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BALANCING SPEED AND JUSTICE: AI-POWERED COURT SYSTEMS AND LEGAL ETHICS IN PAKISTAN

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ABSTRACT

The integration of Artificial Intelligence (AI) into Pakistan's judicial system presents a transformative opportunity to address chronic inefficiencies, such as case backlogs and delays in justice delivery. However, this technological shift also raises significant ethical and legal concerns, particularly regarding fairness, transparency, and the preservation of human rights. This article explores the potential of AI-powered court systems to enhance the speed and efficiency of legal processes in Pakistan, while critically examining the ethical dilemmas and societal implications of such automation. It highlights the challenges of balancing speed with justice, the risk of institutional biases being amplified by AI, and the need for robust regulatory frameworks to ensure accountability and public trust. Drawing on comparative analyses from other jurisdictions, the study underscores the importance of integrating AI in a manner that respects legal ethics and safeguards the rights of all citizens, particularly the marginalized. The article concludes with recommendations for policymakers and legal professionals to navigate the complexities of AI adoption in Pakistan's judiciary, emphasizing the need for ethical guidelines, public awareness, and inclusive oversight mechanisms.

Keywords: Artificial Intelligence, Judicial System, Legal Ethics, Pakistan, Case Backlogs, Fair Trial, Transparency, Institutional Bias, Regulatory Frameworks, Public Trust

Introduction

Is the possibility to use artificial intelligence software in the judiciary activities with the view to improve their effectiveness, speed, and costs feasible? Or does such a solution pose an ethical risk to the lawful proceedings? Pakistan faces an issue that while a rapid disposal of cases is needed and AI-powered court-systems are an option, the lawyer's ethical considerations have the priority. The top court in Pakistan has decided to start a pilot project to introduce an AI-based system for research on law. However, this decision to use AI-based technology makes more acute the necessity to consider the possible philanthropic ethical consequences, as well as the upcoming epistemological

quarrels about the validity of this research (Dymitruk, 2019). The barristers practiced in the high courts of Pakistan consider that while a fair trial was always the aim and a variety of ways existed to ensure it, the use of AI courts could disregard numerous essential elements of Turkish Alternate Dispute Resolution laws, let alone the traditions of legal practices (Nabi, 2015). This may subject the affected lower-paid majority to frequently unjust decisions made without regard to the principles and specifics of the local customs and knowledge. Thus the apparently simple science-driven decision falls within a wide range of cultural and expertise interaction that has to be considered in the interest not to deliver, albeit unintentionally, an unjust outcome.

These technologies encompass a wide spectrum of tools, ranging from sophisticated legal bots to highly advanced AI-powered systems. These innovative tools have begun to be utilized in a piecemeal fashion in courts across the globe and possess the potential to fundamentally revolutionize the legal profession in Pakistan. In light of this significant development, by employing two comprehensive frameworks, this analysis closely examines the potential for AI-powered court systems to become increasingly prominent in Pakistan, with a specific focus on the criminal justice system. In doing so, several pertinent ethical issues that underpin the operation, regulation, and implementation of these systems are thoughtfully considered and explored in depth. In Pakistan, civil courts are overburdened with cases, causing a significant delay to the legal process. In addition to improving the speed of legal decisions, AI tools can also address fairness in judgments. The vast majority of litigants in Pakistan fall below the poverty line and cannot afford the cost of legal advice. AI systems can democratize access to justice by reducing the cost of accessing the legal system and thereby diminishing the disparities in the Resolution of Disputes Act (Khan). Several consultative efforts were made in respect of AI. While making the Model Artificial Intelligence Policy, it was considered that: 'transparent and fair policies in the use of judicial AI within the legal community are crucial. The court system should be able to regulate the kind of tools that can be used in courtrooms' A model artificial intelligence framework was crafted to outline a set of standards with which AI tools that are commercialized to the masses should comply. This was largely inspired by the discussions held by the Working Group on Intellectual Property and Emerging Technologies for discussions on how best to consider these developing technologies vis a vis the Transparent and Fair Use of AI in courtrooms (Bagaric et al., 2022).

