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DIGITAL PATHWAYS TO JUSTICE: LEVERAGING AI AND LEGALTECH FOR THE UNDERPRIVILEGED

***Shreya Chaudhary*[1]**

[1]*University of California, Berkeley*

shreya.ucb@gmail.com[1]

Abstract:
The access to justice has been a common issue across the world, especially in the weaker and developing legal economies whereby the disadvantaged communities are put in economic, geographical, linguistic and institutionally discriminating situations to access legal services. In other countries, especially in rural or poor contexts, people are unable to seek the help of lawyers, legal processes, case-following, or even formal legal institutions, meaning that they lack access to or seek legal redress. It is on this basis that the fast progress of artificial intelligence (AI) and LegalTech is holding new opportunities in enhancing access to justice by automated legal triage, document assembly, online dispute resolution, and AI-assisted legal assistance platforms.
By identifying the ways AI and LegalTech could work as digital access-to-justice solutions to developing legal systems, this paper explores how these technologies can lessen the burden of procedures, enhance legal literacy, and increase service delivery to marginalised populations. The research examines the possibilities as well as the drawbacks of implementing AI-based legal solutions to a setting characterized by low digital literacy rates, infrastructural factors, and institutional inequality through a socio-technical conceptual framework. It establishes some of the main issues with respect to equity, transparency, accountability, and governance, and why LegalTech models created to fit developed legal systems cannot necessarily work when directly imported into jurisdictions like India or other members of the Global South.
This paper presents the argument that, although AI-powered LegalTech has a great potential in terms of democratising access to justice, such tools should be designed in a context-oriented manner, have well-developed governance institutions, and be evaluated in a continuous fashion. The study based on the realities of weaker legal economies is part of growing digital justice ecosystem-related scholarship and provides recommendations to policymakers, courts, and designers interested in implementing fair, accountable, and sustainable AI-driven justice solutions.

Keywords: Artificial Intelligence; LegalTech; Access to Justice; Underprivileged Communities; Digital Justice; Online Dispute Resolution; Algorithmic Fairness; Legal Aid; Socio-Technical Systems.

1. Introduction:

The rule of law and inclusive societies are grounded on access to justice. Theoretically, it means that all people, regardless of their income, geography, language, gender, disability, and social status, should have viable possibilities to enforce rights, solve conflicts, and request a court hearing. As a matter of fact, though, a significant gap in global justice still exists. The poor population is often faced with multiple compounded obstacles, such as prohibitive cost of legal services, procedural complexity, physical distance between courts, low digital literacy, language exclusion, and a lack of awareness of their legal rights [1], [2], [17]. Such barriers are especially strong in weaker legal economies whose institutions of justice are over-worked and under-funded. Although in developed jurisdictions, the studies have shown that most of the civil legal needs of the low- and moderate-income populations are not met, which highlights the structural character of the access-to-justice crisis [16], [46].
To the scope of this paper, the meaning of underprivileged and disadvantaged populations does not refer to a homogeneous group of people, but rather on overlapping groups of people who are faced with systemic problems in accessing formal justice systems. In the Indian context, this can

be: (i) economically disadvantaged people in the rural and urban settings where legal support is unaffordable; (ii) rural people who are geographically out of courts and legal aid institutions; (iii) linguistic minority and people of low literacy who are excluded by the formal legal language; (iv) women especially those in a rural and semi-urban area who may find it socially dependent and gender constraining to seek judicial redress under the law even where they have access to the necessary financial resources; and (v) people with disabilities and the Such a context-specific and intersectional definition of disadvantage explains both the access-to-justice issues of whom this paper aims to respond to, as well as steers clear of an overly broad or abstract understanding of underprivilege whose definition can vary greatly across nations.

These problems are particularly acute in such countries as India that can be considered exemplary of the numerous developing legal systems. As an example, when a villager requires legal help with a land dispute or a domestic violence case he/she can be required to travel long distances to access a district court or legal aid office, go through procedures that are carried out in languages he is not familiar with and depend on informal intermediaries to get basic information. The process through courts can be a veil of mystery, updates on the cases can hardly be accessed and many people cannot even afford effective legal representation. Although the constitution has a promise on the right to access to justice and the judicial system is trying to enhance the transparency (most prominently in Swapnil Tripathi v. Supreme Court of India), the enforced outcome would be an increase in corruption and crime within the country.<|human|>Though the constitution itself guarantees access to justice and the judicial system is trying to increase the transparency (particularly in Swapnil Tripathi v. Supreme Court of India), the imposed effect would be the rise in corruption and crime in the country. The Supreme Court of India (2018), which identified live streaming of court proceedings as one of the ways to improve the access of people to courts - now is the time to begin practically to improve access to justice that is institutionally unequal and restricted [52]. These facts lead not only to a postponement of justice but also to the fact that people give up claims altogether, which strengthens exclusion and invisibility before the law [8], [16].

Meanwhile, the swift progress of information and communication technology, artificial intelligence (AI), and LegalTech have left new opportunities to reevaluate the way justice is delivered. To facilitate the processes, lower costs, and increase access to the legal service, AI-based chatbots, document automation applications, online dispute resolution, virtual hearings, and decision-supported systems are progressively implemented [5], [6], [9]. Theoretically, these tools may help a disadvantaged person to learn the fundamental rights under the law, create documents in native language, follow-up on the case status, or get access to dispute-resolution services without having to physically interact with the courts or lawyers over and over again. Nevertheless, the model of legal tech developed in more developed legal systems like the United Kingdom or the United States tends to presuppose a high level of digital literacy, reliable infrastructure, and trust in the institution- these are not true in such countries as India or Bangladesh. These technologies are prone to being excluded, misused or even fail without contextual adaptation and hence replicate the same inequalities that they are intended to solve [15], [21].

