e-Justice

Digital transformation to close the justice gap
The United Nations Development Programme (UNDP) is the leading United Nations organization fighting to end the injustice of poverty, inequality, and climate change. Working with our broad network of experts and partners in 170 countries, we help nations to build integrated, lasting solutions for people and planet.

Learn more at undp.org or follow at @UNDP.

Disclaimer
The views expressed in this publication are those of the author(s) and do not necessarily represent those of the United Nations, including UNDP, or the UN Member States.

Copyright ©UNDP 2022. All rights reserved.
One United Nations Plaza, NEW YORK, NY 10017, USA

Copy Editing: Eva Allen
Design and Layout: LS graphic design
# Table of Contents

Acknowledgements.................................................................................................................. 4  
Foreword ...................................................................................................................................... 5  
Abbreviations/Accronyms ........................................................................................................... 6  
Structure of This Paper.............................................................................................................. 6  

## SECTION ONE

Justice and Technology in UNDP .................................................................................................. 8  
e-Justice........................................................................................................................................ 9  
The Digital Divide .......................................................................................................................... 10  
Digit(al)ization ............................................................................................................................... 11  
Assessing e-Justice Projects ....................................................................................................... 11  
The Potential of e-Justice ............................................................................................................ 12  
  Leave No One Behind .................................................................................................................. 12  
  Human Rights Protections .......................................................................................................... 12  
  Maintaining Public Services ....................................................................................................... 13  
  Accountability and Anti-Corruption ......................................................................................... 14  
  Data and User Needs .................................................................................................................. 14  
The Risks of e-Justice ................................................................................................................... 15  
  Leave No One Behind ................................................................................................................ 15  
  Conflating Quality with Efficiency ........................................................................................... 16  
  Automating Bias and Mistakes and Eliminating Empathy ......................................................... 16  
  Unanticipated Uses .................................................................................................................... 17  
Balancing Risks and Opportunities ............................................................................................. 17  
e-Justice as a Strategic Development Tool .................................................................................. 19  
  UNDP Strategic Plan 2022-2025 ............................................................................................... 19  
  People-Centred Justice and Inter-Agency Collaboration .......................................................... 20  
  UNDP’s Digital Strategy and the Chief Digital Office ............................................................... 20  
  UNDP’s Global Programme on Rule of Law and Human Rights .............................................. 21  
Procurement .................................................................................................................................. 23  

## SECTION TWO

Specific Technologies ..................................................................................................................... 26  
  Artificial Intelligence and Machine Learning ............................................................................ 26  
  Digital Case Management ......................................................................................................... 30  
  Online Dispute Resolution ....................................................................................................... 37  
  Apps and Individual User Tools ................................................................................................. 38  
  System-Wide Data Collection (Databases and Blockchain) .................................................... 42  

## SECTION THREE

Global Map of e-Justice Initiatives ............................................................................................... 46  
Country Office Toolkit ................................................................................................................... 47  
Future Directions .......................................................................................................................... 47  
  Actions for UNDP Leadership of e-Justice Transformation .................................................... 48  
Glossary ......................................................................................................................................... 52
Acknowledgements

Author: Sarah McCoubrey, CALIBRATE

The author would like to acknowledge the ideas and input of UNDP staff at Country Offices and Regional Hubs in every region. Their insight and expertise have been invaluable.

Consultation, input and review from the Chief Digital Office strengthened alignment of the UNDP’s e-justice with other digitalization efforts.

The expertise of the UNDP Rule of Law, Security and Human Rights global team has brought nuanced human rights and security analysis to the project.

Much appreciation for their generous sharing of time, ideas and practical experience.

The views expressed in this publication are those of the author and do not necessarily represent those of the United Nations, including UNDP, or the UN Member States.
Foreword

In 2020, the sudden closure of courts and public services due to COVID-19 revealed the vulnerability of justice systems to health, climate and political disruptions. Across the globe, the pandemic precipitated an unprecedented rush to provide digital services. Many institutions adopted technology for online and virtual operations allowing for business continuity. In this context, digital transformation in the justice sector also accelerated.

This report examines the implications of digitalization and digital tools from a development perspective, looking at both the opportunities and the risks of e-justice. It provides concrete parameters for responsible implementation of e-justice that aims at improved accessibility, transparency and accountability of justice systems, respects and protects rights, and ultimately strengthens the rule of law.

Each area of e-justice is illustrated with a case study highlighting project innovation and expertise developed and facilitated by UNDP in Brazil, Ukraine, Sierra Leone, Pakistan, Malaysia, and the State of Palestine. Ultimately, this report and its complementary toolkit aim to provide a foundation for building e-justice initiatives that contribute to building resilience to the shocks and uncertainty currently faced by the global community.

Digitalization also carries risks of privacy breaches and setbacks in human rights and gender equality. The so-called “digital divide” between those with and without access to devices, internet infrastructure and digital literacy is at risk of being exacerbated. Through studies such as this one, UNDP is poised to bring nuanced attention to human rights, rule of law, privacy and data security in the design and implementation of e-justice and digital engagements. In alignment with the UNDP Digital Strategy, we reiterate our commitment to “Leave No One Behind” and utilize a human rights-based approach as we implement this work.

E-justice can be a tool for strategic transformation, and can be designed to protect rights, address discrimination and mainstream gender equality. In that respect, we at UNDP aim to cultivate principled leadership in e-justice initiatives in collaboration with national partners, donors and innovators, including through The Global Programme for Strengthening the Rule of Law, Human Rights, Justice and Security for Sustainable Peace and Development and the implementation of the UNDP Digital Strategy.

We believe this moment presents a critical and timely opportunity to build effective, accessible, and responsive justice systems using digital technologies in a way which underwrites the Sustainable Development Goals and helps to realize the achievement of peaceful, just, and inclusive societies.

Asako Okai
Assistant Secretary-General, Assistant Administrator, and Director
UNDP Crisis Bureau
Abbreviations/Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AI</td>
<td>Artificial Intelligence</td>
</tr>
<tr>
<td>CDO</td>
<td>Chief Digital Office</td>
</tr>
<tr>
<td>IT</td>
<td>Information Technology</td>
</tr>
<tr>
<td>LNOB</td>
<td>Leave No One Behind</td>
</tr>
<tr>
<td>MEL</td>
<td>Monitoring, evaluation and learning</td>
</tr>
<tr>
<td>SDG</td>
<td>Sustainable Development Goal</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
</tr>
<tr>
<td>UNODC</td>
<td>United Nations Office on Drugs and Crime</td>
</tr>
</tbody>
</table>

Structure of This Paper

Section one of this paper outlines how e-justice fits into the United Nations Development Programme (UNDP) and its collaborative UN inter-agency work to advance the rule of law, human rights protections and access to justice. It summarizes many of the risks, and the opportunities of e-justice projects.

Section two looks at six areas of technological change in the justice sector, providing definitions and examples of uses, and analysing the implications of each.

Case studies of UNDP initiatives using different technologies highlight the practical application and share lessons learned.

Section three sets out future directions and specific actions for UNDP leadership on e-justice. These actions are linked to the complementary set of tools available to Country Offices undertaking e-justice initiatives. It also links to the global map of e-justice initiatives.
Justice and Technology in UNDP

There is global demand for technology to increase the efficiency of court systems, introduce service standardization, provide more accessible services, prepare for crises and modernize the legal sector. These demands come from a variety of players – courts, judges, lawyers, governments and public users – each with different priorities. UNDP has a vital role to play in e-justice initiatives as technology transforms the operation of courts and the delivery of justice services. UNDP, as a critical development partner, is often asked to facilitate e-justice to achieve these modernization goals and balance these priorities. UNDP has an opportunity when building this critical infrastructure to advance technology as a tool to improve access to justice for individuals and communities and to protect human rights and the rule of law. Missing this opportunity risks missing a chance to use new technologies as a tool for meaningful system transformation.

The United Nations Secretary-General’s 2020 Call to Action for Human Rights reiterated this commitment, linking a human rights approach to development, crisis response and long-term change. The Call to Action focuses on global tensions that require human rights vigilance, including the adoption of new technologies.

The first step in advancing e-justice to transform justice systems into truly equitable, fair, transparent institutions is to understand the risks and the potential of e-justice. UNDP staff, donors and national partners must share a foundational understanding of the role of technology in both rights protection and in the erosion or breach of rights and then use a common framework for harnessing technology as a tool. With this strong foundation in place, informed by e-justice initiatives underway globally, UNDP is uniquely positioned to support and initiate e-justice as a strategy for embedding rights protections and accessibility into this critical pillar of democratic governance.

The COVID-19 pandemic has demonstrated the vulnerability of many institutions that rely on analog operations, paper files and in-person transactions. In justice systems across the globe, this vulnerability has been acutely felt. Lockdowns effectively closed courts in most countries at the start of the pandemic. While some courts found ways to move processes online, others simply did not offer any dispute resolution during this period.

UNDP’s commitment to human rights protection as the foundation for sustainable development is critical to technological change and to digitalization as a key strategy for transformation. The UNDP’s 2022–2025 Strategic Plan priority on digital transformation has been further developed in its Digital Strategy by mapping ways for technologies and digital processes to be integrated responsibly into UNDP’s programming and operations.

"Some (people) are losing confidence in the ability of public institutions to uphold the rule of law and human rights and deliver fair, inclusive policies.”

The first step in advancing e-justice to transform justice systems into truly equitable, fair, transparent institutions is to understand the risks and the potential of e-justice. UNDP staff, donors and national partners must share a foundational understanding of the role of technology in both rights protection and in the erosion or breach of rights and then use a common framework for harnessing technology as a tool. With this strong foundation in place, informed by e-justice initiatives underway globally, UNDP is uniquely positioned to support and initiate e-justice as a strategy for embedding rights protections and accessibility into this critical pillar of democratic governance.

The COVID-19 pandemic has demonstrated the vulnerability of many institutions that rely on analog operations, paper files and in-person transactions. In justice systems across the globe, this vulnerability has been acutely felt. Lockdowns effectively closed courts in most countries at the start of the pandemic. While some courts found ways to move processes online, others simply did not offer any dispute resolution during this period.

UNDP's commitment to human rights protection as the foundation for sustainable development is critical to technological change and to digitalization as a key strategy for transformation. The UNDP’s 2022–2025 Strategic Plan priority on digital transformation has been further developed in its Digital Strategy by mapping ways for technologies and digital processes to be integrated responsibly into UNDP’s programming and operations.

"Some (people) are losing confidence in the ability of public institutions to uphold the rule of law and human rights and deliver fair, inclusive policies.”

The first step in advancing e-justice to transform justice systems into truly equitable, fair, transparent institutions is to understand the risks and the potential of e-justice. UNDP staff, donors and national partners must share a foundational understanding of the role of technology in both rights protection and in the erosion or breach of rights and then use a common framework for harnessing technology as a tool. With this strong foundation in place, informed by e-justice initiatives underway globally, UNDP is uniquely positioned to support and initiate e-justice as a strategy for embedding rights protections and accessibility into this critical pillar of democratic governance.

The COVID-19 pandemic has demonstrated the vulnerability of many institutions that rely on analog operations, paper files and in-person transactions. In justice systems across the globe, this vulnerability has been acutely felt. Lockdowns effectively closed courts in most countries at the start of the pandemic. While some courts found ways to move processes online, others simply did not offer any dispute resolution during this period.

The COVID-19 pandemic has exposed obstacles to justice administration including:

- **basic infrastructure (lack of electricity, internet access and personal computers)**
- **system connectivity (networking, access to files and staff)**
- **public accessibility (lack of online forms or information about cases)**
- **software and hardware (lack of licenses for home use, insufficient cameras, unsecure internet)**
- **resistance to change (court staff, lawyers and judges refusing to adapt)**
- **legal barriers (differences between digital and analog processes, legislative requirements)**

Each of these operational and cultural change obstacles has been a factor in the slow evolution of justice systems prior to the pandemic. In the context of complete disruption of in-person, paper-based administration of justice, these obstacles compounded.

People working in justice systems, even those who had previously resisted technological change, now see the adverse impacts of the slow pace of change in the legal system. There is a greater openness to modernization as both individuals and institutions want to be better prepared for unexpected disruptions. The shift to online services has also created greater public demand for flexible and secure online legal services. Governments, courts, human rights defenders, civil society and individual judges and lawyers are asking for new or better e-justice systems. UNDP, with Country Offices and partnerships with national entities, can respond to these requests with a careful approach that integrates new technologies and processes with ongoing human rights-based development.

To meet these requests for transparent, secure and equitable justice systems, UNDP is working within the framework of its Global Programme for Strengthening the Rule of Law, Human Rights, Justice and Security for Sustainable Peace and Development (hereinafter the Global Programme) to cultivate a common understanding of the trends, risks and issues in e-justice across its Country Offices, its national partners and the donors it works with. Building on this consistent understanding of e-justice in the development sphere, UNDP will continue to expand its digital tools in its commitment to human rights.

---

**E-Justice**

E-justice is an umbrella term that captures any effort to administer, deliver, strengthen, or monitor justice services using digital technologies. It includes efforts by institutions like courts, governments and human rights institutions, individuals like lawyers and human rights defenders, and private and civil society entities like technology providers and community partners. E-justice broadly covers all kinds of digital technologies, from complex case management or innovative apps to information technologies and use of online communication. It includes the tools and processes used by justice sector professionals and those used by the public and the media. E-justice initiatives include the strategies, process (re)engineering, automation, data collection, integration of systems as well as online dispute resolution, e-filing, remote court process and technologies used to digitize, store, and provide access to legal documents and evidence. Apps and direct-to-user communications and messaging tools integrated into legal information and education projects also fall under the e-justice umbrella. E-justice, like any other tool, can easily become the focus itself, losing sight of the overarching priority on meaningful system transformation.

---


E-justice includes a set of tools that will both advance UNDP strategic priorities and support countries meeting their national priorities and rights-respecting obligations. Enthusiasm for new technologies and digital processes often focuses on the new device or hardware or the new way of operating. However, the goal when using these tools must stay on their impact on access to justice, equality and human rights protections, not on the operational efficiencies. The technology itself is often the simpler aspect of e-justice. Bigger challenges come from institutional, individual behavioural and cultural change in embracing new ways of working and thinking.

Related technologies, typically associated with e-government, including digital identities, e-signatures and e-documents and the automation of government processes or eligibility for public services, often intersect with e-justice projects. While these technologies overlap with or facilitate e-justice, for example in the signing or delivery of legal documents, they are not predominately an e-justice tool.

The Digital Divide

As technology continues to transform how people interact with governments, with the media, with business and with each other, it is important to stay focused on the digital divide. Technologies are not uniformly available to everyone. Until everyone has unrestricted access to modern information and communications technology, tackling the digital divide remains an important part of any development-focused initiative.

This gap encompasses both physical access to and ownership of technology, and the technical literacy required to make use of it. The digital divide is becoming more complex as our engagement with technology evolves. Many people are gaining access to technology through home and work computers, cell phones, through libraries and other community access points. Technical literacy for basic functions is also increasing, including as a part of school curricula.

However, many people still face barriers based on:

- economics
- affordability
- linguistic requirements
- geography
- gender
- physical requirements
- cultural differences
- generational differences
- social norms
- infrastructure

E-justice that introduces online methods of engagement, including electronic filing, virtual hearings and online dispute resolution, can create or exacerbate this digital divide by entrenching or exacerbating barriers to quality justice outcomes, particularly for people from vulnerable communities.

E-justice initiatives must continue to advocate for access to the devices - telephone, television, personal computers - and to the adequacy and affordability of reliable internet and electricity.

Gaps in the digital divide reflect social inequities. Women do not have equal access to mobile connectivity nor access to private or independent accounts for accessing legal or financial services.

Individuals with physical disabilities may not have the adaptive hardware or software needed to access online services. People at risk of being displaced or trafficked may not have the devices to prove their identity.

