ROLE OF ARTIFICIAL INTELLIGENCE IN IMPROVING THE CRIMINAL JUSTICE SYSTEM IN INDIA

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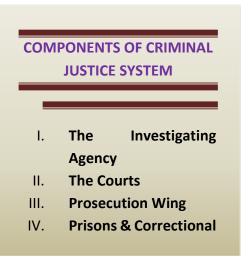*Advocate at District & Session Court, Trivandrum, Kerala*

ABSTRACT

Artificial Intelligence can be called as one of the landmark technological revolution of 21st century, capable of influencing almost all aspects of our life. National Strategy for Artificial Intelligence (NSAI) released by NITI Aayog acknowledges the fact that AI can bring tremendous changes in the field of Mobility, Healthcare, Agriculture, and Education. Another area where AI can effectively be applied is in criminal justice administration. This project discusses the role of AI in improvising the criminal justice system in India.

*Keywords***:** AI, Criminal Justice System

INTRODUCTION

In India major challenge to the judicial system is long pending cases. Though measures like e-court, Alternative Dispute Resolution were introduced, the judicial system couldn't efficiently curb the rising pending cases. Also, shortage of judicial officers adds to the problem. This leads to delaying of justice which is equivalent to denial of justice. It is high time that some non-conventional tool has to be introduced to restore the effectiveness of justice delivery system. One such tool is introduction of AI in the Justice Administration system. Following words of Hon'ble Chief Justice of India Sharad

> **COMPONENTS OF CRIMINAL JUSTICE SYSTEM**
>
> I.   **The Investigating Agency**
> II. **The Courts**
> III. **Prosecution Wing**
> IV. **Prisons & Correctional**

Arvind Bobde, "*we have a possibility of developing Artificial Intelligence for the court system. Only for the purpose of ensuring that the undue delay in justice is prevented,'*"points out the need of AI for ensuring speedy justice.

Already AI has entered the legal system and it is used for contract generation, legal research. In India, a leading law firm, Cyril Amarchand Mangaldas became country's first law firm to embrace AI as part of legal innovation[ii]. AI clubbed with the e-court system can accomplish its efforts of integrating information & communication technologies in courts.[iii]

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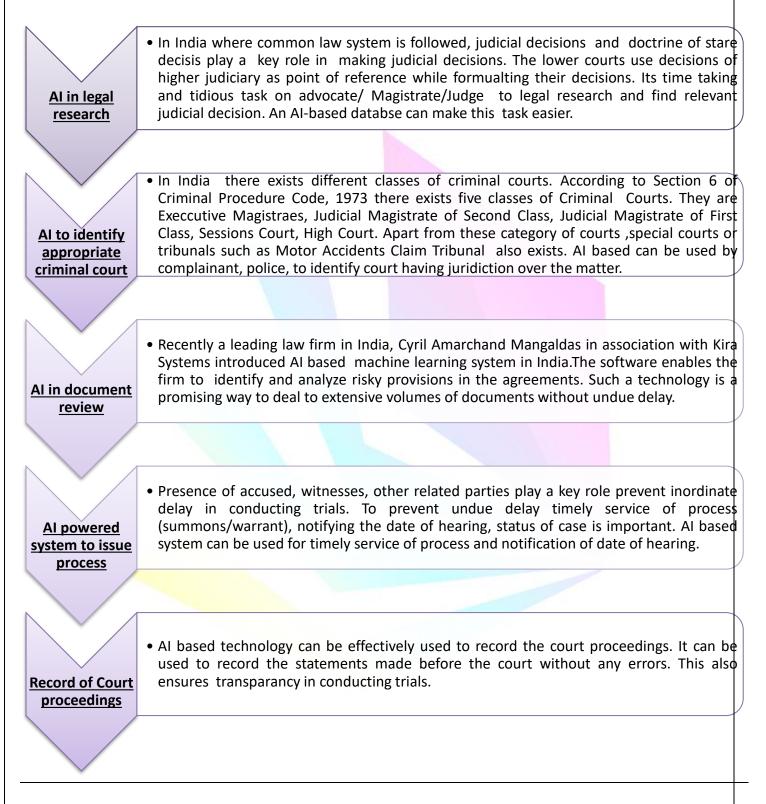*Role of AI in improving efficiency of Law Enforcement agencies:*

In India, though the Government initiated & promoted digitalization of police records, still the conventional paper-based records are in practice at large. This offline method makes investigation & tracking of criminals a time consuming and tough task. The police require real time information to effectively investigate a case. Here comes the application of AI. With the help of AI, bio-metric details such as face, speech, blood group, fingerprint, details about previous crimes etc. can be recorded. The AI powered search engine enables the Investigation Officer to identify the suspects using these digitally stored data.

AI based technology can be effectively used to guide the investigation officers on procedures of investigation. It means the AI will play a key role in preventing procedural errors committed by Officials.AI based applications can be used to store particulars of crime scene, modus operandi of crime. Such a database enables the officer to identify similarity between offences committed at different places. AI based drones; high resolution cameras can be used to track suspects of crime. Also, such technology can be effectively used to monitor road traffic volume.