The present paper discusses the potential of AI and LegalTech to serve as digital gateways to justice, provided that they are made to respond to the circumstances of weaker legal economies. The analysis does not talk about technology as a concept, but instead looks at how digital tools can be applied practically to access-to-justice issues that disadvantaged populations experience on a daily basis. In particular, the paper examines: (i) what access-to-justice barriers facing disadvantaged communities look like; (ii) what AI- and LegalTech-based interventions addressing

access-to-justice barriers look like; (iii) what operational, ethical, and equity-related issues arise when the latter technologies are applied to low-resource legal settings; and (iv) what design and governance principles can be used to ensure that digital justice programs are beneficial and not harmful to inequality.

This need to investigate this issue is supported by converging trends. The COVID-19 pandemic has hastened the process of digitising the justice system due to remote hearings, online filings, and hybrid courts, which at the same time revealed both opportunities and deep digital divides [10]. The rural communities, linguistic minority groups, refugees, and communities of low income, who are already disproportionately overrepresented in the undermet needs of the legal field, are also the least capable of negotiating traditional, lawyer-based justice systems [38], [50]. Additionally, AI-powered systems provide efficiency benefits, the effects of which must not be underestimated, but they also provoke acute questions about the possibility of algorithmic bias, transparency, responsibility, and cultural exclusion in case equity is not built into the system design [22], [43], [48].

Based on this, this paper takes a socio-technical approach, that is, digital justice as a problem of technological implementation, but as a more general problem of institutional organization and moral governance. Digital pathways to justice are seen as a series of design, implementation, uptake and justice outcomes, and not as the mere introduction of tools. Technology will only play a significant role to access to justice when it is not costly, easily comprehended, linguistically accommodative, cultural competent and woven into the current institutions of justice [23], [25]. The paper continues by discussing the existing AI and LegalTech solutions pertinent to access to justice, analysis of representative models of implementation and limitations, and a reflection on how the said technologies can be reconfigured to fit weaker legal economies with India serving as a point of reference. It ends up with policy-relevant and implementation-oriented implications that could reinstate equitable, accountable and scalable digital justice programs.

2. Literature Review:

Digital justice and LegalTech scholarship has grown tremendously in the last ten years, and the role of artificial intelligence (AI) in helping to access a long-standing access-to-justice gap affecting underprivileged segments of the population has received more and more attention. First literature focused on Online Dispute Resolution (ODR) as an intervention that can reduce the costs of the process and raise the involvement of low-income litigants. Empirical research showed that ODR systems saved transaction costs and efficiency in cases resolution especially in large volume issues, like payment disputes and small civil claims, whereby conventional litigation is not always cost-effective to disadvantaged parties [6]. Such results are particularly applicable to legal systems with a backlog where delay as a procedural matter is itself a deterrent to justice.

Coupled with the academic advancements, courts have been more and more involved in the technological field as a way of enhancing access and transparency. In India, the Supreme Court has acknowledged the use of technology in the delivery of justice in such a way that a series of rulings have been made regarding procedural access without considering AI adjudication. In State of Maharashtra v. Dr. Praful B. Desai(2003), the Court did not object to the use of video-conferencing to capture evidence, but recognized that technology may be used to increase the efficiency of the process without undermining fairness. In Swapnil Tripathi v. more recently. The Court decided that live streaming of court proceedings is a constitutional tool to promote transparency, accountability and access of court proceedings by the masses (Supreme Court of India, 2018) [52]. These cases do not feature AI systems, but they are an indication of judicial

receptivity to technology-mediated justice, and an institutional point of view that is significant to the modern LegalTech projects.

This has been followed by studies on AI-based decision-support and triage systems that can improve the legal processes by improving their consistency and efficiency. According to scholars, machine-learning tools can be used to help identify legal matters, rank cases, and direct litigants through procedural needs. Simultaneously, the issues of algorithmic bias, lack of transparency, and low context sensitivity have been mentioned severally, especially in cases where these systems are used on vulnerable groups where social and economic conditions do not effectively translate into formal legal data [7]. Absent conscious protection, automated decision systems have the potential to recreate the institutional biases present in the first place instead of reducing them.

Empirical studies brought about by the Global South provide insights into the usefulness of mobile-based legal assistance applications and legal information support tools with AI in rural and low-income communities. Research suggests that mobile-accessible legal aid can help a great deal to increase legal awareness and intake of justice institutions at an earlier stage, particularly in areas where lawyers and legal aid offices are geographically dispersed or inaccessible [8]. These instruments have been especially effective in assisting people to appreciate the fundamental rights as pertains to wages, land ownership, and employment rights. Nevertheless, researchers are always required to observe that language heterogeneity, low levels of digital literacy and disproportionate access to infrastructure are all critical bottlenecks to scalability.

