Smart Courts: Roadmap for Digital Transformation of Justice in Africa

Logan Finucan

With Erika Barros Sierra and Namita Rajesh

21 August 2018
INTRODUCTION

Rule of law is an indispensable pillar supporting social justice as well as a necessary precondition to ensure that everyone in society enjoys respect for their fundamental rights. Effective application of the rule of law is also crucial for another reason: it is an important factor for a country in supporting commercial investment and economic development, providing certainty to business and commercial activity.

Court systems around the world seeking to apply the rule of law face many different types of challenges, including: to efficiently manage public resources; to be transparent and open to stakeholders; to be accessible to all social groups and communities; and to innovate in response to citizens’ needs. These needs can be especially acute in developing countries, including Sub-Saharan Africa. Like many government agencies with limited resources, judicial professionals are constantly pressured to do more with less, as demands on court systems increase but resources often lag behind. This problem is frequently compounded by an over-reliance on legacy paper-based systems. The result is growing backlogs and court professionals drowning in paper.

As courts in some pioneering jurisdictions have discovered, digital transformation can help tackle these problems. Digital transformation, leveraging many diverse applications and digital tools available, empowers courts to reengineer and optimize legacy processes. By focusing on the outcomes technology can help them achieve, they can drive efficiencies and improve services for users. But despite the potential to realize clear benefits in terms of improved efficiency, accessibility, and transparency, digital transformation of courts and justice systems are often stymied by a series of common institutional challenges. A systematic roadmap to implement digital justice applications can help justice sector professionals to overcome these challenges.

Digitization and Smart Societies

Digital transformation is impacting all aspects of our societies and economies. Citizens and businesses of all sizes rely on information technologies to access and provide services. Governments, in turn, are increasingly leveraging this to deliver better services: from education and healthcare to financial services and agriculture, digital is finding solutions to previously unsolvable problems and driving economic and social progress. Perhaps more fundamentally, digital transformation is transforming the nature of the relationship between public authorities and the people they serve - enhancing transparency, accountability, responsiveness, accessibility of government services, and user experience.

Driving this transformation is cloud computing, which is growing at a fast pace around the world. Cloud service providers are driving down the cost of accessing high quality computing by leveraging the scale of
global networks. This democratizes access to technology, giving individuals and organizations of all sizes the power to access high grade storage, computing, and security services. Governments can also leverage these markets to empower citizens with new tools of e-government.

In response to these trends, government IT spending is rising across the world. A recent study estimated that public sector software markets alone will grow an average of over 13% annual from 2017-2021. Ultimately, the goal of this outlay is for governments to better their societies. Tufts University advanced a framework for evaluating a "smart society," defined as one "in which digital technology, thoughtfully deployed by governments, can improve on three broad outcomes: the well-being of people, the strength of the economy, and the effectiveness of institutions." The end goal is not to implement technology, but to achieve outcomes with technology as the means.

There are many government sectors that have already begun to adopt technology in pursuit of digital transformation. However, justice systems in many countries have not kept pace with changing ways of delivering services or meeting citizen expectations. The modus operandi in this sector have carried on as if technology had never been invented and many practitioners still reject the idea that a computer can do part of their jobs. While their peers in other government sectors, such as finance or healthcare, are leveraging technological tools to optimize their processes, many courts are falling further behind in their mission to serve citizens. Considering the many challenges around the delivery of and access to justice that many societies face — chief among these that few people can afford a lawyer — the time has come for the justice sector to undertake digital transformation. Innovators inside and outside the profession are developing the tools to make this happen.

Challenges for Justice Systems

Justice systems fulfil an important function ensuring social equity and respect for fundamental rights. However, a well-functioning justice system not only helps people exercise and enforce their fundamental rights, it is a crucial factor that facilitates investment and can actually drive economic development. Security that investors will be treated fairly, that their property will be respected, and that contracts will be enforced — all outcomes of the rule of law - are key elements impacting domestic and international investment decisions. The World Bank’s Development Report from 2005 underlined the importance of well-performing courts for a sound investment climate. The Report showed that improvements in the efficiency of justice systems increase firms’ willingness to invest more and led to greater economic development. UN member states recognized these important facts when they adopted Sustainable Development Goal 16 in 2015, to promote a just, peaceful, and inclusive society, including to promote the rule of law and ensure equal access to justice for all.