Seniors face greater isolation as basic services move to unfamiliar digital platforms. Rural communities may not have reliable access to infrastructure.

e-Justice: Digital transformation to close the justice gap

E-justice projects can be developed to address the digital divide, as outlined below, by gradually introducing new technologies, integrating infrastructure improvements and requiring open-source tools and broad functionality requirements across different devices. Throughout these efforts, the digital divide must remain a first-level concern in the introduction of digital tools.

Digit(al)ization

UNDP supported e-justice initiatives cover a wide range of projects, some primarily technology-based, others using technology as a tool within a multi-faceted project. Each of these has a technology or digital component and each brings the potential and the risks of e-justice.

In conversations about technology and legal services, the terms digitization and digitalization describe two different processes that are often confused.

Digitization is the process of converting existing processes and content from analog formats like paper forms and filing into digital formats like online forms or storing analogue data in a digital format. It includes portals to submit documents or access decisions. A digitized process is an existing court process, now available online or in digital formats.

Digitalization is the use of digital technologies to change justice processes and business models. It includes the way that digital technologies allow for new ways of delivering or administering justice.

Digital Transformation describes the cultural change in systems and institutions using digital technology. Digital transformation includes user-centred design and technologies that allow people to work differently. Digital transformation facilitates shifts in legal culture and processes towards more accountability, transparency and accessibility.

As one of the 2022-2025 UNDP Strategic Plan enablers, digitalization will underpin programming at the country level while digital transformation will influence both internal UNDP operations and work with national partners.

Assessing e-Justice Projects

Digital tools bring opportunities and risks. No technology, digital process or service is uniformly positive or negative. Identifying and understanding the potential and the risks is critical to making informed, careful decisions about e-justice projects. This section outlines some of the implications of e-justice, first the positive implications, followed by an analysis of some of the major risks and challenges. This section is designed to equip decision makers with different lenses through which to assess specific e-justice projects. Viewed as a whole, this section summarizes many of the arguments for and against digital tools in the justice context.

<table>
<thead>
<tr>
<th>Potential of e-justice</th>
<th>Risks of e-justice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leave No One Behind potential</td>
<td>Leave No One Behind risks</td>
</tr>
<tr>
<td>Human Rights Scrutiny</td>
<td>Conflating Quality with Efficiency</td>
</tr>
<tr>
<td>Risk Management</td>
<td>Automating Mistakes and Bias</td>
</tr>
<tr>
<td>Accountability and Anti-Corruption</td>
<td>Unanticipated uses</td>
</tr>
<tr>
<td>Data and User Needs</td>
<td></td>
</tr>
</tbody>
</table>

The Potential of e-Justice

Leave No One Behind

Justice systems assert equal access in principle, but the reality is often very different. Whether based on economic barriers, gender stereotypes, social standing, literacy, or remote locations, we know that not everyone has had equal access to justice. It is estimated that globally, 5.1 billion people have unmet legal needs. The promise to Leave No One Behind (LNOB) that threads through UNDP activities, creates an overarching obligation to continually raise questions about how development projects can close this gap.

Digital technology offers the promise of addressing many of these individual and systemic exclusions. The new immigrant who can receive a language translation of legal documents or the person with a disability who can use adaptive software to autonomously participate in a legal dispute clearly benefit from integrating technology into court operations. Technology also offers practical solutions for remote or rural users and allows courts to offer alternatives to in-person appearances, reducing the geographic and economic barriers.

While technologies can replicate or entrench sexism, racism and system discrimination (detailed below), they can also provide solutions to these systemic issues. Sexism and racism can be harder to hide or replicate when processes are automated and people do not need to rely on an official to access services free from discrimination. Legal documents and processes that use standardized forms and automated inputting generate meaningful data about who is affected by different legal issues or changes in the law. Tools that allow people experiencing violence to record their evidence or testify in secure, private locations minimize the trauma of reporting and prosecuting crimes, particularly benefiting women, LGBTI+ and people of colour who face gender-based violence, homophobic or racist attacks.

The cost of legal services drops when people do not have to pay a lawyer to fill in forms or can automatically receive documents, eliminating the need to formally serve, swear or authenticate documents. Legal services available outside of business hours through online portals can reduce the cost to users who would otherwise need to arrange childcare or take time off work to get to a courthouse or lawyer’s office.

Online dispute resolution for transactional disputes removes the need for expensive legal representation entirely and can allow a court or government to provide a fast, reliable and predictable resolution option for specific kinds of disputes. This predictability increases public confidence and encourages people to act on their rights.

Digital technologies can be a tool to identify, call out and respond to the ways that legal services and justice systems have not been available to everyone. E-justice initiatives, when well designed, can effectively expand access to justice for individuals and communities that have historically been left behind.

Human Rights Protections

The protection of human rights in the context of technology is multifaceted. When reflecting on the relationship between artificial intelligence and human rights, the UN High Commissioner for Human Rights recently stated:

“Artificial Intelligence can be a force for good, helping societies overcome some of the great challenges of our times. But AI technologies can have negative, even catastrophic, effects if they are used without sufficient regard to how they affect people’s human rights.”

14 For example, British Columbia’s Civil Resolution Tribunal. Available at https://civilresolutionbc.ca/
This concern is the basis for the Resolution 48/4 on the Right to privacy in the digital age, adopted by the Human Rights Council in October 2021. The resolution text acknowledges critical human rights and privacy concerns in the context of current and emerging technologies, calling on Member States to centre privacy rights and maintain rigorous attention to the laws and practices relating to surveillance, data collection, profiling, automated decision-making, biometrics and other technologies. The resolution also highlights the obligation of States to prepare judges and lawyers to understand how technologies impact rights and deal with data in order to adjudicate cases about privacy rights.

Human rights are impacted when institutions and governments collect data that allows for discriminatory targeting of a particular religious, racial or identity community, or collects unnecessary personal data, or when data is used to repress political participation. When apparently neutral digital processes embed bias, these systems breach human rights. The appearance of neutrality or objectivity in machine learning and other digital tools can make it harder to identify and prove that bias because many people assume technology is unaffected by human motivations. However, the biases and stereotypes of the people designing, programming and inputting become part of the digital solutions.

In other contexts, new technologies are standardizing processes and eliminating opportunities to deny services to women or racial minorities. Automated processes reduce delays and facilitate due process rights for people who are detained. Technology assisted services in remote areas and in multiple languages allow for the widescale registration of births, marriages and deaths, increasing access to government services, inclusion on voter lists and participation in the digital economy. Specialized digital tools are designed to help victims of violence or abuse record evidence, report to police and access their rights. Political dissidents and media use technology to record their actions and movements, providing digital evidence to protect their own safety and to hold people in power to account.

For every example of a digital technology providing the data or nuanced information to better identify and eliminate human rights abuses, there is an example of technology being used to target people based on a protected identity. Systems scrutinized in their development may later be adapted for a different use that ignores or infringes human rights. This complexity requires constant attention to the purpose and to the implementation of digital tools.

The complexity of human rights analysis of e-justice is exactly why it is critical that high priority is placed on examining the explicit and unintended impacts of digital tools on individuals and groups. A human rights-based approach is necessary to ensure that system transformation not only maintains countries’ existing human rights protections but is also used proactively to advance human rights. Examination of legislation from the perspective of rights protection and privacy in a digital context might require legislative reform. Judges, court staff and lawyers will need training on the intricacies of these technologies and on the data storage protocols. Programmers and software developers will need training and support to understand the legal parameters of personal data and the risks that digital processes and machine learning pose to vulnerable communities.

**Maintaining Public Services**

E-justice initiatives can be part of a risk mitigation plan to make public dispute resolution resilient to upheaval or disruption. The COVID-19 pandemic has forced justice systems around the world to review and update their contingency planning for different kinds of disruptions. A carefully designed, robust system with appropriate security, reliable back-ups and decision-making controls is part of preparing for times when the justice system cannot operate as planned.

Pandemic-related disruptions are an ongoing risk. The current pandemic continues to cause periodic health related restrictions on in-person gatherings at local, regional, or national levels. Being ready for future pandemics, whether at a large or local scale should be a standard part of risk planning for all legal services,

---
17 For example, UNDP Programme of Assistance to the Palestinian People, Sawasya II Project: Promoting the Rule of Law in the State of Palestine [https://www.ps.undp.org/content/papp/en/home/projects/sawasya_ii.html](https://www.ps.undp.org/content/papp/en/home/projects/sawasya_ii.html)
19 For example, VESTA reporting app. Available at [https://www.vestasit.com/](https://www.vestasit.com/)
with protocols for maintaining uninterrupted, secure access to legal advice, dispute resolution and court processes to support family and economic health.

Climate change disruptions are also increasing. Floods, earthquakes and hurricanes all pose risks not only to the operation of courts, policing and civil society justice supports, but also to the storage of court files and evidence and to the security of individuals and institutions. These climate disruptions also make people more vulnerable to property and personal harm and increase local demand on legal services for those who have been displaced, lost homes and jobs, or find themselves having to prove their identity or ownership. After a natural disaster, people rely on a high functioning justice system to help them establish their rights and protect themselves and their families. Risk mitigation for justice players requires thinking about both how a system or process will continue during a period of physical disruption and how a natural disaster will increase or shift the demand on courts and legal services to help people stabilize in the wake of the event.

Periods of political upheaval can also create risk mitigation challenges for legal service providers. Consistent, reliable access to officials, court processes, legal documents and registries can all be upset by either deliberate actions to shut down the courts or as an ancillary impact of curfews, road closures, protests or civil unrest. Ensuring that the justice system and its actors, including institutions, lawyers and civil society organizations, are ready to maintain access to justice is critical to maintaining rule of law through a period of instability. The effectiveness of the justice system and its ability to insulate itself from political upheaval is critical to its credibility and to the quick resumption of democratic, equitable and principled operations.

E-justice plays a role in risk mitigation not just in obvious adaptations like virtual hearings, but also in planning for secure filing and data storage systems, cloud-based file storage, judicial access to court files and security of evidence handling. Having a combination of digital and analog processes, with tested protocols for switching seamlessly between in-person and online systems is part of preparing for risks. A staff of clerks, lawyers and judges comfortable with technological solutions to these disruptions is critical to maintaining court operations during periods of crisis.

Accountability and Anti-Corruption

Discriminatory or corrupt public officials undermine people’s human rights and the transparency of the system as a whole. Technology is a powerful tool to strengthen the rule of law and increase anti-corruption and accountability initiatives.

Courts are a critical institution to redress rights violations and yet can also be the site of further corruption and discrimination. The impact of abuses of power within the justice sector is two-fold, failing to rectify rights violations and further undermining public confidence in the justice system.

Technology can transform administrative processes to restrict opportunities for corruption.21 When documents are automatically generated, court cases managed on a predefined timeline and document records show who has accessed files, there are fewer opportunities for an official to request a bribe or engage in sextortion. Automated process can be programmed to create alerts for cases that may be delayed or diverted by someone taking a bribe.

Public accountability for the equitable, transparent and fair administration of justice poses challenges to institutional practices and highlights outdated processes that may have a systemic impact on some groups in society. Better information about time-to-trial makes it easier to analyze regional or demographic patterns of who can access justice and who faces discriminatory or logistical obstacles. Anti-corruption efforts identify and eliminate avenues for individuals to abuse their positions. E-justice initiatives can strengthen accountability frameworks and target corruption – both financial abuse of power and the discriminatory expectations of sexual attention – while also promoting efficiency and simplifying court processes.

Data and User Needs

Justice systems worldwide have been slow to adopt data collection and analysis as a part of operations. Court administration data about users, cases, timelines and case results is notoriously unavailable or inconsistent between levels of court, courthouse, or region. Data about the full extent of public legal needs is only just starting to be collected.22

---


Data in the legal sector also comes from ancillary institutions like the police, lawyers’ associations, civil society, human rights defenders, prisons, and governments. Each of these entities tends to track different data, using different metrics or collection tools and relying on different software or reporting platforms. E-justice projects that work across institutions or facilitate collaboration between different parts of the justice system have the potential to introduce standardized data collection points and to create common reporting templates across the system and between sectors or countries to better understand and react to changes in legal service delivery. In its recent report on the use of digital technologies in access to justice, HiIL concluded that justice sector data continues to be segregated in individual courts or governments. There is a lack of comparable, sharable data on the impact of digital tools on access to justice.23

User data has also been a long-ignored avenue for understanding what people need from the legal system, rather than focusing on what the legal system wants. User data includes direct information from people who are using the legal systems, whether formally or informally. It also includes data from those who are not using the legal system and are either abandoning their legal rights and entitlements or seeking redress through religious, community, family resolution or through vigilante justice. Some courts conduct user satisfaction surveys, listening to those who access the formal dispute resolution to hear about whether they understand and can navigate the process both with and without legal representation. Civil society and human rights defenders have data, both quantitative and qualitative, about why people avoid legal institutions and how they experience justice. National statistics bureaus and academic researchers are starting to collect information about people’s civil legal needs, helping to identify the legal issues faced by women and girls, ethnic and linguistic minorities, people with disabilities and LGBTI+ people. This data could be used to improve legal services and better monitor quality justice outcomes.

The assessment of a legal system based on court data or case resolution rates prioritizes only one way of determining success. Data, whether generated from speaking with users or tracking the internal processes, is a powerful tool for identifying gaps in legal services and addressing delays and inefficiencies. Assessing the impact that legal disputes have on people’s lives, the costs, financial and otherwise, to asserting rights and the experiences of users all provide additional perspectives on whether the justice system is meeting people’s needs.

The Risks of e-Justice

Leave No One Behind

The Leave No One Behind framework demands focusing attention not just on the anticipated benefit of new technologies, but also on those left out, left behind or adversely affected. While e-justice initiatives might address the needs of some communities left behind in conventional court operations, there is a real risk that technology leaves others out of the evolution of public services. Examining e-justice through this lens is a critical component of UNDP initiatives. Use of technology to receive fundamental services links civic entitlements with individual characteristics like literacy, or with systemic characteristics like socio-economic status or with societal structures like internet infrastructure. Any one of these can result in an individual or a community having no access to a basic service and no avenue to claim legal entitlements or protections, thereby entrenching injustice.

Functional literacy has long been identified as critical to democratic and economic participation and to full access to health care, education, political enfranchisement, physical security and other aspects of social life. When services are delivered digitally, the added dimension of digital literacy comes into play. Discomfort with technology can be linked to conventional illiteracy, as well as to lack of experience with computers, devices and online platforms because of age, disability, and economics. Many e-justice projects promise to streamline services and create efficiencies by looking at the overall caseload of courts or service providers. This often identifies positive impacts for the majority of users, but the number of and impact on those left out must also be factored in before adopting new technologies.

Rates of internet and mobile device usage continue to increase but are not yet universal. Proposals for digital service delivery must continue to be paired with meaningful investments in infrastructure to increase internet penetration and decrease the cost to users. Many e-justice initiatives have embedded private sector partners that develop platforms at reduced or no cost. However, users may be required to use specific hardware or buy proprietary software developed by that company. New devices, upgrades or faster data processing requirements can exclude people with older or cheaper technology. Decision-makers in the legal system have the obligation to remain focused on all of its users and require technology that meet these needs, rather than accepting technologies that exclude people.

Automation and user data can tend to treat everyone as an interchangeable user, but people have different needs and strengths based on gender, abilities, age, race and ethnicity. Digital processes can rely on inputs that appear neutral but in fact replicate biases, make assumptions and limit the user’s options. Not only do we need to ensure the LNOB principle is at the forefront in the access to e-justice, but also embed it in the design of digital processes.

Technologies are not uniformly available to people across the demographic spectrum. Differential access is evident when looking at gender, disability, age, geographic location and legal status. Socio-economic and cultural divisions exacerbate these distinctions.

The differential impact of technologies on societal groups varies in based on the context. For example, testifying virtually from a rural communities might improve access to courts, however the same process can create a serious safety risk to women testifying against an abuser.24 Similarly, the importance of identity-based data collection to understand the scope of women’s business ownership might also put LGBTI+ or ethnic minority business owners at risk. A LNOB lens requires regularly assessing and reassessing the way that technological change is impacting people and adapting or retrofitting from processes that create or replicate harm.