Document-assembly systems and automated form-generation systems have also become the subject of attention because they can facilitate the self-representation of litigants. Empirical studies indicate that automation can save a lot of money and error of procedure in the routine issues like employment disputes, welfare claims and complaints related to services [9]. These technologies are particularly pertinent to litigants in legal systems with weaker legal economies whose claims may be of low value but have a high impact such as claims of unpaid wages, termination of Class IV employment or refusal of subsistence benefits, where the cost of legal representation can be greater than the economic value of the claim, and therefore prevent such claims in the justice system.

The other significant avenue of the literature is the digitisation of courts, as well as proliferation of remote hearings. The 2020 studies revealed that virtual court models enhanced access to geographically dispersed and mobility-restricted populations such as rural residents and daily-wage workers that may encounter large opportunity costs when visiting a physical court hearing [10]. Meanwhile, researchers warn that the disparities in technological infrastructure and unequal digital capability may increase inequality in case remote justice systems are established without the necessary support infrastructure, including digital assistance and offline backup.

More current literature studies AI-based legal triage systems in legal aid and administrative justice systems. Such systems use machine-learned classifiers to evaluate the features of cases and rank things according to urgency and vulnerability. It has been shown that these tools have the potential to enhance the way limited legal aid funding is distributed by targeting high-need cases early on [11]. The understanding is especially relevant in a place like India where there is no formal, technology-enabled system that would enable prioritisation of urgency in low-income cases. In reality, things can be usually rushed through only when raised by senior or high-profile lawyers-a privilege that can hardly be enjoyed by low-end litigants. This means that, even when cases are related to unpaid wages or the loss of low-income jobs even when it implies the loss of the family livelihood, the cases will not be expedited in jam-packed court lists.

A further implication of the comparative justice research is that AI can enhance administrative justice by ensuring that cases are managed more efficiently, making processes of handling evidence easier, and making the process more transparent- which is of particular benefit to those populations marginalised by bureaucracy [12]. As an illustration, the patterns of institutional neglect can be uncovered through automated systems that will be able to raise red flags whenever a case related to welfare or employment is taking unusually long. Scholars however warn that in the absence of accountability or human intervention when such systems are in operation, they can also reinforce injustice instead of relieving it.

Research on digital legal empowerment programs focuses on the use of chatbots and guided-interview systems in promoting procedural and rights awareness among low-income users [13]. Such tools could help the users to write complaints or applications without involving the lawyers directly. However, the literature cautions that over-simplification and misinformation is a serious threat when AI generated outputs are taken to be an authority with no human validation. Likewise, studies on mobile ODR and SMS-powered legal information systems have shown that they are effective in a low-resource environment, as far as smartphone penetration is weak, due to exploiting the simplest mobile infrastructure [14].

The study of cross-national governance points out that the efficacy of AI-based systems of law relies on effective regulatory and institutional frameworks [15]. The best way to explain this concern is based on real-life examples: in a situation where automated eligibility checks or prioritisation systems are run without transparency or any way of appealing, mistakes or biased results can be left unquestioned, which would lead to greater disadvantaged users using the system, who do not have the resources to challenge the decision. Systems that include explainability, human inspection, and institutional accountability, in turn, have a higher probability to avoid automation being a new source of exclusion.

Another aspect that is increasingly recognized in the literature as a determinant to the ethical application of AI is the role of state investment and institutional capacity. In other countries like India, it has been observed that although policy language on AI in the governing sector has widened, substantial investment on AI-driven legal assistance and court management has not been a major concern. The experts propose that fair and ethical AI solutions will involve more than just technological innovation but they will entail investments such as capital in multidisciplinary knowledge, such as legal experts who will be trained to decipher AI outputs and technical professionals who will be able to audit algorithmic systems [31]. Without such an investment, ethical commitments will remain an idealistic but not a functioning concept.

Collectively, the literature represents a wide agreement that AI and LegalTech are capable of greatly improving access to justice in terms of cost reduction, improved procedures, and decentralised service delivery. Meanwhile, scholars always warn that those technologies should be incorporated into the systems of inclusive design, embedded in the digital infrastructure, and regulated by effective ethical and regulatory frameworks. It is on this basis that this body of scholarship forms the basis of analyzing how the digital justice models can be structured in a manner that they will operate in a fair and efficient way in the context of weaker legal economies.

3. Conceptual Framework:

In the present paper, a multi-layered conceptual framework is followed, which will help analyze the connection between artificial intelligence (AI) and LegalTech in offering digital pathways to justice to disadvantaged populations. Instead of viewing access to justice as a technical mere consequence, the framework approaches the matter conceptually as a socio-technical process that

is influenced by legal systems, technological design, governance policy, and the experience of low-income and marginalised users. This is informed by the fact that digital access to justice is not necessarily generated by the use of technology, it depends on the development of systems, their deployment, management, and utilization by the subjects to the systems [16].

The framework incorporates three pillars, which are interconnected; (i) socio-legal contextualisation, (ii) technological capability assessment, and (iii) equity-based evaluation. These pillars allow, together, the systematic examination of the interaction of AI-powered tools with legal organizations and social reality to create (or not) meaningful results of justice.

Socio-Legal Contextualisation

The first pillar is concerned with the socio-legal factors that influence the access to justice in under-resourced locations. It explores institutional obstacles to disadvantaged populations such as economic, geographic, linguistic, procedural, and poor institutional environments. The current literature reinforces the fact that technological interventions can only be successful within the local legal culture, power structures and community realities or where they are not foisted as abstract solutions [17].