AI-Powered Court Systems: A Comparative Analysis

The advent of artificial intelligence has led to its widespread application in a number of socio-technical sectors. The legal sector too in many jurisdictions has witnessed automation in certain processes including appointment scheduling and quick response to standardized inquiries. Besides this, several countries have transitioned to AI-

powered court systems solving the data management problems involved in the default judicial processes. A basic research based analysis is conducted of AI applications in legal sector with a special scope on the court system. A broad comparison will be presented in terms of the nature of the legal framework, community response, and effectiveness of AI systems in selected countries, Pakistan, India, United States and Russia (Verma, 2023). It is analyzed under what terms multinational legal firms and bar associations responded to the artificial court cases in the respective countries. The study will make use of news reports, reports, survey, and court observations.

Courts are the final sanctuary for people looking for justice. But in many third world countries, the judiciary is overly overburdened with the number of cases. This leads to delays in solving cases and the public ultimately loses trust in judicial decision making. New open-source artificial intelligence can be used to resolve court disputes speedily and fairly. This AI will be used in the superior and high court for the time being. The courts are full of cases and this delay in delivering justice is due to the burden that is being faced by the courts. If, in this scenario, cases are filed and processed in the system, the parties to the case can get a hearing date and decision immediately. In comparison, the current situation is that cases are decided after a long time and this way witnesses and evidence are also tampered with (Barysé & Sarel, 2023). With the use of artificial intelligence, the evidence provided by the parties to the case will be analyzed, and the system will come up with arguments favoring that party. Due to the rapid brainpower and analytical capability of the system, the case can be resolved immediately, and one party will prevail over the other.

With the explosive growth of the pre-trained language model (PTLM), legal natural language processing (Legal NLP) has currently attracted widespread attention in academia and industries. Emphasizing legal tasks, legal language models (LLMs) have been specifically designed, including large language models fine-tuned on the legal corpora. In this section, a timely survey is conducted on the large language models (LLMs) applied in the legal field, comprehensively summarizing the ten most recent advanced and fine-tuned LLMs. In the advancing process of society and technology, artificial intelligence (AI) has been widely involved in courts and law in a variety of ways involving the justice process. Recently, Pakistan has deployed an AI-based court system (Gondal et al.2025). Given this rising scenario of the court ruling process, legal professionals are facing challenges and need to conform ethics to tackle them. A brief summary reflecting AI in legal systems worldwide and in Pakistan, Avifauna's influence, and an elucidation on practical ethics is presented. With the theme of the application of AI in the court systems and the legal ethics to be consistent with it, the analysis mainly shows an exploration of an overview of AI systems in courts and law spheres,

especially scrutinizing predetermined rules for the ethical conduct of lawyers (Dymitruk, 2019).

Artificial Intelligence (AI) is modeled to play an integral role in incorporating transparency, ensuring impartiality, and to create harmony in different sectors of social systems including the legal system. It has paved new ways to transmogrify the modern judicio-political powers which is persistently keeping a check on the subalterns (Verma, 2023). Often, the legal system is defamed to lean towards the dominant side, i.e. the social elites, governmental officials, or politically powerful actors. In light of an experiment with industry professionals and college sophomores, the former were inclined to cede that both robustness and fragile dispute resolution mechanisms allowed them to organize for claims that effectively exploited the legal system's bias in their favor. It is further suggested that negative stereotypes regarding the less privileged members of society. Hence, expanded accessibility to dispute resolution mechanisms including AI-powered ones may benefit those on the losing end of existing inequities in law and legal regulation. AI is applied in the legal system to balance the prevailing powers of discretion, even if the ultimate judgment remains in the purview of laypeople (judges, arbitrators, etc.). AI systems can also function to reframe and resolve disputes (Cannon, 2021). Dispute resolution mechanisms whether or not they are implemented in computer-simulated environments might benefit from inventing ways in which technologically mediated negotiation and conflict escalation could lead to a mutual understanding of private interests and motivate inter-agreeable settlement visions.