E-justice does not have to entrench these disparities if careful attention is paid to both who is accessing technologies and who is not. Vigilance about the impact of digital services is a strategy not for resisting technologies and who is not. Vigilance about the impact of digital services is a strategy not for resisting technologies and who is not. Vigilance about the impact of digital services is a strategy not for resisting technologies and who is not. Vigilance about the impact of digital services is a strategy not for resisting technologies and who is not.
Digital processes developed by replicating paper forms or in-court procedures can also embed poor practices by replicating processes that are only accessible to some. Digitalization requires examining the whole process and assessing the most accessible and effective way to deliver services, not simply recreating old processes in the online environment.

The converse to this concern is that the automation of processes like sentencing using algorithmic analysis will apply a formula to people’s lives and remove human empathy and discretion from the process. There is a mix of human emotions, motivations and circumstances in every legal issue, not all of which demand the same weight from case to case. Discretion on the part of decision-makers can help to curb the disproportionate impact of legal consequences, acknowledge systemic disadvantage, address resource disparities and opportunities for growth and rehabilitation. While a completely discretionary system runs a risk of bias and discrimination, a system with no discretion will produce rigid, harsh results.

Unanticipated Uses

Many technologies in the justice sector pose human rights risks when there are changes to how the technology will be used, or a lack of safeguards to prevent other uses. Technology introduced for one purpose may be adapted to be used for other purposes with more serious consequences. Biometrics, surveillance technologies, artificial intelligence, data analytics, digital storage and messaging apps all pose e-justice opportunities but can easily be maliciously used either through unauthorized access, or when a government or institution decides to shift its priorities. Whenever technology is introduced, it is critical to examine all the rights affected by the technology, giving full attention to the potential harms as well as the potential benefits. Often this requires UNDP staff and rights advocates to investigate potential implications beyond the promised impacts on people’s lives. Online legal documents, from identity papers to property registrations to health records, are critical to people’s ability to assert or defend their rights and access legal entitlements but can also be the basis for targeting a particular individual or community. The collection and storage of data about individuals, however well-intentioned or legitimate when collected, can be misused, such as in the recent release of human rights defenders’ identities in Afghanistan.\(^\text{25}\) The impacts of digital tools can be opaque when the algorithms and proprietary processes are not made public.

Much like the process of digital innovation is iterative and experimental, the scrutiny of technological change from a rights perspective must also be an ongoing, adaptive process, learning from other countries or contexts.

Balancing Risks and Opportunities

Being alert to the advantages and disadvantages of e-justice initiatives allows UNDP staff to identify risks early in the project design and to develop ways to monitor and minimize these risks. Some of the risks of e-justice projects are easily mitigated against by good design, procurement and regulation, while other risks require ongoing vigilant scrutiny. E-justice is not just a technological change, but also involves regulatory and legal changes, and most significantly, cultural change.\(^\text{26}\) The introduction of technology requires training and education for users, court staff, judges, litigants and members of the public, which can delay introduction and temporarily reduce public participation and confidence. Large-scale transformation is time consuming and costly and often involves delays or setbacks.\(^\text{27}\)

Awareness of these risks allows UNDP to build mitigation into the project design while still embracing the potential of e-justice.


<table>
<thead>
<tr>
<th>Issue</th>
<th>Opportunities</th>
<th>Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Privacy</td>
<td>Online systems may increase the reliability, security and consistency of data, which can have positive implications for vulnerable groups whose experiences are not historically captured in court information.</td>
<td>Digital systems present opportunities for the misuse of personal information and court data, including privacy breaches and hacking, the sale of aggregated data, the use of faulty, incomplete, or biased data as a foundation for predictive technology.</td>
</tr>
<tr>
<td>Proprietary</td>
<td>Private sector companies have the skills and capacities to continuously evolve these systems.</td>
<td>There is limited regulation related to the development of e-justice systems. Rigorous contractual agreements are required to ensure that private sector companies will comply with the security, privacy and legislative requirements of the legal system.</td>
</tr>
<tr>
<td>Access to Justice</td>
<td>Technology in combination with other supports may increase the ability of isolated individuals (women, people with disabilities, linguistic minorities, displaced people) to participate in justice proceedings. Technology can make it easier for people to access justice outside of business hours or without the additional expense of lawyers or court staff. Digital transactions meet the public’s expectation of legal services, especially for younger users.</td>
<td>Infrastructure and internet services may be inconsistent or unreliable. The cost of the system may be passed on to the user, creating potential access to justice implications for those unable to pay, including members of vulnerable groups. Online systems are not available to those who live in rural, remote locations, or other places with low internet penetration. Technology may be difficult to access by all, whether because of cost or digital literacy.</td>
</tr>
<tr>
<td>Rule of Law</td>
<td>Use of technology can increase speed and transparency of judicial decisions, increasing confidence, accountability and allowing for a greater public scrutiny of the system. Digital processes are less susceptible to corruption and provide checks on abuse of power, both in the legal system and when judges adjudicate corruption and sextortion cases.</td>
<td>The foundational protections of the rule of law built into justice systems may be compromised, even unintentionally, by private sector technology developers.</td>
</tr>
<tr>
<td>Human Rights</td>
<td>Greater data and transparency allow civil society and human rights institutions to identify and prove human rights abuses. Increased access to justice can provide an avenue for vulnerable communities to track injustices and take action on systemic discrimination.</td>
<td>Technologies can embed injustice, inequity and bias into opaque technologies that are difficult to understand or challenge. Data repositories can be misused by governments or private companies, putting individuals or communities at risk. Use of technologies to collect personal information on and target human rights defenders or political opponents.</td>
</tr>
</tbody>
</table>
UNDP Strategic Plan 2022-2025

UNDP works strategically and collaboratively with UN partners and donors to deliver integrated development on six signature solutions - poverty and inequality, governance, resilience, environment, energy and gender equality - using three enablers – strategic innovation, digitalization and development financing.\(^28\)

The 2022-2025 UNDP Strategic Plan outlines commitments to structural transformation, leaving no one behind and building resilience to uncertainty. It details activities and goals under each of the six signature solutions. Each highlights the potential of technology and digitalization to address the needs of individuals and communities. E-justice is a programming option to both strengthen governance infrastructure, to protect rights, to address discrimination and to mainstream gender equality. Emphasis on preventative and anticipatory approaches supports development for both the current state and the future state. The Strategic Plan, adopted in the context of COVID-19 pandemic, prioritizes actions to cultivate resilience to crises and change, both predictable and unexpected. UNDP delivers integrated, well-planned projects in the short-, mid- and long-term that are monitored and evaluated against meaningful metrics.\(^29\)

As an enabler across the Strategic Plan, digitalization of systems and institutions is a key approach to UNDP work at the country level. Digital transformation, both of programming and of its own operations builds the capacity for this digitalization. Carefully designed e-justice advances the Strategic Plan by building the capacity of national actors and of UNDP systems to respond to crises and provide stable access to justice.
People-Centred Justice and Inter-Agency Collaboration

UNDP is committed to inter-agency collaboration and integrated joint management. Its e-justice initiatives are informed by the Secretary General’s Call to Action for Human Rights, the UN Policy Guidance on Human Rights Due Diligence and the recognition that digital tools can be used to advocate for, protect and defend human rights.

Inter-agency coordination brings nuanced understanding of these human rights implications and brings the gender, migration, legal and social science expertise of other UN agencies to bear on UNDP’s development expertise.

UNDP’s work is part of global efforts to enhance access to justice and protect human rights and instrumental in the movement toward people-centred justice. Organizations such as the Pathfinders, HiIL, and the World Justice Project have all advanced the discussion of rights-respecting technology in the development context. A commitment to people-centred justice underpins these collaborative efforts to promote digital tools that can meaningfully increase people’s access to justice and protect their fundamental rights. People-centred justice takes the focus off the experience of the courts and the people who work in them and looks instead at the legal and justice needs of the whole population. Digital innovations that increase efficiency are only warranted when they do not infringe or ignore people rights and make the system easier to understand, navigate and improve trust and outcomes for society’s most vulnerable.

Aligning e-justice initiatives with data from the new and growing understanding of people’s civil legal needs offers the promise of real transformation. The design of people-centred justice must draw on the growing body of civil legal needs studies being conducted in many countries.

UNDP’s Digital Strategy and the Chief Digital Office

UNDP adopted its first Digital Strategy in 2019 and created the Chief Digital Office (CDO) to implement digital transformation. The current Digital Strategy 2022-2025 sets out UNDP’s strategic focus moving forward, emphasizing both building the digital capacity within UNDP itself and integrating digital tools in projects and initiatives with national partners. The Digital Strategy emphasizes the importance of cultivating a digitally competent UNDP team through skill and knowledge development and a culture of innovative. This focus on strengthening UNDP staff is combined with robust digital infrastructure and effective use of data to transform UNDP operations.

This office works with the UN Global Centre for Technology, Innovation and Sustainable Development and with Country Offices to complete digital readiness assessments with a cross-cutting analysis of how digital transformation will impact society. The assessment process takes an inclusive approach, focusing on infrastructure, government, regulation, business and people, examining the impact of initiatives on all five pillars. The CDO is also collecting data both within and beyond UNDP sources to build a more robust data foundation for decision making. As a specialized team focused on digital transformation, the CDO is a valuable partner in specific projects and in UNDP-wide learning and sharing experiences. Its digital readiness assessment and other planning and design supports can set up Country Offices, national partners and specific e-justice projects for success, particularly when undertaking large-scale transformation.

---

32 Pathfinders for Peaceful, Just and Inclusive Societies. Available at https://www.sdg16.plus/
33 Hague Institute for Innovation of Law. Available at https://www.hiiil.org/.
34 World Justice Project. Available at https://worldjusticeproject.org/.
e-Justice: Digital transformation to close the justice gap

UNDP’s Global Programme on Rule of Law and Human Rights

The Global Programme for Strengthening the Rule of Law, Human Rights, Justice and Security for Sustainable Peace and Development is a UNDP initiative that provides support to 48+ crisis and fragile countries to advance critical development objectives. Its work on Sustainable Development Goal (SDG) 16+, enabling peaceful, just and inclusive societies, is organized around four pillars: rule of law, justice, security and human rights. This approach aims to target the root causes of inequality, injustice and insecurity and to accelerate progress. The Global Programme is a key mechanism for a holistic approach to system transformation and rigorous rights protection.

The new phase of the Global Programme (Phase 4) articulates its commitment to continue in its core areas of assistance and expand into new and emergent issues. E-justice fits into both categories as a key tool in the existing focus on the rule of law, security and human rights protections as well as the emerging realities of climate justice, digitalization, and human rights in the business context.

UNDP recognizes that the responses to weak rule of law, insecurity and human rights abuses are interrelated and complex.

Integrated responses to complex challenges are critical in e-justice projects. Only through an integrated, problem-driven response will UNDP address these challenges while ensuring that system change does not result in human rights or rule of law setbacks.

There are six enablers for the Global Programme’s work, all of which have critical importance in the context of e-justice:

- Robust systems for monitoring, evaluation and learning (MEL)
- Strategic innovations (transformation, testing and experimentation, Accelerator labs)
- Strategic approach to partnerships
- Integrated responses to complex challenges (problem driven, not solutions driven)
- Enhance development financing (sustainability)
- Inclusive, ethical, and sustainable digitalization
The potential to transform systems through digitalization can be appealing to national partners and donors who often see system improvements in terms of efficiencies and new data. Through the Global Programme, UNDP works to ensure that e-justice is inclusive and ethical and does not reinforce injustices or violate rights. Importantly, UNDP supports e-justice that does not obscure or hide injustices behind the guise of technology.41

The Task Force on Justice, Innovating Working Group, outlined roles for the key players in innovation, highlighting in chart form the strengths of each42:

<table>
<thead>
<tr>
<th>Sector</th>
<th>Core Strengths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public sector</td>
<td>Convening power, citizen perspective, coercion and enforcement, protection of the vulnerable, quality control, enabler, data platforms, what works research, financing (public funds).</td>
</tr>
<tr>
<td>Private sector</td>
<td>Customer perspective, agile, fast, innovative, scale, data platforms, ‘what works’ research, financing (impact investing)</td>
</tr>
<tr>
<td>Civil society</td>
<td>User perspective, presence ‘on the ground’, specialized knowledge on specific groups and needs, data on what works</td>
</tr>
<tr>
<td>Academia/think tanks</td>
<td>Data collection, what works research, connector and convener.</td>
</tr>
<tr>
<td>Business</td>
<td>Business acumen, delivery capacity, organisational skills, investment.</td>
</tr>
<tr>
<td>(Impact) investors</td>
<td>Funding, business acumen, road to sustainable funding models</td>
</tr>
</tbody>
</table>

UNDP, through the vehicle of the Global Programme, has strong partnerships across each of these categories in the innovation sector. Building on its dynamic collaborations, UNDP can act as the catalyst for e-justice development that is rooted in sustainable development, rights protection and equality.

Technology-based initiatives generally use an iterative process, testing and refining technology tools as they are scaled or rolled out across systems. Co-creation between UNDP staff, national partners (courts and governments), rule of law institutions (judiciary and security), sector players (lawyers and legal services), national human rights institutions, public court users, researchers, civil society and the private sector is critical in the iterative process. Co-creation models that involve UNDP staff at the global and the country level bring expertise to the process and more importantly build the capability of country offices to stay engaged in e-justice, raise ongoing rights concerns, assess data and bring UNDP’s expertise to procurement, planning and monitoring decisions.

The Global Programme’s approach anticipates six outputs,43 each advanced through strategic capacity building, planning and active UNDP staff involvement throughout the lifecycle of an e-justice project. What used to be viewed as gaps in infrastructure, solved by providing computers and servers, are more accurately seen as process and culture changes in how justice is administered. E-justice projects include tech design, data collection, platform development, long-term capacity building within institutions, as well as training, communicating and monitoring results. UNDP’s role facilitating donor relationships and strategic partnerships will continue to put human rights and the rule of law at the centre of e-justice initiatives. E-justice specifically advances each of the six outputs.

OUTPUT 1
People experience greater equality and are more empowered to access justice and exercise their rights

People-centred transformation does not start with system-centred design. Meaningfully advancing Output 1 requires putting public users, vulnerable communities and human rights institutions and defenders at the centre of e-justice design. Many user-centred design processes focus on those who work in the court system as the users, assessing ease of use, privacy and effectiveness from their perspective. Developing user-experience and data collection tools from an intersectional perspective designed to capture the experiences of those typically left out of system analysis also allows e-justice initiatives

---

that bring the needs of women and girls, Indigenous communities, displaced persons and the LGBTIQ+ community to the forefront.

**OUTPUT 2**
**Duty bearers and power holders are more accountable and responsible for upholding rule of law and realising human rights**

E-justice brings accountability and creates transparency to advance Output 2. Case management systems make it more difficult for individuals to abuse their power within court services and create the evidentiary record that allows judges to address corruption in court.

**OUTPUT 3**
**Justice and security systems are more people-centred and effective**

Digital processes are more accessible to people in rural and remote places. Improved time-to-trial and system predictability engenders public confidence and increases access to justice. Digital records are transferable across borders giving refugees and displaced people verifiable identity, banking and property records. E-justice can advance Output 3 by transforming justice and security systems.

**OUTPUT 4**
**Communities experience greater safety, security and resilience through people-centred approaches**

Output 4 is advanced when institutions, individuals and global civil society actors have access to human rights data about policing, prisons and court operations. Digital controls on state surveillance and transparent protocols for data handling and storage is critical to community safety and security.

**OUTPUT 5**
**Rule of law and human rights programming is evidence and learning informed**

Advancing Output 5 involves building the capacity of Country Offices and ensuring their sustained access to court and legal system data, collected using transferable and scalable metrics.

**OUTPUT 6**
**Evidence-informed international policy enables stronger commitments to rule of law and human rights**

Output 6 is advanced by strengthening the knowledge sharing across the UNDP ecosystem, sharing experiences, tools and strategies between the global, regional and country initiatives and by building capacity through continued inter-agency collaboration. UNDP cultivates donor understanding of the challenges and opportunities in people-centred, sustained, transparent e-justice initiatives.

