technological and modernized invention there can be some inherent loopholes in it which may adversely affect for the legal sector. Therefore, it is useful to be aware of the negative side of the AI before incorporating it in to legal sector.

1) Biased Decisions of AI

In the legal practice, main challenge faced is that the practitioners will be carried away unknowingly due to their personal biases. Sometimes the emotions may retain in human mind and influence for the decisions they make. This will be common for the judges as well. Main argument for using AI in legal practise is that it helps to take decisions without being affected by human biases or emotions. But it is important to investigate whether the AI is actually unbiased when making crucial decisions. For an example COMPAS, which is an AI used for predicting recidivism in judicial decisions was revealed to be biased against the defendants of black origin (Angwin et al., 2016). Also, it was revealed that the google photos failed to properly recognize a black couple and identified the aforesaid couple as gorillas (Alciné, 2015). Currently, Singapore has focussed on introducing robot- arbitrators, but according to the above incidents it is wise to reconsider this (Dastin, 2018). Also it has been reported that Amazon AI was biased to women in a recruitment process which again questions the performance of AI (Dastin, 2018). This creates a dilemma about the high accuracy and unbiased nature expected from the Artificial Intelligence.

2) AI can be unaware of some contextual information

Artificial Intelligence can be smart but it will be unaware of some exotic and contextual information. Basically, this may happen because the AI does not have access to all the knowledge human beings gain through their cultural and customary practices (Dias & Bandaranayake, 2021). For an example an AI may fail to identify the hidden meanings of

a word in a rural dialect (Dias & Bandaranayake, 2021). However, in the areas of legal practise such as criminal law, the background knowledge and contextual information will play a significant role. Therefore, it is expected from the lawyers to gain a proper idea about these exotic, contextual information. In that point the AI will face several practical issues due to the lack of exclusively experience-based knowledge.

3) Lack of empathy and emotional justice

Law expects to adhere to the justice by considering prevailing arguments, evidences and factors. But a judicial decision is not solely based on the success of arguments presented by the lawyers. Legal Practise has given room for creative interpretation of law without being limited to the literal interpretation of black letter law. But due to the lack of empathy and emotional justice, Artificial intelligence has failed to address this. Moreover, the role of AI in the cases of public interest litigation is very limited due to the same reason.

C. Best practices of AI-based legal practice around the world

Currently, many countries have used Artificial Intelligence in legal sector for variety of works. In United States AI models such as *ROSS Intelligence* and *Case Text* are used for legal research automation (Agrawal & Bhattacharya, 2019). In addition to that predictive analytics in litigation are carried out with the use of AI based software in companies like *Lex Machina* and *Blue J Legal*. In United Kingdom *Luminance* Company and *ThoughtRiver* Company have launched AI-powered contract analysis (Agrawal & Bhattacharya, 2019). In law library of Victoria in Australia the AI model *Ask Izzy* is used for legal research and document tracking (Carlo, 2017). Furthermore, *Loom Analytics* company in Canada provides insights to the lawyers about the judges view on particular case or argument (Carlo, 2017). The Future Law Innovation Programme organized by the Singapore Academy of Law supports the development and adaption of AI-based contract management tool s(Agrawal & Bhattacharya, 2019). Likewise, all these examples affirm the use of Artificial Intelligence in legal practise in global level. Through this it can be identified that AI- based legal practice can be implemented successfully in certain dimensions

D. Creating readiness for an AI- friendly Legal practice in Sri Lanka

As displayed in figure1, it will be very useful for a country to strengthen the government intervention, technology sector and data and infrastructure in order to get ready to embrace AI technology. Hence, if Sri Lanka is to incorporate some features of Artificial Intelligence it will be essential to have a proper government vision on the use of AI. Also, AI directly involves with ethical considerations when it is implemented. Therefore, the country should have a definite governance framework to address the matters

concerning to AI, while protecting the legal ethics. Furthermore, if AI is to be used in Sri Lankan legal sector it will be essential to facilitate with the required digital capacity. Since the introduction of AI to the legal sphere can create several changes in the prevailing legal system the government should ensure that the country is equipped with the relevant adaptability to this new technology.

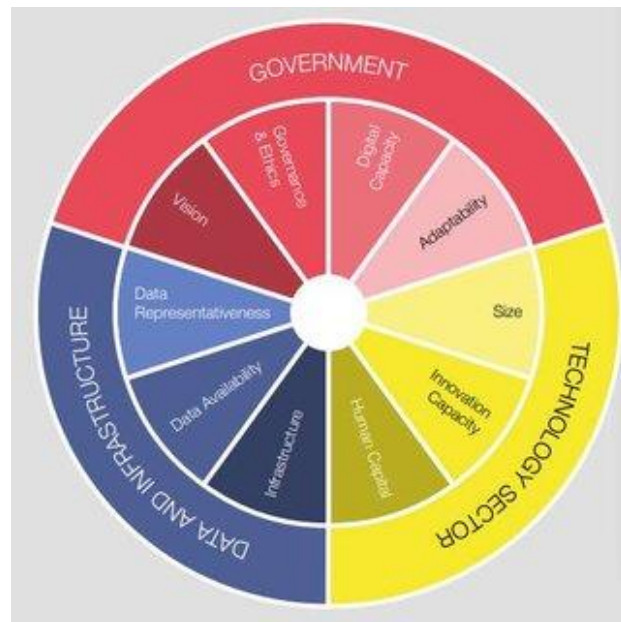


Figure 1. Government AI Readiness Index Components
Source: Oxford Insights 2020

Also, before the implementation of Artificial Intelligence the infrastructure should be favourable for adapting this change in legal sector. Maximum usage of AI can only be gained if the country has a proper data representativeness and data availability.