---

The reality, however, is that billions of people across the world lack equal and effective access to justice. An estimated 4 billion people live outside the protection of the rule of law because of their marginal positions in society.\(^5\) Difficulty in accessing justice can result in a well-documented ‘cycle of decline’ within vulnerable communities – even in developed countries – which feeds a vicious circle of legal and non-legal problems. Among other effects, this results in economic deprivation and social exclusion.\(^6\) This can have a pernicious impact at the macro level; the OECD has warned that lack of social mobility can weaken economic growth.\(^7\)

Afrobarometer, a pan-African survey and analysis organization, has examined the problems faced by African citizens when they interact with the justice system. It conducted a special survey in 2014 and 2015 concerning access to justice in 36 countries. Their report finds a number of significant barriers to accessing justice. Across 36 countries, 54% of individuals who interacted with courts reported that it was "hard" to access justice.\(^8\)

The World Justice Project compiles a "Rule of Law Index" (RoLI) to assess how effectively the rule of law is applied around the global. Through thousands of household and expert surveys, measuring dozens of distinct indicators, they build a snapshot of the challenges justice systems in 113 different countries face each year. Major areas examined include constraints on government powers, absence of corruption, open government, fundamental rights, order and security, regulatory enforcement, civil justice, and criminal justice.

Their data demonstrate how developing countries, including Sub-Saharan Africa (SSA), face particular problems regarding access to justice. Comparing across seven global regions, South Asia and Sub-Saharan Africa notch the poorest performance in the overall RoLI. South Asian countries score 0.45, which would place a country 96th out of 113 countries ranked. Sub-Saharan Africa is not far above with a regional score of 0.47, which would put the average SSA country at approximately 91 out of 113.\(^9\)

Looking more specifically at the problems in the administration of justice, several different factors that compose the RoLI aggregate score point towards particular issues with court systems.

---

\(^7\) “A Family Affair: Intergenerational Social Mobility across OECD Countries,” *OECD* (2010).
Lack of Accessibility

The ability to access civil justice is clearly a hurdle in SSA. Many types of barriers increase the costs of turning to courts, which discourages individual citizens and especially small business owners from seeking protection from the formal legal system. Of Africans who had direct interactions with courts (either criminal, civil, or administrative), Afrobarometer has found that 42% had difficulties “obtaining necessary legal counsel or advice,” and 47% said that they “could not understand the legal processes and procedures.” WJP measures accessibility of civil justice by awareness of available remedies and court procedures, barriers such as complex procedures, lack of linguistic interpreters, or physical distance of court facilities, as well as costs. The average SSA country scores a 0.43 by “people can access and afford civil justice," which would place such a country 94th in the world. African countries occupy a third of the lowest 15 slots worldwide, including Burkina Faso (111), Madagascar (110), Kenya (105), Zimbabwe (103), and Ethiopia (101).

<table>
<thead>
<tr>
<th>“People can access and afford civil justice”</th>
<th>EU and North America</th>
<th>Latin America and Caribbean</th>
<th>East Asia and Pacific</th>
<th>Eastern Europe and Central Asia</th>
<th>Mid-East and North Africa</th>
<th>Sub-Saharan Africa</th>
<th>South Asia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Country Rank (of 113)</td>
<td>24</td>
<td>50</td>
<td>55</td>
<td>66</td>
<td>75</td>
<td>94</td>
<td>101</td>
</tr>
</tbody>
</table>