---

**Procurement**

Court systems, governments and international agencies traditionally procure goods and services, including technology, through established and often legislated models with strict controls. These can include calls for a tender, soliciting bids and selecting a winner to provide the goods or service, or standing offers and supply arrangements such as vendor of record lists and non-competitive processes in small or urgent situations. Increasingly, institutional actors are finding that these models do not provide the speed or flexibility needed to implement large-scale technology changes, nor do they respond to the demands of large private sector partners.

Private sector partners, especially large technology companies, are instead looking to develop partnerships with national public institutions. Public-private partnerships are not uncommon in large-scale, long-term government infrastructure projects like roads or hospitals, where the private enterprise provides funding for the construction in exchange for operating profits for a period of time.
Private sector partners have engaged with international agencies and donor organizations to find partnerships for technology projects in donor-supported countries. Public-private partnerships can support rapid deployment of new technology that aligns with commonly used software systems in a country, increasing usability and familiarity for users. Increasingly public-private partnerships are being used in the development context. The United Nations Office on Drugs and Crime (UNODC) has used public-private partnerships to improve the lives of vulnerable populations by focusing on specific industries such as fighting to combat human trafficking and exploitation.44 UNDP regional hubs promote procurement models that centre rule of law priorities in the development process.45 Public-private partnerships may include justice-related projects such as large-scale digitalization, or specific projects such as case management systems and virtual court proceedings. In the justice system, public-private partnerships have been used in some countries to build and operate prisons.

Reliance on conventional procurement models in e-justice projects can result in human rights, rule of law and access to justice risks. Private operation of justice-centred infrastructure, such as prisons, has been criticized in the past for breaching human-rights and safety protections for inmates because private sector companies are not bound by the same ethics or rules as governments.46 In the technology context, there are similar concerns about the protection of vulnerable individuals or those unable to pay for services. Private sector partners may want to charge fees or sell data to increase profits, creating potential access to justice implications for those unable to pay. A private technology developer can charge fees every time a public institution needs to alter or update a system, creating a long-term expense. Public-private partnerships may be perceived as corruption or cronyism, creating the perception that the justice system and its decisions cannot be trusted. Public-private partnerships may result in private companies having access or ownership of personal information, which could lead to privacy breaches or the sale of the personal information.

As these examples demonstrate, well designed procurement is a significant component of e-justice projects, used for hiring expertise in the design, user-testing stages, securing software or hardware and in the developing, monitoring and operation of digital technologies. Procurement and partnerships in the technology sector present interesting challenges to procurement offices.47 The long-standing emphasis on the lowest price for a service may not be the most important criteria in the selection of a technology provider. Instead, rigorous scrutiny of data security and contractual protection on the control of legal data is paramount.48

The procurement process itself is an opportunity to embed human rights, access to justice criteria and to ensure that transparency, privacy and data protections shape the relationship between public institutions and private sector partnerships.

UNDP staff bring rights respecting expertise to the design and review of the procurement process, as well as to the design of the technology itself.49 Early collaboration with procurement teams and reliance on procurements standards50 allow e-justice projects to leverage digital transformation into long-term, sustainable development.

50 For example, the Open Contracting Partnership model, Yevhen Hrytsenko, How one data team is rooting out procurement corruption in Kazakhstan, 2021. Available at https://www.open-contracting.org/2021/09/20/how-one-data-team-is-rooting-out-procurement-corruption-in-kazakhstan/
SECTION TWO
Specific Technologies

Artificial Intelligence and Machine Learning

Artificial Intelligence, or AI, and machine learning refer to processes where an algorithm applies patterns from data or past processes to future cases or situations. These processes harness computation power to generate faster results or to predict or recommend outcomes. Machine learning is a process of an algorithm building up its base of data by incorporating past decisions or data trends. Human operators may then review and correct the system’s interpretation of the new data until the algorithm produces the same results as a person would. This is then used to generate predictions or recommendations in new cases. AI integrates the results of an algorithm with other predictive technologies.

TERMINOLOGY

An **Algorithm** is the mathematical logic or formula behind a system that performs tasks or makes decisions. It applies new data using the same formula, to predict a future result or to suggest a course of action.

**Machine learning** is a computer system that can learn and adapt without following explicit instructions by applying algorithms and statistical models to analyze and draw inferences from patterns in data.

**Automated decision-making** is when decisions are made using a predictive algorithm.

**Artificial Intelligence** is an umbrella term for a wide range of methods and tools, including machine learning, facial recognition and natural language processing that are developed with a combination of technical approaches, social practices and industrial power.

AI is being used in all aspects of public life. It is both the prominent technology in some innovations and an unseen component of others. Unlike other kinds of technologies, AI automatically evolves with use, requiring rigorous attention to its design, implementation and ongoing use. As one commentator observed, “Data issues and choices are endemic to every aspect of an AI or algorithmic system” and each of these choices bring opportunities and consequences in the justice system. Countries and global institutions are adopting guidelines to govern the use of AI to bring an ethical framework to the development and adoption of AI.

Example:
In criminal cases, an algorithm recommends a sentence based on analysis of all similar cases stored in the digital data set. A judge decides whether to follow the recommendation or adjust it based on the case.

Impact:
Sentences are consistent over time and between judges, providing predictability and increased public trust as they see everyone treated the same regardless of class, race, gender or other aspects of their identity.


52 For example, UNESCO, Recommendation on the ethics of artificial intelligence, November 2021. Available at https://en.unesco.org/artificial-intelligence/ethics
USE IN LEGAL SYSTEMS

AI and machine learning is in use in a wide array of legal settings, including:

- determining eligibility for government benefits or housing
- assessing the risk of current or future harm to a child in a family law or child protection case
- assessing the risk of future abuse in cases of gender-based violence
- identifying cases that may be part of a pattern of gender-based violence
- predicting whether students are at high risk for school-related violence
- predicting where crime will occur or who will be involved
- recommending immigration eligibility
- assessing the suitability of releasing someone on bail
- recommending a sentence for a criminal accused, including assessing the risk of recidivism
- online dispute resolution for private matters (e.g. eBay) and civil matters
- recommending parole eligibility or conditions
- predicting the case timeline and identifying suspicious delays
- populating decision templates

AI tools are used for mass adjudication in private companies, tribunals and agencies that make decisions that affect groups of people, such as benefits or taxation agencies. This involves case clustering (grouping cases together to improve case processing), triaging (accelerating appeals based on their likelihood of success) and quality assurance (analyzing draft decisions against a set of indicators). Machine learning and AI is used to generate pre-drafted judgment templates for judges, predictors for bail, sentencing and financial calculations that lawyers and judges can use when preparing settlement offers or decisions. AI is used to give the public a prediction of case success, including assessing the outcomes based on the performance of prosecutors and judges. AI has been integrated into gender focused projects to identify trends in judicial processes and flag cases of violence for urgent hearings. Machine learning of case management data has been used to develop time-to-trial guidelines and identify cases that may be delayed because of corruption.

DATA/PRIVACY IMPLICATIONS

Algorithmic tools raise privacy concerns when they are based on or access personal information. It can be difficult to tell how much data is accessed and how it is used. However, there are increasingly better software protocols and protections to scrub personal information from the data fed into machine learning.

PROPRIETARY IMPLICATIONS

AI and machine learning is generally developed by private sector companies, either as a proprietary tool or a public-private partnership. The algorithm is often owned by the private company that has the expertise and capacity to continuously evolve the tools. Private sector companies may also then own the aggregated data. This creates risks that public institutions will not have full control or visibility over their own data, process or outcomes, or the company may sell the data as part of an AI system sold to another court or used for other purposes. The opaque nature of the technology creates the risk that bias will be imported from source data into the AI system when it is shared with another jurisdiction.

There is limited regulation of AI tools. Rigorous contractual agreements are required to ensure that private sector companies will comply with the security, privacy and legislative requirements, share all legal system data and are both prohibited from and unable to sell the data or breach privacy rights.
ACCESS TO JUSTICE IMPLICATIONS

AI tools can be used by lawyers and parties to predict case results. However, the tools are not equally available to both sides of a case. For example, in the criminal justice system, frequently only the prosecutor will have access to an AI predictor. Litigants in civil cases might be able to pay for a prediction of their likely case result, giving them more information about how to use their time and money. This may create an inequity for low-income individuals. Access to these tools is limited for those who live in rural, remote, or other places in which there is low internet penetration.

HUMAN RIGHTS IMPLICATIONS

In principle, algorithms produce an objective result, generated from a mathematical formula. However, in practice, the quality of the data set, including biases or information gaps, has a direct effect on the quality of the algorithmic prediction. If the data is biased, so will be the prediction. This has been shown to have negative results for racialized people in bail decisions in the US where the algorithm was trained using previous decisions. AI embedded racial bias from human decision-makers into the algorithm. In fact, embedded bias can be harder to identify and challenge because the automated decision appears neutral or objective or aligns with an expected result. Women may face similar implications when the data set does not contain gender-disaggregated data. Analysis of the impact of legal decisions on the LGBTI+ community, as well as refugees and religious minorities, will not be reflected in the historic decision data set if their rights have only recently been adjudicated by the courts. Socio-economic bias may also be taught to the algorithm and then be replicated in the AI predictions.

These concerns may be amplified by the social understandings and biases of the technology developers working with the data and teaching the algorithm if they do not have specialized expertise in human rights and justice administration. The European Commission released a new set of guidelines in 2021 proposing rules for the development of AI to meet high standards and build public trust. This kind of principled design of AI allows for human rights protections to be a central concern in the machine learning process.

AI also presents significant risks if judges accept predictions about recidivism or decision-makers accept predictions of immigrant and refugee compliance as if these predictions are credible evidence. It is difficult to assess how much weight a judge gives to a trend analysis compared to the testimony and evidence presented in a hearing. Racial and gender profiling, a long-standing human rights concern, may be more difficult to challenge and may become more common if judges who do not have a particular bias themself, accept the algorithm prediction without realizing that it is based on a biased data set. AI tools may be a useful to identify and call out decision-making biases towards particularly vulnerable populations in geographic regions by tracking and analysing prosecution or decisions trends. Systemic delays and barriers to justice experienced by specific demographic groups may be easier to substantiate. AI tools can be trained to identify patterns of abuse and alert judges, prior to decision-making or sentencing, to previous police and judicial involvement that could point to heightened risk of violence for women and other victims.

RULE OF LAW IMPLICATIONS

AI monitoring of case progression and the time-to-trial can be used to trigger alerts when a case has been delayed. This flag for potential bribery or sextortion both narrows the opportunities for corruption and creates an opportunity for early intervention. AI predictions in sentencing may produce greater consistency across similar decisions reassuring people of both the fairness of the result and increasing confidence and predictability of judicial decisions. Conversely, algorithms developed to support decision-making are not easy to understand by litigants or decision-makers. When a judge cannot explain the basis for their decision, it undermines public confidence and


transparency in the process. The lack of regulation of the development of these tools may be a challenge to trial fairness. Judges, while fallible and able to make biased or corrupt decisions, are able to use their discretion to reflect the facts presented. Judges and decision-makers frequently depart from the typical decision or sentence because of the circumstances of the parties. This discretion brings a human assessment into the process that is not evident in AI and may result in more rigid decision-making.

Artificial Intelligence Case Study

THE PROJECT:
National Council of Justice’s Artificial Intelligence System (Brazil)

THE CHALLENGE
Applying AI tools to address backlogs and to identify trends in judicial processes that disproportionately impact vulnerable communities.

THE E-JUSTICE INITIATIVE
Starting in 2018 the Brazilian National Council of Justice worked with UNDP and other partners using the Innovation Facility Fund to develop the AI Tool. The pilot AI tool was developed to analyze backlog trends in a number of regional courts or courts dealing with different types of cases.

Data from 2.9 million cases was cleaned and entered into the system and then analyzed. Recommendations were generated for improved delivery of justice services as well as for expansion of the project.

Now that the data has been collected and scrubbed, the Justice 4.0 initiative is focusing on how the algorithm can be used to identify trends and patterns to flag cases of femicide or track patterns in case processing and delay that may disproportionally affect women. This use of AI to identify equitable treatment with the courts and to streamline cases offers the possibility of preventing injustice.

Identifying cases involving violence against women and children can be scheduled quickly to address risks of escalating violence.

Facing a backlog of 78 million cases, Brazil’s judicial system has been struggling to process cases and meet demands. The National Council of Justice is responsible for coordinating judicial policy in Brazil, including the facilitation of 92 courts now using AI in their administration. After the UNDP-supported pilot initiative, the National Council of Justice has developed AI applications through the Justice 4.0 initiative. Courts across the country now use AI for a wide range of purposes from assessing case complexity or threshold eligibility or grouping similar cases that can then be heard at the same time. Machine learning is being applied to case management timelines to optimize scheduling, processing and the use of judicial resources.

Cases brought by vulnerable groups, particularly women, can be fast-tracked based on AI identification, to address high risk situations.

GOOD PRACTICES
• Judicial ownership of the data protects personal data and judicial independence.
• Development of algorithms based on large numbers of cases decreases the impact of case anomalies, or regional or individual bias.

LESSONS LEARNED
Longer periods of development, including commitment to sustained investment, are needed to test and revise the technology.

Piloting the project at an early stage provided the opportunity to improve the approach before applying it to additional regions or court contexts.

The success of the tool has led to additional demand and ideas for improvement and adaptation of the tool to new contexts. Early anticipation of and budgeting for these new ideas will allow for meaningful application of AI to learn about and address the needs of vulnerable users.

Judicial leadership and collaborative regulation and oversight can balance rule of law concerns with efficiency goals.

Impact
The use of AI is reducing delays by sorting case files, allowing court staff to focus on urgent cases and streamlining the human processing of common types of cases.

The algorithm trained on a large base of Brazilian case law is now able to screen cases based on urgency, complexity and patterns, allowing the court staff and the judiciary to make strategic decisions about limited resources.

Cases brought by vulnerable groups, particularly women, can be fast-tracked based on AI identification, to address high risk situations.

Digital Case Management

Digital case management systems are partial or complete digital platforms for handling case forms, scheduling, logistics, evidence handling, and decision publication. Some include digitization of forms into online forms, or the hybrid use of paper and digital files. Others are comprehensive systems that create a single repository of electronic forms and evidence, linking case handling and scheduling through a common platform with secure access to different players including lawyers, police, judges, interpreters, and court staff.

Case management systems can include a public access component that allows people to start a case, file documents or send and receive documents to the other parties through the court platform. These functions may be a built-in component of a case management system or may result from the integration of a distinct e-filing platform.60

Example:
Financial documents in a divorce proceeding are shared through an online portal. As soon as a verified form is uploaded, all parties are notified and have access to the same information.

Impact:
All the parties have equal access to the evidence in advance. This particularly assists women who are statistically less likely to have a lawyer and may not have access to shared financial records. This portal also eliminates the need for the parties to serve the documents on each other, reducing incidents of conflict or violence.

TERMINOLOGY

Online forms are typically a digital version of the historically used court forms for starting a case or filing specific pieces of evidence or information. Online forms are often linked to financial records or other common kinds of evidence. In complex case management systems, the platform will share verified documents with the parties, ensuring that everyone has fast, reliable copies of all the forms and evidence without requiring personal service.

Differentiated access is a way for case management systems to create password protected access to some parts of a court file. Lawyers might have access to just the documents the parties have filed, while police would only have access to their own investigation and any enforcement materials. The media might only have access to public documents and the decision while the judge and court clerk can access the whole file.

USES IN LEGAL SYSTEMS

Electronic case management is in use in many court and tribunals for:

- Online forms
- Online evidence portals
- Systems for applying for variations in child support or other financial payments
- E-disclosure of state or police evidence
- Case scheduling platforms linking lawyers’ and the judges’ calendars
- Case handling timelines and automated steps to progress the case
- Evidence tracking and storage
- Digital transcript storage

Electronic case management systems increase efficiency by allowing the parties to input their information only once and saving court staff from repetitive form completion.61 This reduces human errors and links all the documents to the case file, reducing delays resulting from missing paperwork. Automated disclosure of police investigations and sharing of the documents filed by each party improves speed and consistency and removes the requirement for direct contact with the people who are in conflict in a case.