Moreover, it is important to consider the fact that Artificial Intelligence should be introduced to law field only if the required human capital, innovation capacity and the volume of technology sector is available.

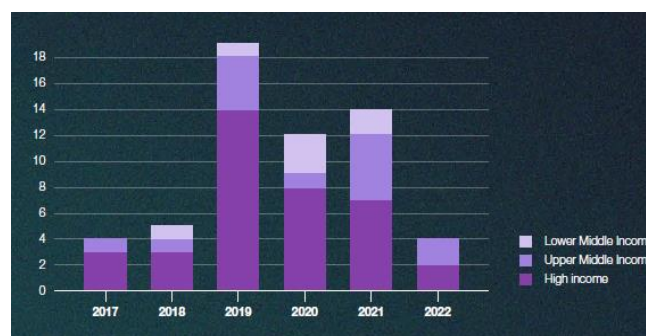


Figure 2. Number of countries of each income group publishing an AI strategy per year
Source: Oxford Insights 2020

As displayed in Figure 2, unlike the countries in high income group, the countries in lower middle income group have a low tendency to publish an AI strategy each year. Therefore, if Sri Lanka plans to adhere AI technology to the

legal sector it is essential to maintain a proper government AI strategy.

C. Barriers for AI in Sri Lankan Legal Practise

Since AI is an updated technology it cannot be implemented in Sri Lankan legal system at once. There are some barriers in Sri Lanka to have a well-updated, modernized technology like this.

1) Lack of regulatory frameworks

Sri Lankan legal system has not embraced the provisions to facilitate an AI- induced legal practice. Still according to the prevailing law the presence of a counsel or attorney is expected. Also, according to the Sri Lankan legal system there is a systematic documentation procedure. Hence, in order to facilitate the AI this process should be revised accordingly. Furthermore, Sri Lanka has to ascertain whether it accepts an AI model as a legal person. For an example in Saudi Arabia an AI robot named Sofia was granted the citizenship (Dias et al., 2020). In Japan equal status was granted to AI models as well (Ariyadasa & Aparrajitha, 2019). Likewise, it is essential to determine the relevant regulatory frameworks in Sri Lanka if we are to experiment AI in legal sector.

2) Data quality and accessibility

Another issue in implementing AI in Sri Lankan legal system is the lack of data quality and accessibility. As per the prevailing conservative legal practice, the lawyers may go to the court record room and study the case files. Also, in Sri Lanka we do not have databases of the cases that have been maintained properly. In such an outset there may be many barriers in launching Ai to the legal practice.

3) Interpretability and transparency

Furthermore the interpretability and transparency expected from a human legal practitioner cannot be expected from an AI model. Due to the long traditions shaped with the human legal practitioners it will be a challenge to justify the transparency of a technical AI model.

4) Liability and accountability

As per the current legal structure lawyers and judges will be held accountable and liable for their actions. But it is questionable whether this accountability can be expected from Artificial Intelligence.

5) Trust and acceptance by public

According to the views and thinking pattern of Sri Lankans, the public will hesitate to share their legal issues with a technological model instead of a human being. Since the AI is not so successful in expressing deep human emotions there will be a rough path to earn the trust of the public. Also, the elder generations will prefer to have a human lawyer or and attorney in person or in their presence in the court instead of a sophisticated AI programme.

6) Cost and Accessibility

Since Sri Lanka is still a developing country the rural community has become a victim of poverty. Therefore, if AI is allowed to be used in legal practice common masses will face issues of cost and accessibility in using this technology. This can create new issues regarding the equality before the law as well.

7) Ethical considerations

Legal issues arise between human beings and it is questionable whether a technically operated model is capable of handling such disputes and giving a reasonable judgement. Therefore, due to the ethical constraints there can be barriers in incorporating AI to the legal arena.

Likewise, when considering all the above facts it can be identified that there are some practical barriers for Artificial Intelligence in Sri Lanka.

IV. RECOMMENDATIONS AND CONCLUSION

Gaining the positive impact of Artificial Intelligence, to the legal sector of Sri Lanka is a huge challenge which cannot be fulfilled rapidly. When focusing on the current economical situation of Sri Lanka, it is evident that these steps should be made gradually. Accordingly, as the initial step Sri Lanka can initiate AI based models and software for legal research and document management. Taking this initiative during the initial stage will help the public as well as legal stakeholders to familiarize about the role of Artificial Intelligence in legal practice.

Moreover, creating public awareness about the pros and cons of using Artificial Intelligence in legal sector will be helpful to create the forum for popularizing AI. However, the legal practitioners and policy makers should be mindful about the repercussions of relying on AI and create an ideal strategy suitable for Sri Lanka's economical, social, cultural and legal background. Furthermore, since Sri Lanka is a part of this globalized world, it may have to deal with several AI related legal issues also. Therefore, it is recommended to strengthen the legal system with relevant legal amendments in order to address the AI- related legal practice. This will help the society to embrace the Artificial Intelligence without facing unnecessary complications.

Therefore, when analyzing all the above facts it can be concluded that AI should be implemented in Sri Lankan legal practice gradually as a collective effort with necessary legislative framework.

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