This pillar aids in finding gaps in justice that are the least resistant to AI and LegalTech applications. As an illustration, the barriers that rural and low-income litigants usually encounter include information asymmetry and documentation requirements and bureaucratic lag. The individual interested in commencing wage claim or employment grievance may not be aware of what court has jurisdiction, what records will be needed and how to check the progress of the procedure. As a result of socio-legal contextualisation, the technological solutions are guided by concrete pain points and not generic efficiency goals.

The assessment is based on the capability to adopt technological innovations to address external challenges and opportunities.

Technological Capability Assessment

The second pillar assesses the functional capabilities of AI and LegalTech solutions, such as decision-support algorithms, document automation systems, online dispute resolution (ODR) systems, and legal chatbots. Previous research highlights that these tools should be evaluated based on efficiency, but also on accuracy, reliability, clarifiable, as well as equitability particularly when they are used with vulnerable populations [18].

As an example, we can discuss a low-income employee that works in a countryside and has not received pay over many months. The person might also provide via a digital jurist system where in a mobile interface, he/she would key in some basic details such as the type of employment, the duration of the employment, the non-payment period, and place of employment. A system based on AI could then categorize the problem, produce a draft complaint in the relevant legal format and local language, find the relevant forum, and mark the case as urgent based on the dependency on livelihood. Procedural advice and updates could also be offered within the platform without necessarily visiting courts and legal aid offices physically.

This pillar is based on established standards of AI-for-law evaluation, such as the transparency of decision logic, human-in-the-loop monitoring, and low-bandwidth or mobile-only operation [19]. It focuses on the ability of technological tools to work effectively within the realistic conditions, as opposed to idealised conditions.

Equity-Based Evaluation

The third pillar focuses on equity, digital inclusion and human-centred design of AI. Empirical studies have repeatedly indicated that marginalised users have an usability and access barrier that

is not considered by mainstream LegalTech systems [20]. Consequently, this pillar preempts design guidelines, including multilingual interfaces, mobile-first design, low bandwidth compatibility, culturally contextual communication, and step-by-step procedural guidance [21].
The criteria of risk assessment, among which are algorithmic bias, non-random exclusion, privacy vulnerabilities, and automation-driven opacity are also included in this pillar. Such risks are disproportionately applicable to poor users who might not have the ability to contest wrongful output or opaque decisions [22]. Indicatively, automated eligibility check, which bases on partial or biased information, can deprioritise informal employment cases in a faulty manner and hence leaving behind exactly those people who require immediate legal pressure the most.

Digital Pathways Model Conceptual.

A combination of these three pillars ends up in a Conceptual Digital Pathways Model which facilitates a systemic study of the translation of legal needs into outcome of justice by using technology as a mediating factor. The model is based on the socio-technical systems theory and public-interest technology research and focuses on the multi-stakeholder alignment between the courts, legal aid providers, technologists, civil society organisations and the end-users [23]. It also has adaptive feedback loops to consider changing user experience and system performance where it is acknowledged that constant iteration and participatory co-design are fundamental in low-resource environments [24].