On the contrary, it is also construable that curtailing the freedoms of discretion in the legal system opens up an avenue for circumventing the weak and potentially infringing upon their ability to seek redress, deterrence, and the realization of just outcomes to damaging interactions with privileged actors. In practice, the operation of AI can very well serve to amplify institutional biases: in a study of bail decisions made by contractually detained US immigration courts, mere randomness was seen to be surpassed by pro-government outcomes predicted by machine learning models trained on case data (Bhatnagar & Huchhanavar, 2023). This was the case even for models equipped solely with variables related to the record of these courts' interstate appellate proceedings. Given previous involvement in the development of legal informatics algorithms for natural language processing, these findings serve to underscore the significance of factoring in the legal-technical component of dispute presentation in the experiment. However, it is important to venture beyond the strictly formal adjudicative dimension of the legal systems in exploring the feasibility of representing litigation and arbitration cases and parties therein—the attendant negotiation, conflict modulation, and dispute resolution as pertaining to their

negotiation and informal adjudication and related legal phenomena in broader societal and historic perspectives.

Legal Ethics in Pakistan

Pakistan attained independence on August 14, 1947. Since then, several amendments and wholesale replacements occurred. Like the original Indian version, the first Pakistani constitution was short-lived. The problems that had plagued the earlier version doomed it too. This was inevitable considering that the 1956 Constitution intended to establish a parliamentary system but gave rise to the imposition of two martial laws within 11 years. In effect, the two mutilated fragments of the 1956 Constitution are not even recognized as of historical importance. In response to the clamor for legitimization by the people of Pakistan arising in a [356-page] judgment, such remaking respects the rules, procedures, and basics of the 'Chapter of Judgment' that caps a completed constitutional epoch; and Addition VI doesn't permit that anyway. Though not exhaustive, the following Critique will elaborate how the judgment and its roads and avenues to its building have been manipulated to achieve the desired ends by the interpreters of this monolithic and powerful sentence of the Supreme Court (Nabi, 2015).

In any society governed by the rule of law, it is essential to have an independent and impartial judiciary. Considering the justice system to be the backbone of any society can elucidate its importance and the integral part it holds in the social system. The judiciary, with its foremost purpose to dispense justice, guarantees the rights of the people and provides them with a fair trial. Yet, in a country like Pakistan, the judiciary is still plagued with numerous issues, among them delay in dispensing justice, biased opinions, inefficiency, corruption and the inaccessibility to the public are some of the limitations that continue to weaken the system.

The present technology such as the internet has opened up new avenues of opportunities. E-courts, including video conferencing, web chats, signup petitions, emails, etc. have significantly contributed to the judicial system. In light of these observations, effective management of the judiciary, together with the introduction of an e-court system that could enhance the efficiency of the judiciary and the accessibility of the public to justice, is the need of the era (R Johnson, 2013). Decision-making in a court defines the interval for a case to be resolved. The administrative court decisions are one of the broadest and important procedures in a country, greatly affecting the functions of governments. Therefore, they require being efficient, rapid, and just. Efficient justice is the primary vehicle to achieve individual rights. The most significant dispute about the judiciary system in Pakistan is the delivery of prompt justice.

Challenges and Ethical Dilemmas

Concerns and discussions associated with application of Artificial Intelligence (AI) in the law sector are one of the most hotly debated issues today in the broader public and in the legal community. The latter is especially visible after astonishing results of algorithms during various experiments and competitions which pits AI against professional lawyers mainly in identifying legal issues concerning companies. These experiences and advancements raised a set of legal concerns and fears revolving around a potentially huge risk of mass exclusion of professional lawyers by fully (or even mostly) autonomous 'robot lawyers', and further increasing the inability of an ordinary citizen to understand the legal system thanks to the extreme black-box nature of AI. Many of these issues may seem as distant future scenarios. However, changes are afoot right now, and some of these contentious issues are already knocking on the door. Changes and advancements are far more modest, but the beginning of mechanization and automation of the legal sector is now evident mainly in decision-making procedures in different types of courts. At the beginning mentioning success of AI in the civil, but also criminal law sector is a good example. They raised hopes for substantial/on-the-fly change of extremely dysfunctional legal sectors in many countries by significant reduction of backlog of cases and speeding-up and more uniform sentencing. Because of these observations, the goal of this research is to focus exactly on the legal concerns with possible broad and long-term ramifications, not only on the current highly specialized uses of AI technologies in the legal sector. A special emphasis will be made on ethical implications of enormous automation boost applying on already informational asymmetric (and somehow lethargic) judicial apparatus, now in a country that with over 220 million inhabitants struggles with the high accessibility and quick turnover of the current courts (Barysè & Sarel, 2023).