Case management systems allow for data collection of both specific case information and aggregated data about the issues and speed of case resolution.

---


Digital access is more convenient for judges and lawyers during disruptions like a global pandemic, facilitating continuity of justice services.

DATA / PRIVACY IMPLICATIONS

The security of electronic case management systems is a serious concern. Legal documents can include private personal details, such as identity, financial or medical records, immigration status, and the traumatic details of violence, abuse and discrimination. These records must be secure from public or media access, from hackers and from access by other agencies or government bodies.

The state is a party to many kinds of court actions including criminal, child protection and immigration cases. Court files must be completely segregated from all government departments, not only to protect citizens’ privacy, but also to provide public confidence in the independence of the judiciary when the government is a party in a case.

PROPRIETARY IMPLICATIONS

The development of electronic case management systems requires sophisticated programming and tech development skills – skills rarely found within court staff. It is common to contract a private sector company to develop the case management platform. The company might also be retained to administer the system long-term. Alternatively, a tribunal or court might purchase a case management system that has already been developed. In each of these situations, careful attention to the data and privacy provisions in the contract are critical to whether the system poses privacy risks to public users or to court staff and judges. Many governments do have in house programmers and software developers who could be engaged in the design of e-justice that is both rights respecting and cost effective.

Robust security systems, updated often, are needed to protect against the constantly evolving risk of hacking.

ACCESS TO JUSTICE IMPLICATIONS

Online portals are not dependant on courthouse hours or staffing levels. People can access them outside of work hours or without arranging childcare or travelling to the courthouse. Individuals can often start a court process or submit documentary evidence without the assistance of a lawyer, reducing the cost of legal resolutions. The automated sharing of documents related to the case is more accessible and avoids litigants having to pay to receive or validate duplicate copies.

Electronic court management systems can be built to be more accessible for people with disabilities by integrating adaptive technologies. When documents can be read and completed using adaptive technologies, people with disabilities have more autonomy over their legal issues and do not have to depend on a court staff or support person to interpret the documents accurately. Similarly electronic documents can be more easily translated in multiple languages.

Automated scheduling, court reminders and prompts for required filings can make it easier for people to understand the progression of their court case, attend court or hearings when required and meet deadlines.

HUMAN RIGHTS IMPLICATIONS

Case management offers a system for identifying patterns in delays or court processing that may reveal patterns in human rights abuses. Human rights defenders can use case management data to identify trends in caseloads, court processing and the needs of people making human rights claims within the court system.

RULE OF LAW IMPLICATIONS

The accessibility of electronic case management can increase people’s confidence in the legal system by making the steps in the process more transparent and automating the equal treatment of all the parties.

The online submission of documents like financial records, while more convenient, can present verification challenges for the court. Sophisticated data handling is required to ensure that evidence cannot be tampered with and that judges are confident that the documents are reliable.

Digital Case Management Case Study

THE PROJECT:
Sawasya’s Mizan II comprehensive digital case management system (Programme of Assistance to the Palestinian People (PAPP))

THE CHALLENGE
Develop secure, flexible, comprehensive digital case management that provides role-specific access to legal professionals and accessible public access, with integrated data collection and analysis capacity, which can connect the entire court system.

THE E-JUSTICE INITIATIVE
Initially developed for criminal courts, Mizan II is the centralized case management database supporting all courts including family / Sharia courts, traffic court, municipal courts and military courts. The Mizan II system is owned by the Palestinian High Judicial Council and is supported by UNDP. Mizan II started in 2006 and has continued to evolve, adapting to changing needs and new technologies while still maintaining its core services. Initiated by the Chief Justice, with senior level commitments from the major justice institutions, the project started as electronic case files accessed by judges and expanded to include court staff access and eventually online filing and role specific access by lawyers, police and other officials involved in a case. Now a comprehensive digital case management system, Mizan II facilitates exchange of case documents to lawyers and accessed by judges. If a case is appealed, the file can be moved seamlessly between levels of court and public prosecutors. Integrated case scheduling enables easy planning around judicial and lawyer schedules and the allocation of resources like courtrooms and interpreters.

Enforcement documentation, filing and monitoring has been added, providing a consistent management of a case from start to finish. Warrants, notary public services, and judgements are integrated with the case file ensuring that judges and court staff have access to authenticated documents. These functions of the Mizan II system are all accessible by mobile phone through Apps.

In its current phase, Mizan II has added public-facing e-services that allow lawyers to file their court documents and communicate with the parties. Lawyers have easy access to case data without having to go to the courthouse, improving client service and avoiding delays. E-notification features provide alerts to the parties, lawyers and police about upcoming dates or developments in the case.

Data is collected about each case and automatically compared to similar cases, identifying deviations from typical case timelines. These typical timelines were established by analyzing case complexity or assessing threshold eligibility. The timelines are used to flag cases where undue influence or delays by one of the parties is affecting case fairness or access to justice. Data held in the system is available in real time to authorized users including judges and court staff, providing transparency and allowing staff to share up-to-date information. Data analysis examines gender and equality-based concerns and has been used to support system reform to protect women and girls and to build an evidence base for justice reform. Aggregated data about legal needs is shared with the bureau of statistics and justice sector decision makers, facilitating planning for new services and reliable data about access to justice.

Data collected in the Mizan II system is held separately from other databases and in cannot be accessed from outside the system. A secure storage system behind high-security firewalls protects people’s personal data.

IMPACT
Mizan II is now the engine behind the operation of courts, providing reliable, efficient and trusted case handling. Lawyers who originally resisted the new process are now asking for more services to be integrated in the Mizan II. Court staff have adapted to the inputting processes and appreciate only entering data once.

The system now generates sophisticated insights about access to justice needs and justice administration that is driving system reform, with a development and rights respecting lens which opened the way to developing a comprehensive e-justice system.

GOOD PRACTICES
• Mizan started with user-centred design, focusing on how people do their work and analyzing the business processes involved at each step of a case. Opportunities for linkages, efficiencies and automation were identified.
• Risk and security issues were analyzed at the design stage, and repeatedly evaluated throughout the evolution of the system.
• Technologists and programmers were hired internally to design the system instead of contracting out the design process. This expertise has been retained within the project for over ten years.
• The system is open-source and designed to be shared, with no proprietary barriers or costs.
• The project focused on analyzing the system and writing code, not on purchasing off-the-shelf solutions or new hardware that quickly becomes outdated.
• Long-term funding and support commitments have been secured at key points in the project development. UNDP has expanded its role over the 15 years of the project rather than a 3-5 year cycle common with technology projects.
• Human resource and training needs were identified early in the project and implemented throughout, exposing judges and staff to the new system and building the capacity of institutions to use and contribute to it.
• While not developed as a performance management tool, data from the system is now being used to monitor and address performance standards within court staff, increasing transparency and accountability and strengthening judicial independence.

THE PROJECT:
Sawasya’s Mizan II comprehensive digital case management system (Programme of Assistance to the Palestinian People (PAPP))

THE CHALLENGE
Develop secure, flexible, comprehensive digital case management that provides role-specific access to legal professionals and accessible public access, with integrated data collection and analysis capacity, which can connect the entire court system.

THE E-JUSTICE INITIATIVE
Initially developed for criminal courts, Mizan II is the centralized case management database supporting all courts including family / Sharia courts, traffic court, municipal courts and military courts. The Mizan II system is owned by the Palestinian High Judicial Council and is supported by UNDP. Mizan II started in 2006 and has continued to evolve, adapting to changing needs and new technologies while still maintaining its core services. Initiated by the Chief Justice, with senior level commitments from the major justice institutions, the project started as electronic case files accessed by judges and expanded to include court staff access and eventually online filing and role specific access by lawyers, police and other officials involved in a case. Now a comprehensive digital case management system, Mizan II facilitates exchange of case documents to lawyers and accessed by judges. If a case is appealed, the file can be moved seamlessly between levels of court and public prosecutors. Integrated case scheduling enables easy planning around judicial and lawyer schedules and the allocation of resources like courtrooms and interpreters.

Enforcement documentation, filing and monitoring has been added, providing a consistent management of a case from start to finish. Warrants, notary public services, and judgements are integrated with the case file ensuring that judges and court staff have access to authenticated documents. These functions of the Mizan II system are all accessible by mobile phone through Apps.

In its current phase, Mizan II has added public-facing e-services that allow lawyers to file their court documents and communicate with the parties. Lawyers have easy access to case data without having to go to the courthouse, improving client service and avoiding delays. E-notification features provide alerts to the parties, lawyers and police about upcoming dates or developments in the case.

Data is collected about each case and automatically compared to similar cases, identifying deviations from typical case timelines. These typical timelines were established by analyzing case complexity or assessing threshold eligibility. The timelines are used to flag cases where undue influence or delays by one of the parties is affecting case fairness or access to justice. Data held in the system is available in real time to authorized users including judges and court staff, providing transparency and allowing staff to share up-to-date information. Data analysis examines gender and equality-based concerns and has been used to support system reform to protect women and girls and to build an evidence base for justice reform. Aggregated data about legal needs is shared with the bureau of statistics and justice sector decision makers, facilitating planning for new services and reliable data about access to justice.

Data collected in the Mizan II system is held separately from other databases and in cannot be accessed from outside the system. A secure storage system behind high-security firewalls protects people’s personal data.

IMPACT
Mizan II is now the engine behind the operation of courts, providing reliable, efficient and trusted case handling. Lawyers who originally resisted the new process are now asking for more services to be integrated in the Mizan II. Court staff have adapted to the inputting processes and appreciate only entering data once.

The system now generates sophisticated insights about access to justice needs and justice administration that is driving system reform, with a development and rights respecting lens which opened the way to developing a comprehensive e-justice system.

GOOD PRACTICES
• Mizan started with user-centred design, focusing on how people do their work and analyzing the business processes involved at each step of a case. Opportunities for linkages, efficiencies and automation were identified.
• Risk and security issues were analyzed at the design stage, and repeatedly evaluated throughout the evolution of the system.
• Technologists and programmers were hired internally to design the system instead of contracting out the design process. This expertise has been retained within the project for over ten years.
• The system is open-source and designed to be shared, with no proprietary barriers or costs.
• The project focused on analyzing the system and writing code, not on purchasing off-the-shelf solutions or new hardware that quickly becomes outdated.
• Long-term funding and support commitments have been secured at key points in the project development. UNDP has expanded its role over the 15 years of the project rather than a 3-5 year cycle common with technology projects.
• Human resource and training needs were identified early in the project and implemented throughout, exposing judges and staff to the new system and building the capacity of institutions to use and contribute to it.
• While not developed as a performance management tool, data from the system is now being used to monitor and address performance standards within court staff, increasing transparency and accountability and strengthening judicial independence.
• Gender equality and access to justice for women and girls has been a priority since the beginning, using system data to identify discrimination and gender inequality.
• Data collected through Mizan II is being used to track progress against the SDGs.

**LESSONS LEARNED**

Strong political will of senior decision makers, notably the Chief Justice, was essential to the success of Mizan II.

Cultivating technical capacity within the national entities (courts, ministries of justice) has strengthened the project.

Slow, steady iterative design is important. Learn at each stage and make improvements before moving on to the next stage, even if this changes the original timeline promised to partners and donors.

New systems always face resistance. Plan for a period of change management to allow people to adjust slowly, even if tech developers are ready to roll out improvements faster.

Integrate realistic funding expectations into the project including both the scope of the budget and an awareness of the long-term costs. Donors can be asked to commit to an iterative implementation timeline with key milestones. National partners must expect hardware upgrades and staff training and transition costs beyond the initial donor investment.

**OPPORTUNITIES**

Within Mizan II:

The system continues to evolve, currently adding e-payment capacity and developing self-serve kiosks and mobile apps to expand the accessibility of e-services. A group of 12 justice institutions has endorsed an e-justice matrix and roadmap for implementing 19 different e-services as part of a long-term vision of a shared justice portal to deliver legal information and access.

The initiative is currently exploring the possibility of using biometric data to access the system, providing an additional level of security.

Within the Region:

The monitoring framework, based on reliable data, is effectively documenting both justice administration outcomes and rights-based outcomes. This system can be shared or replicated in other countries. The design and technology capacity can be built up at the regional hub level to guide e-justice design and implementation.

Mizan II is a very strong digital case management system. The Palestinian High Judicial Council has committed to UNDP replicating the system in other countries, starting with those using an Arabic interface. Mizan II is considerably more effective, comprehensive and user-centred than most digital case management systems. It has SDG and human rights monitoring built into the design. It can be replicated through UNDP Country Offices. The expertise and lessons learned by the UNDP team should also be shared across the UNDP system. To that end, the Mizan II team has offered its expertise.

Palestinian officials, often donor recipients, are now able to share their expertise. There is an opportunity to showcase the system within the region, shifting the narrative of its justice system leadership and benefiting more court systems.
Virtual and Remote Courts

Virtual or remote courts, sometimes referred to as e-courts, include hearings held partially or completely online. Virtual courts can be held through virtual platforms with the judge, lawyers, witnesses and parties all appearing by video. Court processes can also be a hybrid of in-person and virtual with some witnesses or experts appearing online while others appear in-person.

Remote courts can also be modified versions of court processes, delivering justice in rural and remote locations. Mobile courts use community centres and other facilities as temporary courthouses or as a location for some parties to connect to distant courthouses.

TERMINOLOGY

Virtual court proceedings, also referred to as remote courts or remote hearings, include video hearings and video-access to in-person courts, such as for incarcerated litigants, vulnerable witnesses and experts.

Example:
A secure court portal is set up in a community centre in a remote community. Witnesses and parties can appear easily, without travelling to a major centre for major court events.

Impact:
The court process is more accessible to people isolated by geography and economics. This kind of portal can also be used to let people meet with a lawyer or legal aid service.

USES IN LEGAL SYSTEMS

Elements of virtual court proceedings include:

- video or telephone appearances in court by incarcerated litigants from prison
- video appearances in court by vulnerable witnesses, from another location either inside or outside the courthouse
- telephone appearances by litigants or lawyers for motions, pre-court matters and scheduling discussions
- video or telephone appearances by litigants when weather, health or distance prohibit in-person appearances
- public and media viewing of courtroom proceedings
- hearings involving parties and judicial officers in different locations or jurisdictions
- completely virtual courtrooms with all parties and staff participating from different locations
- crisis-based temporary capacity to hold court virtually (pandemic, earthquake, etc.)
- virtual appearances from remote/rural areas
- virtual hearings for multi-country disputes

The COVID-19 pandemic and resulting lockdowns accelerated the need for virtual courts. Entirely virtual courts, in which no one, including the judge, is present in the courthouse became necessary, shifting the traditional concept of a virtual appearance away from one individual in an otherwise in-person courtroom.63
The typical virtual court concerns, including the security of the technology, the quality of a court process, and testifying in an online setting, were all tested as courts rapidly adopted available technology in order to avoid delays in administering justice.\textsuperscript{64,65}

**DATA / PRIVACY IMPLICATIONS**

Some virtual platforms are not secure or immune to hacking and proceedings could potentially be recorded by outside parties, leading to concerns about the privacy and safety of vulnerable litigants. Particularly in the rush to move online during the COVID-19 pandemic, many trials or hearings were heard on private sector platforms without full investigation of their security protections. Storing the recordings of virtual court hearings presents both security and storage challenges.

**PROPRIETARY IMPLICATIONS**

Courts have traditionally been reticent to use off-the-shelf technology, causing delays and challenges in procurement processes. The pandemic disrupted this trend and courts embraced readily available means of video appearances, such as Zoom, Skype and Microsoft Teams. While this enabled faster adoption, the long-term implications and security concerns related to these products has not necessarily been assessed.