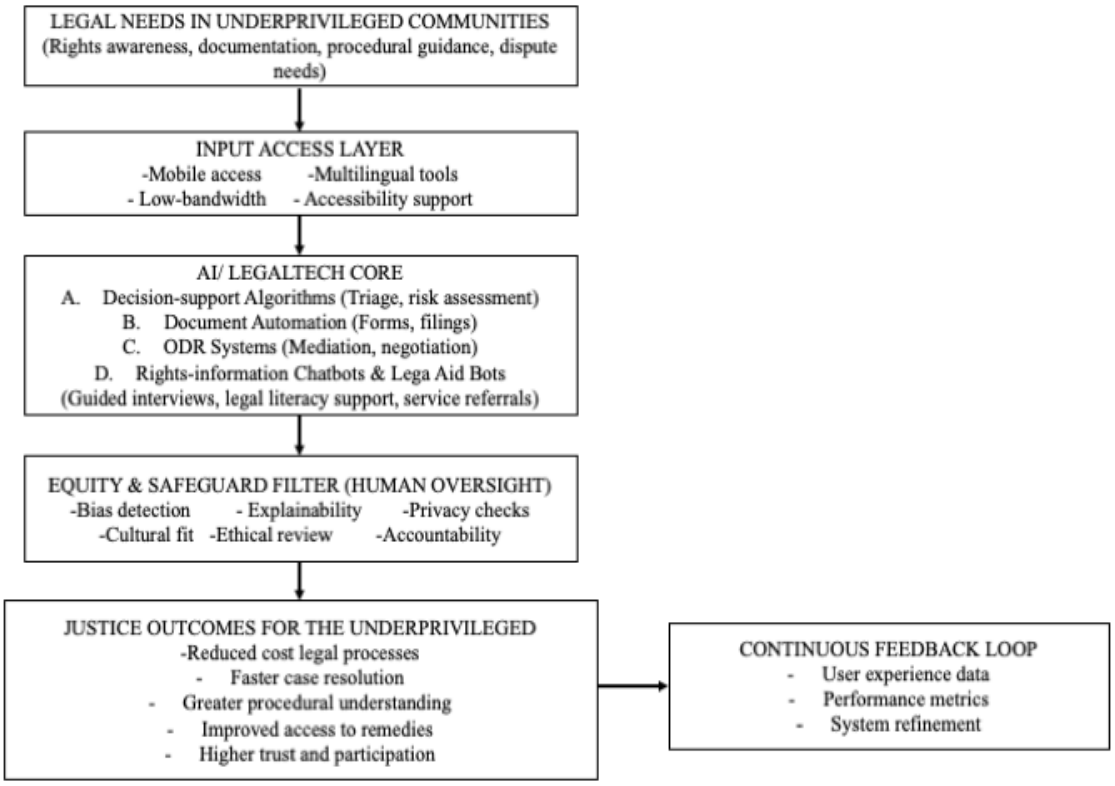

Figure 1. Conceptual Digital Pathways to Justice Model

Figure 1 presents the multi-level socio-technical framework according to which AI and LegalTech technology can increase the access of disadvantaged groups to justice. The first layer in the model is the Input Layer that takes the legal requirements, like rights awareness, documentation, procedural advice, and dispute resolution channels. This is backed up with an Access Layer which

puts emphasis on mobile accessibility, multilingual support, low bandwidth capability, and inclusive interface design.

The hub of the model is the AI-Enabled LegalTech Layer, which is a collection of decision-support algorithms, automated document assembly systems, the system of online dispute resolutions, and chatbots that recognize rights and help users navigate the legal processes and legal literacy. An Equity and Safeguards Layer is around it where human guardianship, bias detection, privacy, cultural sensitivity, and ethical accountability are also integrated.

Justice Outcomes of the model include lowering legal expenditures, streamlining of legal proceedings, strengthening of the procedural comprehension, augmented availability of remedies, and augmented belief of the justice institutions by the deprived groups. Continuous Feedback Loop allows the further development of the system in accordance with the user experience and performance data and contributes to the further adaptability and responsiveness.

This paradigm enables the AI and LegalTech to be viewed not as individual tools, but rather as the part of the larger justice system, where its performance is determined by governance architecture, infrastructural preparedness, institutional accountability, and user empowerment [25]. The model in the following section is used to consider the application to particular AI-enabled technologies, including automated triage systems, mobile ODR systems, and legal services platforms, to illustrate how digital access to justice might be put into practice in weaker legal economies.

4. Applications of AI and LegalTech for Underprivileged Communities

The applied use of artificial intelligence (AI) and LegalTech in justice system has created an extensive array of applications that had direct consequences on underprivileged and marginalised groups. These technologies have not worked as abstract innovations rather they have been used to apply to particular points of the justice process where disadvantaged users bring the most obstacles into play such as case identification, prioritisation, dispute resolution, and legal awareness.

Automated legal triage is among the most effective uses of machine-learning models, wherein machine-learning algorithms can be used to determine the type and priority of a legal problem and refer a user to relevant resources. The empirical studies suggest that the use of AI-based triage systems can considerably enhance the timing and accuracy of prioritising the cases among the users with low incomes to allow legal aid organisations to distribute limited resources more efficiently [26]. As an illustration, a worker on daily-wages and who planned to sue the employer due to failure to receive the due wages might input simple data; job nature, number of days non-remunerated, number of family dependents, and place, in a computerized interface. A system with AI capabilities would classify the claim, refer the case to the right forum, and classify the case as urgent based on the risk to livelihood, which is a gap that currently exists in many jurisdictions where the notion of urgency is based on the cost of legal representation, rather than social-economic vulnerability.

Another important type of application is document automation tools, especially those of routine but high-impact legal issues. Studies indicate that automated document generation has minimized filing mistakes and boosted compliance in procedures where eviction defence, welfare benefits, employment dispute cases, and immigration applications are to be approved [27]. These tools in particular are applicable to self-represented litigants in weaker legal economies litigants with low-value claims, including unpaid salaries, termination of Class IV employment, or government benefits denial, where the expense of legal representation may easily surpass the amount of the claim. Document automation eliminates procedural exclusion, which would otherwise prevent

such claims to be put into the justice system by leading users through structured and language-accessible forms.

Another important trend is the growth of Online Dispute Resolution (ODR) systems that have been modified to operate in low-resource settings. Research has shown that streamlined mobile-based ODR interfaces can lessen the procedural burdens of disadvantaged litigants by allowing asynchronous communication tools, structured negotiation tools, and stepwise guidance to increase the level of resolution over traditional court proceedings [28]. To illustrate, small payment claims or grievances during services can be handled without numerous visits to the court, which is unfairly favorable to rural users and informal workers who miss a more daily income because of attending a hearing.

There has also been the emergence of Hybrid LegalTech models, which are a combination of AI based interfaces and limited human legal support. In others, the preliminary information regarding law and procedural advice are given by chatbots, and complex cases are referred to human lawyers. The systems have been found to enhance legal literacy and user confidence especially among the rural and mobility-constrained users due to their reliance on face-to-face meetings and maintaining access to human judgment where they are required [29].

The argument about the AI assisting the work of the public defenders and legal aid lawyers should be contextually qualified. Although AI-enhanced AI-powered tools like natural language processing (NLP) to summarise case files, find precedents, and draft routine motions have been discussed in jurisdictions with sufficient resources, these tools are still inaccessible in countries with inadequately underfunded and technologically inefficient legal aid and public defence systems. Within such contexts, AI support is better placed as an institutional augmentation, as introduced, than a broad practice. Such tools have the potential to streamline administrative work, and enable legal aid lawyers to spend more time on client counselling which is in many cases the least reachable element of legal aid to the poor [30].