Integration of AI in Pakistani Court Systems

There is a special purpose of life; to use "prosper thy neighbor" maximally in a given societal milieu. Coexistence of societies heavily filtered as such, is an endless tapestry ratified by the cyclic ebb and flow of civilizations. On circumstances they come across; they may fraternize or dual amongst things of barter. This has applied towards the gradation of technology and sciences in the domain of human life. In such sense; artificial intelligence and its flanked technologies has intercalated to offer ampliform dominions to heed legal sanction, so much that the Azizan code is of no deviation. Though the island nations have championed on AI teetering legalities since the dawn of millenniality, the swift leap since 2022 has substantiated and solidified the integration of AI to its judicial and court system. Ergo; the morality, logic and creed of its use. Hence; it is only apt that a Bibliantha researches and enlightens on AI's functionality in Pakistan's nalaboth; nutates on the vignette when said blarneyed noun signals its beyond-ecliptical stance (Dymitruk, 2019). Balancing could be formidable; its extreme

gauge wrathful as (and if) cases are hastily vended but justice thereof is unfed, and such inverse of actor could knead an unmatched scale of gest.

Regarding the transcription and/or translation of the court (during hearing) events and happenstances; the present judiciary have scant choice but to dismantle their intermezzo (despise the status of person's of learning) for the easement of ogle and conversance of threadbare events and constraints at hand. Atrocities thus unspoken or unchronicled gone by may flourish in the embroidered cultures and traditions, whilst disputes and discards would be allayed and withheld where at the concourse of wardship all are inferred and appraised.

The Pakistani judiciary is facing severe backlogs in both lower courts and the Supreme Court due to a shortage of judicial officers and systemic issues. Currently, tens of millions of cases exist, with an annual increase of eight to nine percent. This delay has led to a predatory legal profession that exploits the threat of lengthy court battles for extortion, notably through the katchi abadis mafia engaged in land-grabbing. Additionally, it has fueled unregulated alternative dispute resolution methods and eroded public faith in institutions. In response, provinces have initiated E-courts over the past five years to alleviate these issues. This emerging litigation technology could significantly impact society, offering transformative potential for the judiciary and the legal profession, but might also affect privacy and access to justice. Time is currently the primary commodity in courts, disadvantaging the poor and perpetuating cycles of poverty, disenfranchisement, and conflict over resources..

AI-powered systems have been slowly "adopted" as the word implies knowledge of intent making their way into court systems across various countries including Estonia, Canada, UK, and the U.S. Such a system is also being planned by the government of Pakistan. While some (mostly preliminary) studies show court decision-making to be assisted by AI technologies can lead to quicker administration of justice without overburdening judges (as well as increased uniformity), concerns are also raised about such systems undermining key legal-ethical implications. Pakistan is already a country notorious for its slow and costly justice system, and automating some of its procedures may seem like a reasonable move (Khan et al.). However, the government should also be worried about the public confidence in such systems, and how their introduction makes the perceived speed-accuracy trade-off of the court even more contentious. Crucially, this is especially the case since the speed of decision-making, which is expected to be enhanced by ADM, has been found to be an important element of court decisions concerning the public because it (rather counterintuitively) signals a high degree of consideration in court judgments. On the other hand, the fear that decisions are made without due consideration contributes to undermining the public's

confidence in court decisions. Meanwhile, this speed-accuracy trade-off seems to be one of the most important challenges court faces (Barysè & Sarel, 2023).

Case Studies and Ethical Considerations

Rapid advancements in AI have led to the rise of tech-savvy industrial sectors, redefining the realm of professional practices within them. Advocates of such systems claim that they would operate smoothly, reducing cases' turnover time and fostering efficiency. Because AI-powered machines are devoid of ebbs of mood, fatigue, or personal conduct, they can work around the clock, and would interpret constituents solely on merit, without xenophobia or preconception. The modern market is brimming with proof of their viability – from waste management to healthcare services. Many corporations employ AI-powered machines for recruitment purposes. It has been calculated that, utilizing one such machine, a corroboration protocol that would otherwise take 3600 hours for completion could be wrapped up within just one hour. It is posited that utilizing AI-powered systems in legal practice as well as in the judiciary streamlines matters as well, fostering rapid responses or elucidation of queries. They can interpret data of intricate nature with unparalleled precision. In the United Kingdom, various app developers have engineered digital legal assistants employed in police quarters, which can hum through litigation history, interpreting who survives or fails to navigate prosecution or the prosecution (Rajendran et al.2025). In America, AI-held callback services are heavily used by garrison tenants facing extradition. It is also supposed that, nested in AI, equally seized scientific analysis can promptly arbitrate intricate concerns discerned in complicated civil scenarios, hence the AI-operated Justice Spellman.