**ACCESS TO JUSTICE IMPLICATIONS**

Virtual hearings may not be available to those who live in rural or remote places where internet is either not available or not stable enough for video connections. Access to virtual hearings require a computer or device with a camera and processing speeds sufficient for sustained use of video. The parties must be comfortable with the platform, as well as digital tools and processes.

Virtual courts allow people to appear without traveling to distant courthouses or missing work or other obligations to attend court. This technology, in combination with other supports, may increase the ability of isolated individuals (women in abusive or controlled environments, people with disabilities, linguistic minorities) to participate in justice proceedings.

**HUMAN RIGHTS IMPLICATIONS**

Virtual hearings can be used to facilitate the participation of people who are at risk of violence, political persecution, or trauma. Testifying from remote locations allows for full participation by those who might be in danger in a public courthouse. The flexibility to have some or all witnesses testify remotely gives the judge a way to manage the impact of the trial process on everyone in the case to protect vulnerable witnesses from harm while also ensuring procedural rights and due process. These protections can be particularly important for LGBTI+ people, political activists, refugees and displaced persons and members of the media.

**RULE OF LAW IMPLICATIONS**

The ability of courts to function beyond the courthouse ensures the continued provision of justice services and decision-making during a time of crisis,\textsuperscript{66} maintaining continuity of essential services in areas such as housing, poverty, incarceration, and those seeking refugee protections.

The use of video technology may not be suitable for every type of proceeding. When the judge cannot assess the demeanor of the witness and whether they are alone, it is difficult to both protect witnesses and to assess the credibility of testimony. Some vulnerable witnesses may feel safer testifying from outside the courtroom, and in other cases the witness may be vulnerable to threats and intimidation by someone else in the room who is not visible to the judge.

Virtual hearings present challenges for different kinds of evidence. A witness who refers to a document or a lawyer who points to physical evidence does so on their own screen. Additional protocols are required to secure and verify these before there are admitted as evidence. The variable quality of the video feed of each of the parties exacerbates this challenge as some people can consistently see and hear the proceedings while others may struggle or be disconnected.


\textsuperscript{65} Andrew Valentine and Sara Andrews and others. Providing legal services remotely: a guide to available technologies and best practices, Open Society Justice Initiative; the Legal Empowerment Network; a global network convened by Namati; and New Perimeter, 2021. Available at https://namati.org/resources/providing-legal-services-remotely-guide-2021/

Virtual Courts Case Study

PROJECT:
Mobile Court of Sabah and Sarawak (Malaysia)

THE CHALLENGE
Delivering access to justice in remote areas without the physical or technological infrastructure for traditional courts.

THE E-JUSTICE INITIATIVE
The court recognized the need to bring justice into the rural areas of the country by finding a new way to deliver justice services. The project started in 2007 as a mobile court, with a magistrate travelling to remote Indigenous communities. However, these visits did not include all the services of a courthouse.

Starting in 2011, under the leadership of the Chief Judge of the court, the mobile court model evolved by building a bus equipped with satellite connection and information technology (IT) apparatus that could offer all the registration and filing services of a courthouse, digital case management, a recording system, integrated technology and live satellite links.

The mobile court clerk visits a village in advance and schedules the mobile court visit. The date of the mobile court is advertised locally on radio and in newspapers.

When the mobile court arrives, a clerk, a Magistrate, a Commissioner of Oaths and an interpreter travel to the community. In addition to hearing family and criminal cases and dealing with probate issues, the mobile court registers births, marriages, deaths and provides other identity-based documentation that allows people to register for school, vote, enroll for government services and assert their rights.

The mobile court model now includes four-wheel drive vehicles and longboat or fly-in transportation to bring full magistrate court services to communities that are geographically isolated.

Government ministries have recognized the effectiveness of these periodic visits to remote communities and often attend at the same time, helping with government forms and applications. The magistrate provides assistance navigating government services or gives legal advice on land and matrimonial matters.

In 2020 the current Chief Justice announced plans to replicate the project in urban areas to reach impoverished communities that are unable to access legal services or register vital statistics.

IMPACT
In addition to delivering access to justice in remote areas, the mobile court model has facilitated the registering of thousands of previously unrecorded births of children and of adults who were never registered, allowing for subsequent receipt of government education, health, and social services and addition to the voter registry.

Court proceedings and filings are reliably uploaded, and hearing proceedings are recorded in the secure online case management system.

The magistrates attending with the mobile court are learning about and responding to the access to justice needs in remote areas and offering legal advice in areas with no legal service providers.

The model was showcased at a UNDP Access to Justice colloquium in 2020, expanding knowledge of the model and its benefits to remote communities.

GOOD PRACTICES
• Include interpreter services as a standard and critical component of formal justice participation
• Embed technology and communications capacity into the mobile court model to allow the court to deal with unanticipated legal issues
• Use the event of the mobile court as an opportunity to enroll people in other government programmes
• Empower the magistrate to give legal advice and assist with basic legal tasks on behalf of an individual

KEY LESSONS
The leadership of the Chief Judge, driven by a commitment to “Justice for One and All” was key to adapting and expanding the services. Judicial leadership allowed the mobile court to learn from its early operations and expand the services.

The mobile court model is designed around the needs of a historically underserved community, not on replicating the process or traditions of a conventional courtroom. This shift in design focus allowed the mobile courts to provide responsive, trusted services.

The mobile court model needed to solve both technology and transportation obstacles. Building a small pilot, testing and learning from the early versions of the mobile court facilitated the adoption of more IT and satellite technology as well as transportation avenues for even more remote communities. The results of early mobile court visits were the basis for funding and support requests and demonstrated the unmet legal needs of Malaysia’s Indigenous and remote communities.

OPPORTUNITIES
The mobile court model can be a tool for facilitating participation in legal cases by witnesses or parties who cannot get to the courthouse, using the satellite technology to allow someone to testify in an appellate court or courtroom in the city from the mobile court.

The court has begun to look at the value of the mobile court model to reach communities isolated by poverty, language and education within towns and cities. Even where geography does not create a barrier, the lack of access to technology and internet continues to exclude many people. Adaptation of the mobile court model with integrated IT and communications capacities within urban areas will meet another access to justice need.
Online Dispute Resolution

Online dispute resolution includes a range of online adjudication platforms that provide AI-driven decisions, automated decisions, or human decision-makers working within an online platform.

TERMINOLOGY

**Online dispute resolution** is a public-facing digital space in which parties can resolve legal disputes, share documents, and get a decision online. Online dispute resolution may include algorithmic decision-making, human decision-makers working with parties through an online structure, chat-based mediation, or guided pathways for litigants.

USES IN LEGAL SYSTEMS

Online dispute resolutions systems vary widely and can include:

- Private sector arbitration systems
- Consumer disputes with retail stores
- Transactional disputes for online purchases (eBay, PayPal)
- Disputing traffic ticket
- Small claims court
- Neighbour disputes
- Negotiating debt payments
- Landlord-tenant disputes
- Child custody and support agreements
- Trading platforms

Online dispute resolution systems were pioneered in the private sector to arbitrate commercial disputes between businesses or to resolve disputes between consumers on online platforms like eBay or PayPal.

Online dispute resolution is expanding in the court context from traffic citations and debt collection into more complex cases, such as small claims, civil and landlord tenant cases. Online dispute resolution can provide a complete resolution model that is not connected to a court. Online dispute resolution can also be used in family law disputes, including claims to property or support as well as child custody and access decisions.

Example:

People involved in disputes with their neighbours can provide details in an online portal to produce a letter to a neighbour attempting to resolve the issue. If unsuccessful, the other party can respond through the AI portal, which will then recommend a result. If the parties are happy, the case is closed. If not, it can be referred to a human mediator.

Impact:

People have support to deal with day-to-day legal disputes even if they can’t afford a lawyer. Court resources are preserved for more serious cases.

DATA / PRIVACY IMPLICATIONS

Online dispute resolution uses algorithmic tools that have access to personal information, raising the same data and privacy issues as AI and machine learning technologies.

PROPRIETARY IMPLICATIONS

Online dispute resolution tools are often owned and operated by private sector companies that have the expertise and capabilities to develop, evolve and maintain these systems. Online dispute resolution systems need to be developed with strict contractual and regulatory protections preventing private company ownership or sale of aggregated data.

---


68 British Columbia Civil Resolution Tribunal. Available at https://civilresolutionbc.ca/
ACCESS TO JUSTICE IMPLICATIONS

The cost of the development of online dispute resolution systems may be passed on to the users, creating potential access to justice implications for those unable to pay, including members of vulnerable groups. However, when these systems replace more formal court processes, these user costs are still more affordable than in-person legal representation.69

HUMAN RIGHTS IMPLICATIONS

Dispute resolution based on algorithmic formulas may fail to identify human rights issues or may generate results based on biased data, perpetuating discrimination based on race, gender, age, ability, sexual orientation or other identities if these experiences are not reflected in the decision data that the system relies on.

RULE OF LAW IMPLICATIONS

Algorithmic tools embed the policy decisions of past decision makers, as well as the bias. The algorithmic result proposed by an online dispute resolution provider is treated as an objective result, however, the quality of the data set has a direct effect on the quality of the algorithmic prediction. Hybrid systems of online dispute resolution have an algorithm that prompts the parties through early resolution or evidence gathering, and then switches to a human decision-maker who reviews the material and makes the final decision. If the algorithm has embedded bias, the human decision maker will end up deciding based on an incomplete case file.

The operation of online dispute resolution systems is opaque and may not be understandable to litigants, creating a lack of transparency in the outcome and a lack of confidence in the process.

Apps and Individual User Tools

Many digital tools, whether stand-alone or integrated with e-courts or other platforms, offer direct-to-user legal information and assistance or perform specific tasks for public users. Ranging from automated WhatsApp broadcasts to secure evidence collection, these tools make it easier for people to access and understand legal processes or automate a specific step in a process.

Apps can also be used within justice system operation to facilitate judicial or prosecutorial inputting of data or to automate case processes.

TERMINOLOGY

**Apps** refers to computer software applications, originally developed for mobile or tablet devices, that perform a specific function and can be downloaded and installed all at once.

A **Chatbot** is an AI software program that automates legal tasks by posing questions to users and then directing them to the right resources, support services or court forms based on the answers.

**Guided pathways** are free tools that ask people questions and use the answers to complete court and tribunal forms, or prepare legal documents that can be saved, printed or submitted to court.

**Native language processing** refers to the way AI or computer processing can ask questions and receive answers in common human language forms and then convert it to standardized data inputs, or interpret data outputs into common human language to answer questions.

Example:
A chatbot presents clear, plain language questions to users on a community website. By answering the questions, the user receives basic information about their rights and referrals to psychosocial supports. Based on the answers to the questions, the chatbot populates an online court form and emails it to the user to review and then submit, starting their legal claim.

Impact:
People get assistance filling out simple forms and separating the different aspects of their problem to understand the legal aspects and to get health and wellbeing supports. The chatbot helps people navigate common legal issues, like applying for or appealing benefits decisions or contesting an eviction notice.
USES IN LEGAL SYSTEMS

Apps and Direct to user digital tools in the legal system include:

- Broadcasting decisions directly to the public or the media through WhatsApp and other messaging tools
- Guided pathways to help people identify a legal problem and use the correct form to start a claim
- Chatbots that answer questions from the public and prompt to legal information or referrals to support
- Apps that record police interactions to the cloud as evidence in cases of police complaints
- Interactive websites linking community resources with legal information
- Platforms to upload legal information like financial records at no cost
- Apps used by judges or court staff for remote processing of court files
- Identity verification and documentation tools for displaced and transient people
- Domestic violence and sexual harassment reporting tools designed to be admissible in court and shared with police
- Self-help apps for parties representing themselves
- Native language legal information tools
- Assistance and coaching for self-represented litigants

DATA / PRIVACY IMPLICATIONS

These digital tools range widely in format and structure. In each case, there is the potential for privacy breaches if data is not stored securely or if more information is collected than necessary. If the tool is well designed it can also protect privacy rights by allowing people to get legal information and support without sharing their experience multiple times. Allowing people to ask discrete or anonymous questions lets them confirm their legal rights before reporting an incident.

PROPRIETARY IMPLICATIONS

Some of these tools are developed and owned by courts and public bodies, others by civil society and still others are market-based products owned by private companies. The appropriateness of the ownership structure depends on the purpose of the tool. When direct-to-user tools are designed to let people record abuses by state actors, such as police or other officials, it is important that the platform is completely separate from government. Tools that allow for mass communication directly to the public should use existing platforms that people already have access to, like social media or messaging apps, together with communication options like conventional media sources that do not require subscriptions or memberships.

ACCESS TO JUSTICE IMPLICATIONS

These tools give greater access to people without relying on legal professionals or institutions to get information or take steps in their legal action. This direct access benefits vulnerable communities that do not have access to legal services because of geography, socio-economics, identity, or discrimination. These tools provide access that circumvents discriminatory institutions and individuals.

HUMAN RIGHTS IMPLICATIONS

Specialized tools to record incidences of domestic violence, police abuses or to submit verifiable data about the timing and extent of an attack can particularly benefit women, girls, LGBTI+ people and racial minorities who disproportionately experience violence and underreport these crimes. These tools aim to avoid retraumatizing people during the legal process that often requires them to relate their experiences over and over. Instead, the digital file can be shared with investigators, experts and the court.

Identity verification tools can be used by refugees and displaced people to upload identity and property documents allowing them to establish rights and entitlements, demonstrate status and

---


family connections and access supports, whether domestically or in the international refugee process. Similar tools provide a reliable proof of identification for voting and accessing services, particularly for people who are homeless, do not have bank accounts or evidence of identity. Transgender people can use these tools to track continuity of identity without having to rely on the name used before transitioning.

**RULE OF LAW IMPLICATIONS**

Recording abusive or corrupt interactions with police, public officials or state actors is often risky and impractical. Cell phones are often confiscated by police or border guards. Tools that record interactions on voice command and automatically upload to the cloud create a date stamped, secure recording of violence, bribery or sextortion. Reliable evidence of these abuses of power makes it easier for courts to adjudicate cases and apply anti-corruption laws.

Direct-to-user information from the court, designed for public users, can build public confidence. Courts are publishing decisions, linked to open data registries, on Twitter after first removing any identifying personal information.72

---

**Apps (System-focused) Case Study**

**THE PROJECT:**

*The Justice App (Sierra Leone)*

**THE CHALLENGE**

Providing judicial officers with easy access to Sierra Leone’s case management and the processing of court and correctional files in areas with limited or inconsistent access to electricity and internet.

**THE E-JUSTICE INITIATIVE**

The Justice App is a digital case management and data collection system for Sierra Leone’s courts with data inputting and case tracking by officers in the country’s judicial and corrections institutions. It is a system-focused app that facilitates more effective operation of the justice system.

The App is loaded onto tablets that work on and offline and can be recharged by solar recharging cells, maintaining power and connectivity during court proceedings. Ensuring a tool that is effective regardless of the physical infrastructure has been key in the equitable use of the App across the country.

The Justice App provides judicial case processing and is compatible with the correctional service’s CrimeSync case management, further linking case data and ensuring consistency of outcomes.

The launch of the Justice App included training for 80 judges, magistrates and court staff.

**PANDEMIC ADAPTATIONS**

During the pandemic, when visits to correctional facilities were suspended, the initiative expanded to deliver cell phones to correctional facilities to ensure family visits with inmates. The identification and tracking of this need during the pandemic was enhanced by the relationships and data monitoring resulting from the Justice App initiative.

In April of 2020, after a COVID-19 outbreak led to a riot in a prison with increasing infection rates, justice services were suspended. UNDP worked with the justice system institutions to hold virtual court using the Justice App.

**IMPACT**

The Justice App is gradually moving Sierra Leone’s court system from a paper based to an electronic system. Court staff, clerks and judges can input and access court files. The court has reduced its backlog of cases and through the App provides greater transparency into the judicial process.

The App is fast-tracking case management to reduce the time-to-trial of many types of cases. Data analysis of trends captured through the App are allowing for system wide monitoring and harmonization of bail and sentencing decisions.

The Justice App has built-in data collection and reporting aligned to SDG 16+ and has reduced the opportunities for corruption and delay in paper-based case management systems.