Pilots of AI-based decision-support systems have also appeared in the context of administrative justice and specifically in the welfare and benefits administration. To illustrate, automated systems have been utilized in the United States to help in screening asylum applications using country-of-origin information and risk factors, whereas some legal aid agencies have used electronic screening to determine eligibility to services based on income. Even though these examples are of different extent and level of maturity, the current research indicates that such systems can promote consistency and efficiency provided that they are supported with efficient human control and appeal processes [31]. In the absence of these protective measures, automated decisions have a high likelihood of locking out the very people who need protection the most.

Legal empowerment systems based on the mobile phone have been found to be exceptionally revolutionary in low-income and underdeveloped environments. SMS-based and WhatsApp-based or voice-based platforms providing legal information and referrals allow users with low literacy or smartphone coverage to access them [32]. Asia and African empirical work proves that these tools can gain rights awareness and decrease the delay in engaging the rule of law, particularly with women, migrant workers, and informal labourers who have compounded impediments to legal representation [33].

A highly relevant and very urgent AI application is systemic discrimination and institutional bias, which are detected in justice systems. The application of predictive analytics to court cases, bail determinations, and administrative cases has shown patterns of inequality, which affect unprivileged groups disproportionately [34]. These analyses would equip policy makers and

institutions with facts so that they can reformulate processes that support inequality. Simultaneously, legal access has also been mapped on a community scale with geospatial analytics and machine-learning methods to establish a justice desert in which legal services in practice do not exist [35]. As an example, the case filing and access to legal aid spatial analysis has made it possible to invest in mobile legal clinic and e-outreach programs in previously overlooked rural areas.

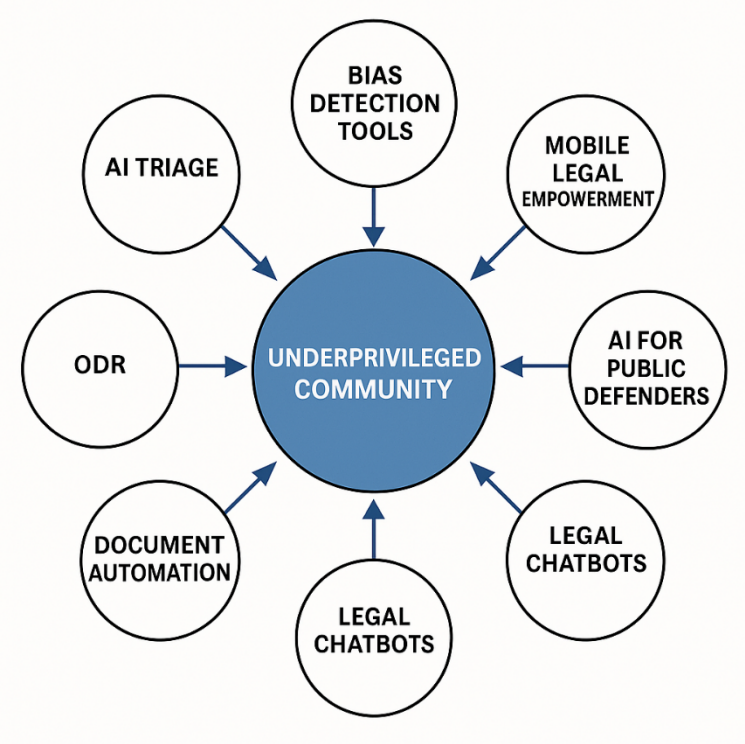

Figure 2. Justice Ecosystem Model

The application of AI and LegalTech in justice can be visualized in Figure 2 as the trend in which these applications operate within a larger justice ecosystem and reveal how AI and LegalTech are justice multipliers, and not standalone instruments. The model emphasizes how automated triage, document generation, dispute resolution, legal empowerment platforms, and analytical tools all help to lessen the obstacles, streamline operations, reach wider, and enhance procedural fairness. Simultaneously, the figure highlights the idea that the success of such systems lies in their context-sensitive design, inclusion, institutional governance, and constant assessment to be made sure that the technological benefits are accrued by people that need them most.

5. Challenges and Limitations:

Although the potential of artificial intelligence (AI) and LegalTech is enormous, their use in low-resource and underprivileged settings has considerable limitations. Among the most long-reported issues is the concept of algorithmic bias, which is caused by training data that emulates the existing structural disparities. Experimental studies reveal that AI systems can work well at a large scale but achieve systematically worse results in low-income users, minority groups, or even those in informal jobs, which casts severe doubts of impartiality and responsibility [36], [37].

An example of such risk in practice is the automated case-prioritisation systems. As an example, an AI model that has been mainly trained on formal employment data might rank wage claims by informal or contract workers less highly because of insufficient documentation, even though wage

claims by informal or contract workers are an immediate threat to their livelihood. Without proper design, the system would propagate the institutional blind spots that already place marginalised communities at a disadvantage, and would be tantamount to automating exclusion instead of reducing it.

The other significant barrier is the digital divide which includes unequal access to the internet, access to devices, digital literacy, and lingo inclusion. Such disparities are particularly high with rural populations, older users and low income households [38], [22]. As an example, a LegalTech solution that demands constant internet connectivity, proficiency in the English language, and knowledge of online forms can automatically disqualify exactly those users they are supposed to support. LegalTech initiatives will impose a risk of increasing existing inequalities instead of minimizing them without specifically designed strategies to include people, such as mobile-first design and multilingual interface, as well as offline functionality.