Delays

Citizens in many countries often report delays in accessing both criminal and civil justice. In Afrobarometer’s surveys, “long delays in handling or resolving cases” was identified as a problem by 60% of Africans who had recently turned to courts – the most frequently cited problem. According to WJP surveys, South Asia and Latin America score most poorly, on average, with regards to timely and effective access to criminal justice, measured in time required to secure convictions in serious and minor crimes, and length of detentions without convictions among other variables. The average country in each region would rank 75th and 85th, respectively, compared to 72nd for SSA. Timely access to civil justice is also a challenge: the average South Asian and Latin American country rank 88th and 84th, respectively, compared to 61st for the average SSA country. These averages mask sharp divergences within regions, however; while some in Africa notch strong performances matching or beating global averages in timely delivery of civil justice (Senegal and Cote d’Ivoire rank 27th and 28th, for example), several key markets provide particularly poor services to citizens in this respect, for example Kenya ranks 96th and Nigeria 99th.

<table>
<thead>
<tr>
<th>“Civil justice is not subject to unreasonable delay”</th>
<th>East Asia and Pacific</th>
<th>EU and North America</th>
<th>Eastern Europe and Central Asia</th>
<th>Mid-East and North Africa</th>
<th>Sub-Saharan Africa</th>
<th>Latin America and Caribbean</th>
<th>South Asia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Country Rank (of 113)</td>
<td>31</td>
<td>35</td>
<td>36</td>
<td>50</td>
<td>61</td>
<td>84</td>
<td>88</td>
</tr>
</tbody>
</table>

Lack of Transparency

Opaque government processes and limited availability of court information are a deterrent from attempting to access the court system, and a hurdle to overcome for litigants. WJP measures ‘publicized laws and government data,’ by assessing the availability of easy-to-understand information on legal rights and timely publication of decisions of the highest national court. SSA as a region registers the worst open government scores, where the average country would rank 97th. Ten out of the fifteen lowest country slots are held by SSA countries. This low performance is particularly striking when compared to the performance of the EU and North America, where the average country would rank 18th globally.

<table>
<thead>
<tr>
<th>“Publicized laws and government data”</th>
<th>EU and North America</th>
<th>East Asia and Pacific</th>
<th>Eastern Europe and Central Asia</th>
<th>Latin America and Caribbean</th>
<th>South Asia</th>
<th>Middle East and North Africa</th>
<th>Sub-Saharan Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Country Rank (of 113)</td>
<td>18</td>
<td>46</td>
<td>48</td>
<td>59</td>
<td>76</td>
<td>77</td>
<td>97</td>
</tr>
</tbody>
</table>

Lack of Accountability and Corruption

Corruption and lack of accountability are other key problems that diminish the delivery of justice in two respects: first, they distort outcomes for individuals and undermine trust in the justice system; second, they diminish the quality of administration, leading to wasted resources and delays. 30% of individuals who recently used African courts reported having to pay a bribe at least once in the course of their interaction with the court. As measured by the WJP, SSA is tied for the worst performing world region regarding overall absence of corruption. Specific to the administration of justice, SSA is the worst performing region according to their metric “criminal justice is free of corruption” and performs third worst regarding civil justice. SSA countries occupy a third of the bottom fifteen slots in each category, and the average country in the region would rank 85th and 80th in corruption of criminal and civil law, respectively.

<table>
<thead>
<tr>
<th>“Criminal/Civil justice is free of corruption”</th>
<th>EU and North America</th>
<th>East Asia and Pacific</th>
<th>Latin America and Caribbean</th>
<th>Middle East and North Africa</th>
<th>Eastern Europe and Central Asia</th>
<th>South Asia</th>
<th>Sub-Saharan Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Country Rank (of 113): Criminal</td>
<td>21</td>
<td>47</td>
<td>58</td>
<td>58</td>
<td>80</td>
<td>84</td>
<td>85</td>
</tr>
<tr>
<td>Average Country Rank (of 113): Civil</td>
<td>24</td>
<td>51</td>
<td>52</td>
<td>59</td>
<td>84</td>
<td>91</td>
<td>80</td>
</tr>
</tbody>
</table>