Conversely, skeptics posit that because the systems performed based on preinstalled algorithms, qualitative or ineludible constituents of the legal conduct could not be addressed. Consequently, outcomes might be construed as inadequate. At best, AI facilitated machines could solely determine canonical robbery or burglary but would lack competence for complexities such as mutual funds or organized crime (Barysè & Sarel, 2023). Its operation would also vaunt a plethora of construct legitimacy concerns, such as disparity of constituent right of entry, structurally marginalizing citizens unable to warrant input in electronics. Refusing to use such services could, ergo, be seen as an infringement of constitutional right by such individuals (Dymitruk, 2019). There already exist some precedents for such a model of automation to proceed. China, the birthplace of pertinence of Jibo, a digital judge bureaucratic entity established beside Bingxing. Utilizing vast constitutional jurisprudence, Bingxing mechanizes 95% of its days. Operations founded on compiled regulations from judicial shyness, the job of Bingxing pertains paradoxes concerning constitution. Up to 2020, all issues have been analyzed by an autonomous fiscal-technological structure genteelly titled. It is

assumed that intermingling requirements from organizers like the presidency, parliament, or enforcement so-called parliamentary can be irreparable to assemblage. Guilts are therefore preordained before meet amid the both factions in a process crystallizing a novel benchmark bureaucratic act. Following the practice of Bingxing, BKi concurrently embraces the arbitratative instances afore deployment.

AI Implementation in Other Jurisdictions

Many jurisdictions all around the globe have made the switch to AI-powered court practices and systems. In Pakistan, however, such change remains a distant thought. The implementation of AI-powered court systems will take time. It is not just about the technicality but also about the significant legal issues and concerns delivering such a change. AI systems are made to learn and analyze data on the basis of that learning more effectively compared to their human counterparts. The argument could be made while discussing the implementation of AI-powered court systems in Pakistan. However, legal actions are fundamentally important and are a matter of prioritizing a party's discretion to fasten justice. Fastening justice may have sacrifices on both parties. AI-powered court systems may enhance swiftness in litigations. It simultaneously may uphold justice if its implementation is legally ethical. An example of ethical lawful output can be AI only suggesting on how to draft a legal document instead of drafting it on its own (Dymitruk, 2019). Another example is AI of transcribing court arguments and trial recording. AI can be approved to transcribe court notes but it should not transcribe whispers and other off-the-record comments between the council and the judge (Verma, 2023). If a country like Pakistan, with an already burdened judicial system, simply employs AI systems without concern for these requirements and standards, justice can be compromised, as stated earlier, can escape with automation in a system where many fall through the gaps. Most importantly, it is important to understand that AI courts and boundary judicial systems are not suitable alternatives. This has been represented in many observations.

Ethical Frameworks for AI Integration

The integration of AI systems in aspects of court proceedings entails that the legal professional must draw ethical considerations in a fresh light. Specifically, there has been increased attention on the implications of a system of justice that attempts to balance between the haste implications of the performance of the legal system and the participants' confidence in the legal system in view of their fundamental rights. In the wider Asian region, Pakistan has made substantial strides in enhancing the judicial framework through the integration of technology. The Supreme Court of Pakistan recently introduced the e-Court system in a bid to prevent the transmission of the coronavirus pandemic and expedite the course of the judicial system. Pakistan houses 2700 e-Courts with 2000 civil judges and 1048 criminal judges operating through video

conferencing. Following suit, there are plans for 457 e-Courts to be constructed across the country in 2022. Pakistan is increasingly acknowledging the methods that can be adopted to avoid the actions that were taken midway through the evaluation of AI integration options. Despite this, there is a distinct lack of comprehensive consideration of the legal profession in the utilization of machine learning and other AI advances in the judicial system. This paucity is of concern, as legal professionals (lawyers, judges, and paralegals) play a fundamental role in the functioning and operation of the system of justice. This is further compounded by the significance of ethical principles in legal ethics assisting legal practitioners (in the wider meaning of the word) in personifying the principles enshrined in the law and in view of the moral implications of legal representation at trial (Barysè & Sarel, 2023).