The issues of transparency and explainability also make the implementation of AI in justice systems even more problematic. Most sophisticated AI systems, especially deep learning-based systems, can be used as black boxes and, thus, the method through which they come up with a decision or recommendation is not easily understood by users, lawyers, or judges [41]. This is a particularly problematic form of opaqueness when it comes to administration or even quasi-judging. Considering an example where an AI-aided welfare eligibility system suggests rejecting a benefits application, but does not give any intelligible reasons, an impacted individual cannot provide any meaning to appeal the result, compromising procedural fairness and due process.

The issues of data privacy and data security are closely connected with the transparency issues. The personal information that is stored in legal datasets is usually very sensitive and may include financial records, migration status, health conditions and family information. Research shows that poor users, including migrants, refugees and informal workers, are more vulnerable when their data are subjected to uncontrolled systems or become targets of surveillance technologies [40]. Under these circumstances, people might be scared of how their data can be misused, preventing them even using digital forms of justice.

Barriers to adoption are also in the form of institutional and governance constraints. Most jurisdiction systems do not have extensive regulatory frameworks that govern the deployment of AI in justice delivery and thus there is no certainty of what standards, liability, and ethical boundaries should be [41]. Courts and law service providers usually work in a sense of lack of clear guidelines on accountability mechanisms or control requirements. Meanwhile, legal aid organizations often have extreme resource constraints, such as lack of technical knowledge, financial means, and information technology infrastructure, making it difficult to sustain implementation of even solutions to understandably positive LegalTech solutions [42].

Another threat that is observed in the literature is the concept of over-automation, where technology tools are used to substitute the human judgment instead of assisting it. Both empirical and theoretical research warns that overuse of automated systems may lessen empathy, contextual empathies, and discretional flexibility - which is especially sought after when vulnerable groups of people are at risk, and they are experiencing intersecting social and economic challenges [25]. Indicatively, standardised electronic intake forms might miss capturing complicated personal situations, which were unfavourable to those whose cases were not predetermined [44].

Outside the concerns of technology and regulation, institutional culture and judicial preparedness is a pressing but minimally scrutinized constraint to the implementation of digital justice programs. Digital infrastructure might in places where it is explicitly present but the judicial officers are

opposed to the use of technology, the practical implementation can be greatly limited by the opposition of the judicial officers. In India, e-filing is in place in High Courts, and judges can access digital databases of case-law. However, in practical use, the day-to-day operation of the courts still heavily depends on the physical paper books and printed verdicts, which is more of a procedural habit than having no infrastructures in place.

Even after the ruling of the Supreme Court in Swopnil Tripathi v. Judicial adoption of video hearings and other digital tools has been disproportionate [52], although the Supreme Court of India (2018) states that it is a constitutional mechanism that can contribute to transparency, accountability, and access to justice by the populace [60]. Although the judgment took the form of a straightforward normative commitment to technological openness, institutional unwillingness and capacity-building has influenced its implementation. Numerous senior judges who tend to hold decision making roles in the judicial system have shown reluctance to get immersed into digital systems or even undergo organized technological trainings. Consequently, even properly designed LegalTech and AI-powered systems can and will end up being underutilised in the event that they are not adopted alongside the technological offerings at the institutional level. This institutional opposition has significant implications. The most advanced AI and LegalTech platforms cannot produce significant effects when critical stakeholders are not interested or ready to incorporate them into the system of judicial operations. Since judges and court officials will continue to be the key actors in the delivery of justice, their unwillingness to embrace digital tools will present real bottlenecks which cannot be overcome by technology only.

Lastly, the challenge of sustainable scaling is noted in LegalTech pilot projects studies. The systems that are not constantly updated, modified locally, and informed through user feedback tend to lose their relevance as time goes by, especially in the dynamic legal and social settings [46]. Even the best-designed platforms can be forgotten or not properly used without a prolonged institutional commitment, participatory design, and continuous refinement [39].

Collectively, these issues highlight the need to introduce AI and LegalTech in a system where equity, transparency, human control, and discrimination design are given high importance. To seal justice gaps, technological innovation is not enough. Effective change should be accompanied by simultaneous investment in governance systems, institutional change, capacity development, and judicial education. Within the setting of places like India, it indicates that the lawmakers and judicial administrators play a crucial role in enforcing technological competence, motivating its adoption, and ensuring that the current digital infrastructure is not only present, but in fact and purposefully implemented. Such coordinated intervention is the only way that AI and LegalTech can realize their potential of bringing justice to societies that are underprivileged instead of enhancing current inequalities.

Systemic Gaps in Digital Justice and Policy-Oriented Recommendations:

Although there have been considerable improvements in artificial intelligence (AI) and LegalTech, there are still great structural and institutional gaps to overcome to help underprivileged communities gain more access to justice. The lack of evidence on long-term outcomes on justice is one of the most nagging issues. Majority of current deployments are concerned about the short-term measures of efficiency, e.g., quicker case processing or lower administrative expenses, without sufficient evaluation of whether digital interventions lead to the ultimate legal empowerment, procedural inequality decrease, or enhanced trust in justice institutions [46].