**GOOD PRACTICES**

- Use of tablets is cheap, simple technology that can easily be used without complex infrastructure
- Integration of solar recharging is sustainable and practical
- Integration of data reporting linked to the SDG 16+ reporting by the country

**LESSONS LEARNED**

The literacy and technology comfort levels of civil servants familiar with a paper-based systems are an obstacle to adoption.

Ongoing communication is needed to address resistance to technology, security concerns and skepticism about data management and retention.

Working with judicial and legal training institutes facilitates skills development and integrates the technology usage into substantive training.

---

**THE PROJECT:**
E-Court App (Ukraine)

**THE CHALLENGE**
Ensuring access to court case documentation for individuals in remote settlements, non-government controlled areas, particularly when mobility is limited by conflict or by pandemic restrictions.

**THE E-JUSTICE INITIATIVE**
Accessibility of justice services and effective functioning of the judiciary in areas affected by armed conflict has been a focus for both UNDP and the State Judicial Administration of Ukraine. In particular, people involved in a court case must be able to monitor and respond to changes in the court proceeding without having to get to the courthouse. UNDP worked with the State Judicial Administration of Ukraine to develop a smartphone app that allows people to receive court notifications, engage with their court case and minimize visits to courthouses.

This user-focused app was developed to respond to the challenges faced by residents in non-government controlled areas of Donetsk and Luhansk who cannot easily cross the Line of Contact to get to a courthouse or to meet with lawyers or legal professionals. These challenges were exacerbated by the pandemic when further restrictions limited mobility and access to legal services. The app also increased access to justice for residents in remote parts of the country who face transportation and cost barriers to repeatedly attending court, further compounded by pandemic restrictions.

Launched in September 2021, the app integrates with the State Judicial Administration e-court system from the user’s own smartphone. People can access their own case information and have more direct control over their case.

**PANDEMIC ADAPTATIONS**
The pandemic amplified the impact of armed conflict on some communities in Ukraine. Restrictions on mobility and access to public services affected people across the country. The e-court app is an effective tool for people in the Eastern Conflict Areas and across the country.

**IMPACT**
Within the first 6 months of operation, over 28,000 users from across the country started using the app, reflecting a positive impact on access to justice for residents, regardless of geographic location.

**GOOD PRACTICES**
- Integration with existing e-court platform of the courts
- Once developed, source codes and developer rights transferred to the State Judicial Administration allowing for ownership of data and future adaptations
- Release of tool with commitment to make further improvements

**LESSONS LEARNED**
The mobility challenges faced by a community based on conflict or health restrictions created the urgency for this innovation. However, the high level of adoption by users demonstrates the interest in accessible information and participation in justice processes that are simpler, cheaper or more flexible.

The app was launched with plans to monitor use and make improvements by addressing bugs and adding new functionalities. This iterative approach results in a more effective tool.

**OPPORTUNITIES**
The app is part of a larger national initiative for developing an interactive smartphone enabled adjudication process. It will be expanded to include more functionalities and facilitate user-centred court administration. Smartphone based video participation in court hearings is under development.

Developed before the 2022 escalation of the war in Ukraine, the app may be a valuable tool for re-establishing justice sector services for people displaced by the crisis.
System-Wide Data Collection (Databases and Blockchain)

Data collection, storage and security is an aspect of all e-justice initiatives and, as in the case of blockchain, the primary goal of some technologies. The data collected by apps, case management, and online platforms may be in a variety of database formats, with different levels of security protections. Case data includes overall number of cases, areas of law, filing data, frequency of courthouse appearances, time-to-trial statistics, access to legal representation, settlement rates, courtroom processes, enforcement and recidivism rates. Data related to the judiciary includes resolution statistics, case handling timelines, disaggregated gender and demographic data, and judges’ demographic and career statistics.

Blockchain is one kind of distributed-ledger technology that allows digital information to be recorded and distributed, with any edits or changes also securely recorded. Blockchain technology is valued for the security and transparency of the process. Each transaction is recorded with a timestamp that allows decentralized network computers to verify it against other information and correct against error or hacking.

TERMINOLOGY

**Blockchain** is a specific type of distributed-ledger database that structures data in groups (blocks) that hold sets of information. Each block is validated by a network of computers and is then chained to another block forming a chain of data – the ‘blockchain’. New information is stored in a new block and then added irreversibly and with a timestamp to the block.

**Database**: a collection of information that is stored electronically on a computer system. A blockchain is one kind of database. More common databases use spreadsheet storage, rather than block storage.

Example:
A will, created and registered using blockchain, can be automatically executed upon proof of the death of the person. This automatically triggers the transfer of title or of bank account funds.

Impact:
The use of blockchain eliminates opportunities for fraud or misuse of the estate funds. Beneficiaries, including women and children, do not have to hire a lawyer and fight to receive their property. Transaction costs are low, making it easier for people with small estates to have an executable will. Probate cases do not require expensive court resources.

---

USES IN LEGAL SYSTEMS

Data collection and storage is used in most areas of the justice system, whether in analog, electronic, networked or cloud-based formats:

- Collection of court user data
- Court logistics and timing
- Resolution rates
- User demand and satisfaction data

Databases are used to:

- Collect court user data
- Organize case files
- Facilitate inter-agency coordination of enforcement and monitoring
- Coordinate court facilities and staffing
- Track time-to-trial rates

Blockchain is being used or developed to:

- Reducing fraudulent voting in democratic elections
- Foundation for cryptocurrencies
- Reducing the time money is in transit in banking and investing transactions
- Recording and executing corporate contracts
- Recording and executing wills
- Tracking and verifying supply chains
- Securely storing medical records
- Storage and access to property ownership records
- Accurate documentation of criminal records
- Self-executing remedies when contracts are breached
Increased data collection, sharing and reliability has great potential in the justice system. Better data about people’s legal needs allows public institutions and the private sector to tailor services to the legal issues people face.\(^73\)

Blockchain in the legal sector could be used to ensure updated, accurate court judgements, allow multiple users to enter information in arrest and search warrants without compromising the integrity of information and ensure accurate criminal histories are readily available.\(^74\)

In the civil context blockchain could be used to reduce real property disputes through accurate land transactions and title records, and accurately valued marital property. Smart contracts (contracts that automatically trigger events including self-executing remedies) can be used in business, employment and estates matters to eliminate the need to enforce or execute contracts.\(^75\)

**DATA / PRIVACY IMPLICATIONS**

Databases, and particularly blockchain databases, can limit personal information while protecting the rest of the transaction. This has positive and negative implications for justice. While there are positives to ensuring that the personal information of vulnerable individuals is not compromised, there are negative implications to the transparency of the justice process, especially if blockchain is used in illegal transactions.

**PROPRIETARY IMPLICATIONS**

Blockchain is designed to eliminate data ownership and make the transaction record. Other kinds of databases are often owned by the company or agency that develops the technology. Explicit, restrictive agreements about data access, use and storage are critical in the legal context.

**ACCESS TO JUSTICE IMPLICATIONS**

Blockchain has positive implications for individuals living with limited government infrastructure (victims of war, migrants, displaced people, refugees, those living in extreme poverty and women in abusive relationships) to support their identity, property and rights, including personal identification without the need for third party verification.

There are significant energy costs to running a blockchain system which may be passed to users, creating potential access to justice implications those unable to pay, including members of vulnerable groups. Accessing the blockchain may not be available to those who live in rural, remote or other places in which there is low internet penetration.

Better court data can be the basis for system analysis and reform to meet the needs of people currently excluded from legal services. Analysis of trends in case resolution can reveal a systemic bias or sites of corruption or abuse making it easier to challenge and addresses practices that limit people’s accessibility.

**HUMAN RIGHTS IMPLICATIONS**

Data is powerful both in its individual form and when aggregated. Like every other source of power, there is the risk of abuse by individuals or by political entities.\(^76\)

Aggregated data about communities, LGBTI+ people, religious and ethnic minorities can be used to target these communities as much as it can be used to tailor services and meet needs. Strict control over the release of data and constant scrutiny of who has access to data is critical.

**RULE OF LAW IMPLICATIONS**

Blockchain uses a distributed ledger model which means that there is not one central physical jurisdiction. There are no regulations for the development or oversight of blockchain. Blockchain was developed to provide an unalterable record that is deliberately outside of any national regulation. When an issue related to a blockchain transaction comes to court, the jurisdiction of the court may be challenged.

Blockchain is created using transparent source code. While this is a positive for transparency, it is also a challenge to the consistency of the system as the source code and the ‘rules’ of the process can be

---


changed by users. Blockchain has been, and can be, used in illicit transactions, such as drug trafficking. This may compromise the perception of integrity and public confidence if the same technology is used as part of the justice system.

### System-wide Data Collection Case Study

**THE PROJECT:**
Human Rights Information Management System (Pakistan)

**THE CHALLENGE**
Tracking human rights abuses, interventions and progress in a constitutionally decentralized system to support national human rights and SDG reporting and future planning.

**THE E-JUSTICE INITIATIVE**
UNDP worked with Pakistan’s Ministry of Human Rights to design a data collection process to track human rights issues. The project started with a pilot in 2017 as the Khyber Pakhtunkhwa Virtual Platform to establish a baseline for human rights data. It was then refined and expanded to include additional regions. Starting in 2021, the Human Rights Information Management System is being installed and operationalized across four provinces of Pakistan by 2022. UNDP is providing support to government partners to generate viable data through the system.

UNDP led the development of the system, using a bottom-up approach starting with consultations at the provincial level and based on international good practices on the Human Rights Based Approach to Data. The system integrates SDG targets as well as metrics linked to the country’s obligations under the seven human rights conventions Pakistan has signed. The resulting tool generates dashboard information, on an ongoing basis, and allows for regional and country-level analysis of human rights abuses as well as trends in enforcement or awareness.

In a decentralised system, the provincial human rights departments serve a central role in the data collection process using the Human Rights Information Management System installed at the provincial human rights departments. The system also serves as an interface to the federal Ministry of Human Rights, collecting and reporting human rights data. The system is built to accommodate data collected at the provincial level as well as the federal level, reflecting the division of responsibility for health, education, social welfare and labour administration.

The Human Rights Information System includes data management software and treaty body recommendations and observations. It also has a set of nationally contextualized human rights indicators that are used to generate a dashboard of the number of cases, as well as year over year comparisons of efforts to address patterns of human rights violations.

In 2021 the Ministry of Human Rights adopted the System as a tool to institutionalize disaggregated data collection into its national operations. The system will continue with both a regional interface and a national set of comparable data on human rights.

The system is designed to collect and share data to support interventions and shape law reform and changes to services to better protect human rights. The Ministry listed, among other objectives, the importance of providing data to support evidence-based planning, development and interventions.

**IMPACT**
The development of the Human Rights Information Management System has introduced the technical capacity and culture of data collection and sharing into the human rights infrastructure in Pakistan. The inclusion of indicators in the national human rights database has shifted the mechanisms for tracking and responding to patterns in human rights abuses.

The recent assumption of the system by the Ministry of Human Rights reflects a strong national commitment to meet international commitments with reliable, transparent data.

**GOOD PRACTICES**
The integration of the SDG targets and indicators within a data collection model that also reflects the practices of national human rights institutions facilitates international reporting.

Keeping provinces at the core of human rights data collection and reporting creates greater ownership of the process and enables authentic data collection in shorter time.

The ease of inputting is heralded by staff as one of the strengths of the system, reducing rather than adding to staff workloads.

Small pilot projects allow people to learn about and get used to the use of data, giving institutions and individuals time to adjust to changing practices and identify opportunities in their own work.

**LESSONS LEARNED**
- Starting out with one region and testing the data architecture allowed for refinement and system improvement.
- Attention to the user experience of staff dealing with cases is important to ensure ease of use and to minimize resistance.

**OPPORTUNITIES**
The Ministry of Human Rights has identified the potential to work with other ministries data collection efforts to align SDG reporting or develop more nuanced data analysis.
SECTION THREE
Global Map of e-Justice Initiatives

UNDP e-Justice Projects Global Map

As part of the Global Programme’s efforts to facilitate cross-organizational learning and build the awareness of e-justice, it has mapped e-justice projects globally. Entries in the map are organized by type of e-justice project as well as by the primary objective. Information about the project is also organized by UNDP region and by country with an indication of whether it has had UNDP involvement. Links to websites or online documents provide a way to learn more about each project.

This open data map, perpetually incomplete, can be added to and updated regularly, making it possible for Country Offices to connect with others in their region working on e-justice or to find expertise in similar projects.
Country Office Toolkit

As a complement to this paper, a set of tools have been designed to help staff in Country Offices quickly understand e-justice initiatives and bring a human rights-based framework to the design, implementation and monitoring of e-justice as a part of UNDP’s digitalization efforts.

The tools are designed to reflect the key lessons learned in the global mapping and research components of the project and to bridge different levels of technology knowledge, digital readiness and project complexity. Country Office staff can choose the tools that support their leadership in e-justice projects.

View the digitalization and e-justice resources available through the Justice Futures CoLab

Future Directions

E-justice is an area of development activity that can meaningfully advance UNDP’s strategic priorities and make a real difference in people’s lives while also combating systemic exclusion and discrimination. E-justice transformation includes how people access justice, how legal professionals do their jobs and how the legal system is situated in society. Each e-justice initiative is an opportunity for meaningful system change. To realize these possibilities, e-justice initiatives must be carefully, though quickly, developed to seize the current opportunity to lead development-centred transformation.

The examination of trends in e-justice reveal how dramatically and quickly technology is transforming the administration of justice. Legal systems that are not transforming are unable to benefit from global trends in modernized, accountable and accessible justice. As the case studies show, UNDP has successfully facilitated e-justice that integrates development and human rights with programming and operational needs, though often contained to a region or Country Office. Harnessing and expanding this expertise is the operational challenge that e-justice presents both for UNDP itself and for the national partners it works with.

The sudden onset of the global COVID-19 pandemic in 2020 revealed the particular vulnerability of justice systems that have not adapted to new technology and new ways of delivering services. Periods of pandemic lockdown expanded the collective imagination about how legal services can be delivered. What seemed impossible, or unnecessary became first a temporary fix and then a new way of working. The pace of change during the pandemic accelerated, with a related increase in comfort with experimentation. There is a new appetite for digitalization.

The current climate of rapid change is disrupting service delivery and creating opportunities for innovation; however, these innovations must be scrutinized to ensure that this change does not undermine the quality of justice for those most in need. In the context of improving justice delivery, this is an opportunity for UNDP to provide support to rights-based justice services that prioritize justice outcomes for all, including those left behind.

Meeting this lofty goal will require attention to the skills, processes and implementation of e-justice to foster and scale-up innovative approaches. UNDP is poised to respond to requests for new hardware and software by bringing a thoughtful rigorous approach that integrates human rights and rule of law priorities and that builds on past lessons in terms of project feasibility and sustainability. What was once seen as primarily the acquisition of new computers and servers is now properly understood as the re-design of processes rooted in an understanding of how people use systems. The hardware and devices are only the final stage of implementation.

UNDP’s e-justice capacity and credibility across its Global Policy Units, as well as in its regional hubs and Country Offices, is based on the combination of its expertise in technology, in development practices and in substantive rights protection. It is well positioned as the largest provider of justice support in the UN system. It provides the partnership platform for justice support in crisis settings through its Global Focal Point.
Not only does UNDP have experience with e-justice projects, but it also has the geographic and institutional structure to lead e-justice transformation.

As e-justice becomes a more significant focus globally, UNDP can lead strategic transformation to modernize and make more accessible the justice systems people rely on when they are most vulnerable. Deciding to lead on e-justice requires that the UNDP crystallize the lessons it has learned, articulate a coherent commitment to system change and empower its staff and donors to centre human rights, rule of law and equality in its e-justice projects. Its past e-justice initiatives demonstrate that it has the ability but not a consistent focus on strategic e-justice transformation. By formalizing its approach to e-justice, UNDP can strengthen its internal practices, establish requirements for UNDP support of e-justice and cultivate rights focused commitments from national partners, donors and technologists. This will require clear, at times courageous, actions to build internal capacity, focus on system change, and design projects that protect human rights and the rule of law to ensure accessible justice that leaves no one behind.