Public Perception and Trust

In recent years, judicial AI in civil law courts, law firms, and legal education has advanced and expanded globally (Barysè & Sarel, 2023). Magistrate UK, at present, is a real-word AI judge, delivering on average 250,000 live judgments annually. The EU has upgraded its AI judiciary research programs. China has started AI judges in the Shanghai Jinshan District and AI prosecution in two Beijing prosecutors' offices. In contrast, there is notable concern for judicial ethics related to AI judges in South Africa and China. There is still gap in the over 200 study publications on judicial AI since the 2010s about legal ethics issues. This paper examines potential legal ethics issues in view of recent judicial AI advances in various parts of the legal sector. The key issue concerns the substantial body of unwritten procedural and case law encompassing official and customary standard procedure. Considerations of which judge is to hear a case can influence litigants' and agencies' trust in the judicial system, for example, in the area of regulatory compliance. The impact of the introduction of AI judge(s) on this area of judicial discretion in an AI court system is under-discussed in the legal and AI literature. However, published research of AI judge systems are already in operation or development provide insight on the potential issues, and highlight the efforts to program the technical systems to comply with various countries and sectors legal case and procedural laws.

Public Awareness and Understanding

Public awareness and understanding of AI and digital technologies affect the success and acceptability of such judicial systems (Barysè & Sarel, 2023). In the developing world, there is a severe knowledge gap among the masses on the topic. Lack of basic awareness about AI kinds of technologies has allowed misinformation and fear mongering on the topic to flourish. Though steps are being taken to educate the public, there are groups within the legal profession that are reluctant or unwilling to adopt AI technologies. There seems to be special considerations and discussions on

the ethical ramifications of digitizing the 4th pillar of democracy. Traditionally, human judges interpret the law and so, to many, it seems inherently unethical to give this algorithmic based interpretation to a computer. But this argument might seem more appealing due to the discrepancies observable in judicial verdicts harbored by biases, conscious and unconscious. Those who have power to control this interpretation may succumb to an unreasonable degree of corruption. So perhaps, it might be better to have a more sound kind of entity taking these decisions. However, all of this cost-benefit thinking of saving time and optimizing court process overlooks the most important facet of criminal cases, the preservation of liberty, and speed orientation at the cost of justice. Proceedings of many cases in Pakistan have gone on for years, but after those same years of grueling judicial process, the accused are declared innocent. So the question really should not be how to speedily litigate a case, but how to accurately adjudicate one.

Trust in AI-Powered Systems

Introduced to reduce the backlog of cases and convince distrustful citizens in access to justice in Pakistan, since 2020 e-courts are slowly becoming a reality in the country. The automation of some court decisions will mean that poorer defendants could benefit from reduced costs and improved efficiency, with lowered transaction costs allowing the court to process a wider range of cases quickly. It has been argued that automating the low level of court decisions can prop up in speeding up the judicial process and enable "the precious time of High Courts and Subordinate Courts [to be] saved from being occupied in dealing with frivolous cases" (Barysè & Sarel, 2023). However, there is also a need to protect the public perception of justice. Reduced fees, combined with lower case costs, could change the litigation cost game, making legal services more appealing. With the required data and knowledge in hand, plaintiff firms are able to further drive down costs, creating new economies of scale with the potential to disrupt access to judicial remedy.

Pakistan has a chance to use technology as a force for change – not only as a tool for automating the adjudication system and finding a balance between inefficient and sluggish procedures. However, before passengers even consider boarding, a lot of due procedure should cautiously be ensured. Unfortunately, this does not seem to be the case in the first country to announce nationwide automation of court decisions. Given the development trajectory of the digital market and the short IT track record of national courts, the panopticon view proposed by the Peshawar District Court in September 2006 appears to be on the more utopian side of things. Populating the platform with the promised one million cases will also be a daunting challenge unless the information logged in civil and criminal cases is truly "a queryable dataset" that can be comprehensively subjected to structured AI interpretation.