This evidence indicates the scale of the challenge for policy makers with regards to justice systems. Several of these problems - particularly delays – highlight that internal administrative challenges have negative external impacts on court users. For example, inefficient processes or lack of sufficient resources

---

11 C Logan, “Ambitious SDG goal confronts challenging realities: Access to justice is still elusive for many Africans.”
create case backlogs and delays for court users. In this respect, reliance on paper processes, which are still central to most courts, can be a significant source of these delays: Difficulty complying with deadlines and procedures for physical filing can lead to missed opportunities for lawyers and court system users; misplaced documents, lost by accident or otherwise, cause unnecessary postponements; shuffling through extensive documents can eat up precious hearing time, and slow progress through the docket.

Legal professionals are keenly aware of these challenges and are as equally frustrated as citizens are by the backlogs such challenges create. Many courts simply cannot keep up with the volume of cases brought to them, leading to an ever-growing list of proceedings that demand their attention. The High Court of Zimbabwe reportedly processes less than half of the cases brought to it in a year.12 Kenya’s court system had a backlog of upwards of 1 million cases in 2012 when it adopted its Judiciary Transformation Framework; while various institutional reforms have since reduced this, 533,350 cases were still pending in various courts across the country in March 2018.13 It is not unheard of for such delays to stretch out to a decade or more for complex cases. One COMESA Court Justice reported coming across documents in a casefile with her own handwriting from ten years earlier, when she worked on the case in a previous position.14

Most problems faced by courts and the citizens who use them stem from deep social and political causes. Fundamental characteristics of a country’s political system are the dominant factor. For example, Afrobarometer found that democratically run countries (rated as “free” by the international freedom and democracy watchdog Freedom House), register higher trust in courts, and report lower incidents of corruption and better ease of assistance, when compared to less representative political systems.15 Accordingly, addressing laws and basic norms of a political system are the first and most important priority to improve the quality of the rule of law in most developing countries.

Nonetheless, by facilitating process improvements and greater accountability, digital transformation can help. While there is no substitute for enforcement of anti-corruption laws, targeted applications of technology, when implemented smartly, can enable justice system professionals to better manage their specific needs. They empower justice system professionals to reengineer and optimize their own processes, leveraging the capabilities of digital tools to tackle common problems, including inefficient procedures, delays, patchy oversight, and poor access to information. As digital applications become more widespread, this also shapes a culture of transparency and accountability that empowers administrators to enforce – and citizens to demand – adherence to ethical standards and results-oriented process.

---

12 “Why justice in Africa is slow and unfair,” The Economist (1 July 2017).
14 This was volunteered in conversation with a COMESA judge at a workshop for justice sector professionals in Nairobi, May 2018.
15 C Logan, “Ambitious SDG goal confronts challenging realities: Access to justice is still elusive for many Africans.”
MAKING COURTS SMART

Tools for Smart Courts

When well designed and implemented, digital tools can help courts optimize and refocus internal processes, improve services to users, and democratize access to justice. Like many different government services, justice systems around the world are beginning to turn to digital solutions to tackle their individual problems. Amid the many challenges that justice systems face, no two court systems are identical, and all have unique hurdles. Accordingly, there is not one way but many ways for a court to become “smart.”

While court system usage of software is as old as the computer, the development of the Internet and cloud computing services have vastly expanded the scope of problem-solving solutions available to courts. Today, myriad tools are available that can address different aspects of the operation of courts and citizen’s interaction with them. These range from internally-facing administrative tools, to systems for maintaining the integrity of and making available court records, to externally facing resources and interfaces for court users, to platforms to enhance the speed and accessibility of courtroom proceedings.

**Enterprise resource planning** — Court systems are organizations that face challenges familiar to many in the public and private sector: how to best allocate resources, including efficiently managing finances, administering human resources, and running internal processes. There are many options currently available that can support these functions to help administrators run their organizations more efficiently. These can range from discrete software applications for particular functions to more thorough digital transformation solutions to reinvent legacy systems and optimize processes.