**Actions for UNDP Leadership of e-Justice Transformation**

**SYSTEM CHANGE**

**Action: Articulate system change goals to link enthusiasm for efficiency with essential rights protections**

Explore the potential to use e-justice as a strategy that integrates operational improvements with inclusivity and accessibility improvements. Coordinate different justice system actors, governments, and UN agencies to focus on e-justice as a pioneering and disruptive strategy for justice reform and rights protection. Link e-justice to ancillary systems that rely on similar public access, confidence and transparency including e-governance, constitution making and legal identity.

**Action: Build project budgets focused on inclusivity not technology**

Bring a holistic view to system change by rejecting the exclusive focus on efficiency and cost savings. Require justice quality measures, rather than efficiency measures. Require that any savings generated by an e-justice initiative are reinvested into services to make justice truly accessible by all.

Be realistic and transparent with national partners and with donors about the whole budget, including eventual hardware upgrades and ongoing staff training and software costs even after the conclusion of the donor-funded work. Resist the pressure to offer quick spends or immediate results that compromise the quality of justice outcomes.

**Action: Help justice systems prepare for future crisis and ongoing change**

Recognize the risks and likelihood of crises – political, climate, economic, pandemic – as a predictable fact of modern service delivery. Prepare those working in the legal sector, including judges and decision-makers, for the inevitability of future disruptions. Make use of the Chief Digital Office supports, like its digital readiness assessment, to understand the national capacity for digital transformation and the Global Centre, Singapore to support internal and national partner teams to lead development focused e-justice projects. Support education on both the new technologies and on system change. Provide a coherent foundation in e-justice that lets legal professionals understand technical and substantive aspects of new technologies and feel comfortable navigating change.

**Action: Examine legislative parameters**

Examine the regulations and legislation that applies in the e-justice context. Articulate a coherent reform agenda amongst project partners that integrates law reform into modernization efforts, including in the context of transitional, informal, and community-based justice. Examine the privacy protections and data security requirements in existing and new legislation. Propose legislative reform that incorporates the highest standards in e-justice, particularly in the context of AI, data ownership and privacy protections.

**HUMAN RIGHTS SCRUTINY**

**Action: Continually scrutinize e-justice initiatives to assess human rights implications**

Bring a rigorous rights protection analysis to the design, implementation and ongoing monitoring of e-justice. Focus project partners on rights protection throughout project implementation. Conduct a risk assessment of the potential for and impact of breaches of privacy, theft, sale or misuse of personal, sensitive data at the start of e-justice project design. Regularly raise questions about and scrutinize the impact of technology or digital processes on:

- People with precarious legal identity (refugees, internally displaced persons, transgender, trafficked)
e-Justice: Digital transformation to close the justice gap

People belonging to identity and political minority groups (linguistic, religious, racial, cultural)

People who face systemic safety risks (women, LGBTI+, transgender, children, migrants, persons with disabilities)

People who are identified as marginalized or have historically been excluded

**Action: Conduct robust gender analysis of e-justice**

Articulate actionable gender outcomes in the design process. Require disaggregated data collection that examines women's access to justice, identification of systemic discrimination, and evidence for law reform and institutional transformation. Require UNDP supported e-justice to be designed to use inclusive gender identity concepts and to protect against discrimination based on gender identity. Require multiple gender markers in court forms and data collection tools, even where the implementation of those functionalities may await changes in domestic law. Ensure robust gender analysis to facilitate inclusive transformation.

**Action: Integrate internal accountability frameworks into e-justice projects**

Assess the impact of technology on people within the justice system who have limited agency, are subject to lawful or unlawful limitations on their legal capacity or have limited access to advocates (prisoners, pre-trial detention, witnesses, persons with disabilities). Include a complaints or reporting procure within the e-justice project to allow human rights defenders, civil society and others to identify rights abuses or exclusion arising from the digitalization. Support national partners to iteratively address issues identified by system users. Encourage financial support for a human rights institution to independently monitor a national institution's e-justice project. Support national human rights institutions to build capacity in the digital sphere and provide rights-based policy advice.

**ENSURING ACCESS TO JUSTICE FOR ALL**

**Action: Examine e-justice to identify those who are excluded or left behind**

Examine the infrastructure gaps (electricity, internet, geography) that will result in differential access. Design a multiplicity of access points to ensure equality of access despite infrastructure gaps. Identify groups of users who are excluded whether structurally or because of the cost, connectivity, access to devices, digital literacy, comfort or cultural barriers to new technologies.

**Action: Proactively provide accommodations and adaptive tools**

Assess the ease of access or use by people with literacy barriers (linguistic or technological). Integrate free, easy to use adaptive technologies and accommodations that support persons with disabilities and linguistic minorities to receive independent access to legal services.

**Action: Transition carefully and slowly, ensuring continuity of justice for all**

Maintain analog services for an extended transition period to ensure continuity of access for everyone. Divert extra staff time and system resources to provide dedicated services for those unable to use digital tools.

**PROTECTING RULE OF LAW**

**Action: Focus e-justice initiatives on people-centred, not system-centred, transformation**

Actively balance the enthusiasm for efficiency outcomes against the quality of justice outcomes for the most vulnerable in society. Reject a substantive/operational split by including parameters for responsible technology usage into law reform initiatives to protect access to justice and the rule of law.

**Action: Strengthen judiciaries**

Keep the independence of judges and advocates as a primary concern in e-justice initiatives. Prioritize and monitor the anti-corruption impact of digitalization. Anticipate that the elimination of analog processes will be met with resistance from those who benefit from the lack of accountability and transparency in existing process. Provide training and transition procedures to build the skills of legal professionals so that the expertise of senior justice professionals (judges, lawyers, prosecutors) is retained.

**Action: Protect the data**

Scrutinize the data on which digital technologies, particularly machine learning or AI systems, are built, alert to embedded bias. Require human oversight of machine learning and data infrastructure. Ensure all case and personal data is isolated from government control, completely segregated from health or social service records, and protected from improper use or sale. Require confidentiality systems, policies and security protocols to protect people’s rights to privacy.
STRATEGIC PROJECT DESIGN

**Action: Cultivate sustained buy-in from senior leaders**

Cultivate senior level commitment and engagement from the judiciary and the political decision makers, starting with the Chief Justice and ministerial staff. The commitment and directives of these leaders will be essential to manage resistance to change and to see the project through setbacks. Bring civil society, academics, legal aid systems and bar associations into the early design of projects to establish partnerships, align training and learn about the needs of the people they work with. Build the appetite and capacity for transformation with a phased implementation. Establish feasible and sustainable expectations and timelines. Avoid promising complete fixes for complex systems.

**Action: Design with a user-centred, iterative process**

Design projects with long timelines that allow for multiple iterations. Start with a small pilot and plan to learn and evolve. Introduce small, simple examples early as a strategy to prepare the system for change.

Really understand the existing process before proposing new solutions. Map out the business process, listen to multiple levels of staff and decision makers to understand how a system actually operates, to find the opportunities for transformation. The most successful e-justice projects are changes in the process, not in software or devices.

Start with a user-centred design process that listens and learns from how people experience the justice system. Users include members of the public, as well as those who are not yet using the system, due to systemic barriers or lack of confidence in the system. When assessing overall project purposes, the needs of those who work in the system are secondary to public users.

**Action: Build SDGs targets and human rights obligations into the project outcomes and data collection**

The design of an e-justice project is the best window to bring the full range of human rights and rule of law priorities into the project. Integrate SDG indicators and targets as well as human rights, gender equality and rule of law criteria into the program design and procurement documents. Require contractors and programmers to demonstrate how their digital solution will track or advance SDG and human rights priorities. Establish project governance to reinforce rule of law and human rights frameworks, in line with UNDP Social and Environmental Standards.

**Action: Build-up expert, sustained UNDP resources, as well as national partner resources**

Maintain equal focus on the justice and development goals as on the technology goals when allocating resources to e-justice projects at the Country Office level. E-justice projects require time and resources to understand and scrutinize the implications of new technology. Staff with specialized human rights and justice sector expertise need support to cultivate the technical expertise to understand and responsibly shape e-justice. Include data analysis expertise in the project design to ensure that justice sector data can be extracted to inform policy decisions. Without a sustainable plan for data analysis with realistic budget and staffing, the data will not be effectively used.

**Action: Ensure data remains publicly owned**

Raise the issue of data and technology ownership early in the planning process. Require exclusive and transparent ownership of processes and data in line with human rights standards as a requirement throughout the project. Explore avenues to develop and program dedicated technology solutions instead of opting for off-the-shelf solutions with proprietary constraints and long-term updating costs.

**Action: Collect and analyze data**

Generate, maintain and analyze aggregated data about the impact of justice services and e-justice changes. Require regular, direct access to aggregated data in the early pilot and testing stages. Cultivate a commitment to standardize metrics across project partners and ancillary users to build a comprehensive, aggregated dataset. The cross sectoral application of e-justice data to advance gender equality and prevent human rights abuses is critical to achieving the broader goals of justice system transformation. Develop and maintain active data monitoring and analysis within UNDP as well as within the beneficiary project team. Establish mechanisms for sharing analyses and transferring key lessons across institutions, to other countries and through UNDP teams.

**Action: Shape the donor experience**

Involve donors in the design process, building a realistic understanding of the outcomes, timelines and risks. Involve donors in mid-project strategic learning processes, distinct from project evaluations, focused on technical assessments, iterations and improvement with open discussion of failures and experimentation. Time communications around different phases of the project, rather than waiting until project or funding cycle completion. Include strengthening team capacity as a concrete output in donor messaging to highlight the value of long-term investment.
BUILD UNDP CAPACITY

**Action: Build expert UNDP staff teams empowered to assert rigorous, human rights-based frameworks**

Cultivate staff capacity within UNDP Country Offices and within the national partners. Create sustainable positions that attract and retain e-justice expertise. Support staff eager to learn and experiment with new ideas. Encourage innovation and sharing of practices across UNDP teams. Offer sustained, secure assignments on technology projects, both in the national partners and within the UNDP, to avoid the pattern of the private sector poaching experts trained with development funds.

Include a UNDP Project Manager who holds the vision for the project with equal emphasis on the technology and the rights frameworks. Gaps in internal project management create inconsistencies in the substantive rights protection priorities and undermine donor and national partner confidence in the long-term vision. As the demand for e-justice increases and UNDP activates digitalization as an enabler of its strategic priorities, a related investment in the technology acumen of its rule of law and human rights staff is necessary.

**Action: Cultivate agile expertise on digital transformation throughout human rights and rule of law teams**

Institute regional and Country Office sharing opportunities, recognizing the considerable learning curve many staff face when starting on a technology-based project. Find interactive ways for UNDP staff to learn from each other. Cultivate data analysis and interpretation expertise within Country Offices or Regional Hubs to capture and integrate data generated through e-justice initiatives to inform related social services, democracy-building, and evaluation efforts.

Harness the potential of the UNDP, as the biggest UN provider of rule of law assistance, by building a robust learning culture with senior level expertise in e-justice implementation. Involve senior UNDP staff in the design and piloting of e-justice to both shepherd the project through staffing or political transitions and to replicate or scale projects in other Country Offices.

**Action: Learn from failures**

Share data and invite external scrutiny of system performance during implementation, with a commitment to make changes where needed. Establish a learning culture that supports staff and national partners to identify risks throughout the implementation process. Celebrate the benefits of iterative experimentation and lessons learned.

### Summary of Actions for UNDP Leadership of e-Justice Transformation

#### SYSTEM CHANGE
- **Action:** Articulate system change goals to link enthusiasm for efficiency with essential rights protections
- **Action:** Build project budgets focused on inclusivity not technology
- **Action:** Help justice systems prepare for future crisis and ongoing change
- **Action:** Examine legislative parameters

#### HUMAN RIGHTS SCRUTINY
- **Action:** Continually scrutinize e-justice initiatives to assess human rights implications
- **Action:** Conduct robust gender analysis of e-justice
- **Action:** Integrate internal accountability frameworks into e-justice projects

#### ENSURING ACCESS TO JUSTICE FOR ALL
- **Action:** Examine e-justice to identify those who are excluded or left behind
- **Action:** Proactively provide accommodations and adaptive tools
- **Action:** Transition carefully and slowly, ensuring continuity of justice for all

#### PROTECTING RULE OF LAW
- **Action:** Focus e-justice initiatives on people-centred, not system-centred, transformation
- **Action:** Strengthen judiciaries
- **Action:** Protect the data

#### STRATEGIC PROJECT DESIGN
- **Action:** Cultivate sustained buy-in from senior leaders
- **Action:** Design with a user-centred, iterative process
- **Action:** Build SDGs targets and human rights obligations into the project outcomes and data collection
- **Action:** Build-up expert, sustained UNDP resources, as well as national partner resources
- **Action:** Ensure data remains publicly owned
- **Action:** Collect and analyze data
- **Action:** Shape the donor experience

#### BUILD UNDP CAPACITY
- **Action:** Cultivate agile expertise on digital transformation throughout human rights and rule of law teams
- **Action:** Learn from failures
Glossary

**Algorithm** is the mathematical logic or formula behind a system that performs tasks or makes decisions. It applies new data using the same formula, to predict a future result or to suggest a course of action.

**Apps** refers to computer software applications, originally developed for mobile or tablet devices, that perform a specific function and can be downloaded and installed all at once.

**Artificial Intelligence (AI)** is an umbrella term for a wide range of methods and tools, including machine learning, facial recognition and natural language processing that are developed with a combination of technical approaches, social practices and industrial power.

**Blockchain** is a specific type of distributed-ledger database that structures data in groups (blocks) that hold sets of information. Each block is validated by a network of computers and is then chained to another block forming a chain of data – the ‘blockchain’. New information is stored in a new block and then added irreversibly and with a timestamp to the block.

**Case management** is the combination of processes and technologies used by courts and lawyers to manage the steps of a case, including forms, scheduling, hearings, deadlines and documents.

**Digital transformation** describes the cultural change in systems and institutions using digital technology. Digital transformation includes user-centred design and technologies that allow people to work differently. Digital transformation facilitates shifts in legal culture and processes towards more accountability, transparency and accessibility.

**Digitalization** is the use of digital technologies to change justice processes and business models. It includes the way that digital technologies allow for new ways of delivering or administering justice.

**Digitization** is the process of converting existing processes and content from analog formats like paper forms and filing into digital formats like online forms or storing analogue data in a digital format. It includes portals to submit documents or access decisions. A digitized process is an existing court process, now available online or in digital formats.

**e-Justice** is an umbrella term that captures any effort to administer, deliver, strengthen, or monitor justice services using digital technologies. E-justice broadly covers all kinds of digital technologies from complex case management or innovative apps to information technologies and use of online communication. It includes the tools and processes used by justice sector professionals and those used by the public and the media. E-justice initiatives include the strategies, process (re)engineering, automation, data collection and integration of systems as well as online dispute resolution, e-filing, remote court process and technologies used to digitize, store and provide access to legal documents and evidence.

**Machine learning** is a computer system that can learn and adapt without following explicit instructions by applying algorithms and statistical models to analyze and draw inferences from patterns in data.

**Online dispute resolution** is a public-facing digital space in which parties can resolve legal disputes, share documents, and get a decision online. Online dispute resolution may include algorithmic decision-making, human decision-makers working with parties through an online structure, chat-based mediation, or guided pathways for litigants.

**People-centred justice** puts people, instead of the system or other outcomes or priorities, at the centre of justice system operations and reform. It is a commitment to focus on people's needs and the impact of the justice system on people, as the primary goal.

**User-centred design** is a design process common in technology development that focuses on the experience of the user. User characteristics, workflow, needs and feedback are given priority at each stage of the design process.

**Virtual hearings** also referred to as remote courts, e-courts or remote hearings, include video hearings and video-access to in-person courts, such as for incarcerated litigants, vulnerable witnesses and experts.