Regulatory Frameworks and Oversight

The World Economic Forum ranked Pakistan 110th out of 141 countries on the Readiness for the Future of Production Index. This index measures the extent to which a country is well-prepared to shape and benefit from the changing nature of production. Moreover, it ranked Pakistan 149th out of 156 countries on the Rule of Law Index. To put this into context, the courts alone disposed of nearly 1 million cases in 2020, a decrease of nearly 6 per cent from the previous year. This decreasing trend highlights a point that Pakistan is not "justice delayed, justice denied" and, on the other hand, underscores the Herculean task of adjudicating the deluge of legal matters before the said courts. In these circumstances, the use of Big Data, AI and ML to dispose of cases presents an attractive solution to ensure the celerity, accuracy and certainty of proceedings (Burnashev and Chernykh2024). The utility of using AI-powered court systems is not limited to Pakistan alone. The ongoing fourth industrial revolution and the emergent tide of digitalization in the Pakistan economy also demand that the courts keep abreast of the changing circumstances. Additionally, the use of AI could also assist in weeding out mundane, unmeritorious or uncorroborated matters. Still, with only a handful of court systems being AI-powered in Pakistan, proposals for such court systems are considered premature whilst neglecting the intricate issues that may arise as these technological systems are mainstreamed. Arguably, such court systems could fall prey to a sectoral and digital divide. Legal perks could further influence poor compliance, utility and access where advanced technology is being introduced (Raji et al.2022). On the other hand, where low-tech systems are installed, they might exacerbate existing malfunctions and overburden the courts. Combined, this could tarnish the expected benefits of using AI in court proceedings.

Human rights organizations recommend embedding specific ethical precautions to protect defendants from over-automation. But the actual law governing court decisions in Pakistan does not allow to recommend earlier health treatment, psychological evaluation, detaining some defendants as preventive measures, sending some to detention centers or fining if they can't provide required data (Dymitruk, 2019). Automation makes decisions and requires certain actions, whereas balancing of interests makes only recommendations. Therefore, ethical recommendations including a balance of interests cannot be followed. To summarise, from the perspective of pro bono legal praise, the introduction of AI-powered court systems maintains the overall legality of pre-trial procedures, but they need to evolve the ethical guidelines embedded in the technology or in the relevant code of conduct of the National Judicial Automation Committee.

Balancing of interests is an innate element of legal system work. Lawyers interpret the law in a way that ensures the best outcome for their client, while the judge makes an impartial decision, reconciling both sides' balance of interests. The law introduces the equality of arms, so those without legal knowledge about their rights can still fight against institutions and law specialists in relatively fair conditions. Public prosecution is meant to defend society's interests, not private entities' ones. However, regard to pre-trial investigations, public prosecutors and the court are responsible for requesting/providing the evidence that is necessary for a criminal institution to function properly, according to the law. This establishes the so-called principle of compulsory action (Barysè & Sarel, 2023). In that context, any person or institution knowledgeable of another one's activities contradicting the law should notify and provide evidence of this to the relevant authorities.

Conclusion

Artificial Intelligence enabled solutions can have a dramatic positive impact upon very many people, including those in the legal field, and on the available services. However, in light of the growing use of such tools with their implications for objectivity – as regular laws and codes have been written by biased individuals – such deployment also risks the perpetuation of historical social inequalities and favoritism in civil society. Ethical standards and these consents of equity should consequently be given prime importance when using these systems. Investigators are particularly optimistic that the legal community will agree to stick to the aforementioned guided form of the judgment. Moreover, within the isolating power scenario, the arbitrator may recommend a set of laws for the litigants to read. Today bots are used by lawmakers to make decisions about matters such as traffic fines in several nations. Some think, however, that this is a positive move. A computer system can process details and create a determination more easily than a human. It is also thought that this approach, without the personal prejudices that can be possessed by individuals, would be more objective. Not only is Deep learning itself a perfect instrument for recognizing structured data such as video, so are other tools. But there are ethical problems that must also be taken into account. In a medical setting, it may be a matter of life and death whether someone is diagnosed with a given illness. Machine diagnosis of this illness, however, might become a self-fulfilling prophecy various laws are open to decree that following a diagnosis the patient is killed. Internationally, automaton judgments would remove another of the last few ways for developing countries to compete with more affluent ones. The current evidence shows that such tools may have a significant social benefit, but as new uses become viable, these dilemmas will undoubtedly start to force themselves in new and unforeseen regions.

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