**Public information and virtual help desk** — Lack of publicly available information on law and court procedures can discourage citizens from even attempting to access courts to seek justice. Online resources (optimized for access and use via computers and smartphone devices) can make information on law, legal resources, and court procedures instantly accessible to those with an Internet connection. Functions like a virtual help desk can go one step further and enable citizens to navigate these resources or respond to many of their common inquiries and needs.

**Archiving and transcription** — Most legal cases are a matter of public record, however producing, archiving, maintaining, and publishing these records can be a burden when resources are limited. Cloud-based tools can facilitate easier recording, archiving, and electronic access to court documents and public records of proceedings. More advanced tools can also automatically transcribe these records. Such systems have been deployed by courts in several developing and developed countries to reduce the administrative costs of these functions.

**E-filing and document management systems** — One of the most widely deployed and impactful solutions for courts currently, e-filing and document systems can both significantly
reduce the quantity of paper a court must use, lowering costs and environmental impact, as well as significantly reduce logistical challenges associated with the need to submit physical documents. Court users and operators can file and access necessary documents remotely at whatever time is convenient – not just during normal hours of the court’s operation. Many judges also report using these solutions to better prepare in advance of hearings, which they can do from their homes.

**Case management systems** — These solutions build upon document management systems to enable not just electronic access to documents, but integrated processes for tracking the progress of and taking actions related to a case throughout its lifecycle. These integrated systems can help judges and administrators track cases, as well as enable individual citizens and citizen advocacy groups to monitor the progress of specific cases.

**Collaboration tools** — Collaboration tools can come in many different forms and can be components of document and case management solutions. For example, they can enable direct communication, annotation of documents, and commenting between the various parties of a case and the judge. These can expedite hearings, and enable better advanced coordination between the parties.

**Fee payment portals** — Online options to settle fees or fines associated with courts can alleviate the workload on administrative staff and make it easier for payers to engage with courts and comply with court orders.

**Video conferencing and virtual presence** — Cloud-based videoconferencing tools enable parties to a case to participate from a remote location. These are often sufficient for routine or preliminary procedures. Often employed when utilized in connection with minor infractions, these tools can speed court proceedings and reduce burdens associated with transporting incarcerated defendants by allowing them to attend their hearing virtually from their prison. For those with limited mobility or economic means, video conferencing can facilitate and lower the time cost of accessing justice through courts by allowing them to participate from a location and electronic device of their convenience, whether their personal computer or smartphone or a device at another public facility.

Courts in several countries have found productive uses for these solutions. Some, such as the Dubai International Financial Center (DIFC) Court or the Abu Dhabi Global Markets (ADGM) Court, have implemented integrated, comprehensive solutions that address all aspects of user interaction and staff operation. Essentially, they designed fully digital courts from scratch.

In the case of the ADGM Court, it is designed as both a fully digital and fully functional virtual “eCourt” built on Microsoft’s Azure cloud platform, capable of managing disputes completely online end-to-end – from petition to hearing to ruling and settling payments. Starting from zero, ADGM Courts were an important component underpinning the overall success of the Abu Dhabi Global Markets international financial centre. Administrators need to build a system that would be able to quickly instil investor

---

16 F De La Cerna, “**ADGM Courts launch ‘eCourt’ platform co-developed with Microsoft**,“ *ConstructionWeekOnline* (9 April 2018).
confidence that they would receive equal access to fair and expedient justice, despite the challenge of parties frequently being located outside the country. Without being weighed down by legacy systems, ADGM could design court processes to enable justices and court staff to focus on administering the rule of law to the maximal extent possible. As a fully mobile and virtual court, users can file documents, check on case statuses, participate in hearings, and settle fines 7 days a week from any device. Justices presiding over the ADGM Court do not need to be, and are not all, physically present in the United Arab Emirates.