AI INITIATIVES BY VARIOUS STATE POLICE IN INDIA

- *Punjab Police introduced AI-based face recognition system in association with Staque Technologies.*
- *Cuttack Police introduced AI powered equipment to guide Investigation Officers in following procedures of investigation.*
- *Uttar Pradesh police launched AI based face recognition app called 'Trinetra' to solve criminal cases.*
- *Andhra Pradesh Govt. launched 'e-pragati',* **a database that consists of e-KYC of millions of people in the State of Andhra Pradesh.**
- *Delhi Police in association with IIT Delhi set up AI Centre to handle crimes.*

Role of AI in improving the efficiency of Criminal Courts[iv]:

AI in legal research

- In India where common law system is followed, judicial decisions and doctrine of stare decisis play a key role in making judicial decisions. The lower courts use decisions of higher judiciary as point of reference while formualting their decisions. Its time taking and tidious task on advocate/ Magistrate/Judge to legal research and find relevant judicial decision. An AI-based databse can make this task easier.

AI to identify appropriate criminal court

- In India   there exists different classes of criminal courts. According to Section 6 of Criminal Procedure Code, 1973 there exists five classes of Criminal Courts. They are Execcutive Magistraes, Judicial Magistrate of Second Class, Judicial Magistrate of First Class, Sessions Court, High Court. Apart from these category of courts ,special courts or tribunals such as Motor Accidents Claim Tribunal also exists. AI based can be used by complainant, police, to identify court having jurisdiction over the matter.

AI in document review

- Recently a leading law firm in India, Cyril Amarchand Mangaldas in association with Kira Systems introduced AI based machine learning system in India.The software enables the firm to identify and analyze risky provisions in the agreements. Such a technology is a promising way to deal to extensive volumes of documents without undue delay.

AI powered system to issue process

- Presence of accused, witnesses, other related parties play a key role prevent inordinate delay in conducting trials. To prevent undue delay timely service of process (summons/warrant), notifying the date of hearing, status of case is important. AI based system can be used for timely service of process and notification of date of hearing.

Record of Court proceedings

- AI based technology can be effectively used to record the court proceedings. It can be used to record the statements made before the court without any errors. This also ensures transparancy in conducting trials.

Role of AI in assisting prosecution wing to conduct cases:

In criminal cases forensic science play a key role in determining the guilt/innocence of the accused. Collection of biological material such as blood, urine, saliva, hair, skin cells, and semen is crucial and is evidence against the accused. From such biological materials DNA of the suspect/accused can be profiled. AI powered system can be used to identity even the slightest of such biological materials present at scene of crime. Also, it can be used to confirm the results of expert witness. Especially it can be used to match fingerprints, gunshot detection etc.

AI based technology can identify serious frauds, money laundering, employee theft, insider trading, fake invoices etc. This ensures that relevant evidences are brought before the court of law.

Role of AI in improving the efficiency of prisons & correctional services:

Correctional institutions play a key role in reformation of the convicts and re-integration of them back to the mainstream society. But nowadays it has been observed that jails are becoming prime point of criminals and mafias to plan and execute crime. Inmates are having unauthorized access to mobile phones, weapons, cigarettes etc. It's tough for the jail authorities to make a close watch on such activities. However, with the help of AI-based powered surveillance system and using UAV's activities inside the jail premises can be closely monitored. AI based monitoring is ideal solution to:

- End violence inside jail
- Crowd analysis
- Detection of security threats
- Detection of prison breaches or unauthorized entry.

The UP Government in association with Staque has launched AI powered video analytic solution with a 'video wall' that covers CCTV footage from all of seventy prisons of Uttar Pradesh.[v]

CONCLUSION

AI is becoming part and parcel of our lives. It has touched almost all spheres of life including education, healthcare, and defense sector and now it has entered the legal field. Application of AI in criminal justice system would curb long pending cases; ensure speedy disposal of cases, effective collection of evidence from crime scene, ensures fair and transparent investigation, proper functioning of correctional centers, face-recognition of suspects, and efficient management of road traffic.

However, before it is readily applied in Indian soil we must address following concerns:

- Hon'ble Supreme Court in the matter of *Justice. KS Puttaswamy (Retd) v.Union of India*[vi] has declared right to privacy as fundamental right under Article 21 of the Constitution. AI works on the basis of information fed to it. A large chunk of data is fed into the system as fuel for search engine. The issue is that in the present scenario there is no legal framework for data collection and protection and in the absence of such a vacuum privacy of individual is at risk.[vii]

- The inclusion of AI in judicial system must be after experimenting through evidence based & research-based approach and not trial and error method.[viii]

- AI technology is growing at rapid pace. The legal framework must also evolve to catch up with this rapid growth; else "boon will become curse".

- The authorities must impart training to all stakeholders before integrating AI in judicial system.[ix]

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viii *ibid*

ix *ibid*