Policy implication: Longitudinal assessment of the LegalTech initiatives should be the requirement of courts and other legal institutions, aimed not at the adoption rates but at the long-

term effects on the vulnerable users. The policymakers can require an outcome-based audits to determine whether digital tools make a real impact on access to remedies and institutional accountability in the long term.

The second essential gap is related to the linguistic and cultural marginalization of AI-based justice. Most of the current LegalTech solutions have been conditioned to major languages and legal extensive language, which makes them unusable by individuals who use other regional languages and dialects, as well as culturally specific ways of speaking [47]. This restriction is overrepresented in rural populations, indigenous people, and informal workers who have poor legal representation in available datasets.

Some **policy implication**: Multilingual and culturally adaptive AI systems should be invested in by government and judicial administrators, community co-designed, and local language datasets created. The developers of technologies should work in cooperation with legal assistance organisations and community organisations to make sure that the digital tools consider not only abstract legal formalities but also language and cultural realities of targeted users.

The third systemic issue is a poor ethical and regulatory control over the use of AI systems in the institutions of justice. Even though AI tools are becoming more and more a part of the legal aid screening and administrative decision-making and court processes, regulatory standards regarding transparency, explainability, and accountability are still in early stages of development [48]. Without proper protections, automated systems can be used as a means to embed bias and lose the due process, especially when the person is not able to afford to appeal against the algorithms.

Policy implication: Lawmakers and courts need to develop enforceable ethical guidelines that regulate the use of AI in justice-related areas, such as the requirement to conduct an algorithmic audit, explainability level and the need to have human controls. Innovations can be tested using regulatory sandboxes and models of public-interest technology and be accountable to vulnerable populations.

The other urgent issue is the incongruity of the AI systems with human justice agents. In the existing applications, automation is commonly presented as the alternative to human judgment instead of its complement. They are especially problematic in legal aid systems, where contextual awareness, empathy, and discretion play a key role in the work with vulnerable clients [49], [54].

Policy implication Courts and legal aid institutions must focus on hybrid human-AI models, where the AI assists and does not substitute lawyers, paralegals, and community justice workers. The training programs must be created to help legal professionals be able to critically interact with AI outputs, rectify mistakes and to incorporate technological help in ethical legal practice.

Lastly, there is the issue of infrastructure inequality as a pillar constraint. Strengths In the absence of uniform internet connectivity, digital devices, or technological literacy many communities do not interact with even a well-designed LegalTech system [50]. Digital justice efforts will fail to reach those who are already in a position to utilize technology without consideration of these structural conditions.

Policy implication: Strategies of digital justice should be in line with overall digital inclusion policies, such as investment in low-bandwidth platforms, offline-capable systems, and mobile-first technologies. The access to digital infrastructure of justice should be a public good in the perspective of governments and courts, especially in remote and socioeconomically disadvantaged areas.

Combining these issues, it is important to emphasize that making AI and LegalTech a better access to justice is not a technical effort, but a shared institutional one. Judges, technologists,

policymakers, lawyers and the communities that are affected should work together to make sure that the digital systems of justice are fair, open and sensitive to lived realities. By filling these systemic gaps, using a planned reform, AI-powered justice systems can cease being experimental pilots and make their contribution to the inclusive and sustainable delivery of justice.

6. Conclusion:

LegalTech and AI can serve as a fundamental means of redefining access to justice since it can address the long-established structural issues of the poor groups. Applications built with neural networks, including automated legal triage, document generation, mobile-based legal empowerment tools, and online dispute resolution, can alleviate procedural load, increase legal literacy, and improve access to remedies, especially in the less powerful legal economies where formal justice systems are still out of reach to much of the populace as is illustrated all throughout this paper. Provided they are responsibly invented, such technologies can also be practical facilitants of justice in addition to the abstract innovations.

Meanwhile, it becomes evident in the analysis that technological potential is not an automatic conversion into fair results. The issues related to the fairness and due process: such persistent challenges as algorithmic bias, digital exclusion, lack of transparency in automated decision making, the absence of regulatory control and the dangers of over-automation are posing serious threats to fairness and due process should they be ignored [51]. These risks are exacerbated in other contexts, such as India, by institutional factors, such as the lack of adequate legal aid systems and the unwillingness of the judiciary to embrace and utilize available digital infrastructure. In jurisdictions with even those courts that have an e-filing system, digital databases and a virtual hearing option, disproportionate adoption by judicial actors remains a challenge to the practical effect of LegalTech innovations.

This paper has suggested that justice gap needs to be addressed by considering AI and LegalTech as part of a larger justice ecosystem instead of isolated solutions. The conceptual model proposed emphasises that efficient digital pathways to justice have to exist within the frameworks that emphasise the protection of equity, the presence of multilingual access, compatibility with low-bandwidth networks, the presence of human supervision and adaptive feedback. More importantly, the adoption of the technology has to be coupled with institutional change, capacity development and policy intervention. The needle role should be played by lawmakers and judges administering, and directing the mandate of technological training, prescribing ethical standards of governance, and mobilizing the digital justice infrastructure to be used in practice and not in form.

In the end, it is not innovation that will bring digital justice, but concerted effort by judicial courts, legal practitioners, policymakers, technologists and communities that will bring it about. AI and LegalTech will no longer be limited to the experimentation phase when rooted in lived realities, anchored on inclusive governance, and oriented towards the needs of the most vulnerable, and will contribute significantly to enhancing access to justice and also the underlying principles of fairness, accountability, and the rule of law [52].

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