Not all courts have the luxury of beginning with a blank slate and do need to manage legacy processes. However, a phased approach integrating complementary solutions can make real progress toward optimizing workflows, increasing both employee and citizen engagement, and leveraging scarce financial resources. Implementing a new tool like a case management system may not instantly solve many years of accumulated backlog, but the process of digital transformation will help chip away at the deficit over time by enabling court professionals do more with less: judges can focus on their cases instead of administrative busy work; administrators can better optimize allocation of personnel and physical resources; IT staff can focus on running and developing solutions that truly improve the court system, not plugging holes in legacy systems. As this process of transformation unfolds, efficiency gains will result in faster processing of cases and better services for users.

Key Benefits of Digital Court Transformation

Efficiency

Courts face resource pressures as do other parts of the government. However, an ever growing caseload is not always coupled with a growing allocation of government resources; the result is often delays. Digital transformation empowers administrators to run their operations more effectively and do more with less. Enterprise resource planning tools that manage finance functions and human resources apply equally to both court systems as well as other large public and private sector organizations. Other applications tailored to the needs of court administration can, for example, streamline the processing of court submissions or casefiles, which can have a beneficial trickle-down effect to the end user in terms of faster responses to their submissions.

One of the primary problems facing court systems is paper. This may seem paradoxical, since paper has been and, in most places still is, central to the work of establishing justice. For centuries, paper has been equally central to just about every government function and service, as well as private sector business...
activities. However, while the private sector and some parts of government like finance and healthcare have progressively adopted digital and cloud-based tools, courts have lagged behind.

As caseloads consistently increase, this can lead to an avalanche of paper which creates backlogs and delays. The Court of Justice of Sao Paolo (TJSP) presents an extreme example. The largest court system in South America, serving a population of some 50 million, the justice system relied on centralized submission and processing of paper records, which generated significant case delays and wait times for citizens making routine filings and inquiries, including long lines.

In response, the CIO of TJSP developed a plan to migrate the courts away from paper through the "100% Digital" initiative. By building a digital PDF document management system, all court submissions became electronic, and therefore easier to process and share between different parties. They also developed a new Judicial Automation System (SAJ) to manage cases and enable citizens to check on the status of their case online at any time, from any device. The benefits are clear:

- A 70% reduction in time spent completing new digital process relative to previous paper-based process that involved physically creating, moving, storing, and retrieving paper;
- Judges rapidly accessing information remotely and securely making informed decisions much faster, increasing their productivity by 50%;
- The processing of new cases accelerated by 87%;\(^\text{17}\)
- An estimated 3 million working hours (nearly 400 years) was saved in 2016 once previously paper-based processes became digital.\(^\text{18}\)

The reforms also significantly reduced the need for individuals to travel to courts on any given day, “drastically” shortening lines outside courts and administrative offices.\(^\text{19}\) This has a cascading impact on productivity, reducing the time off from work citizens previously lost to engage with the court system and easing traffic congestion.

Environmentally, departing from paper carried even broader benefits for the Sao Paulo government:

- Over the next five years, nearly 5 million kilograms of paper will be saved by going digital;
- More than 440,000 cubic meters of water won’t be used over the next five years;
- 13,507 tons of CO2 emissions will be saved.\(^\text{20}\)

**Accessibility**

Courts and tribunals have a fundamental mission for society - ensuring justice for all citizens. Yet, marginal and disadvantaged communities often face barriers that discourage them from seeking justice. Here too, digital transformation can help ensure that more people maintain access to justice by reducing costs of

\(^{17}\) “100% Digital,” *Tribunal de Justiça*, accessed 18 June 2018.


\(^{19}\) Microsoft, “State Court of Justice of Sao Paulo.”

\(^{20}\) Microsoft, “State Court of Justice of Sao Paulo.”
interacting with the justice system. New modes of digital transformation have the potential to democratize access to justice. They empower citizens to more effectively use the justice system without relying on intermediaries such as law firms and other gatekeepers.

Simply by making basic information available online, digital tools can facilitate citizen engagement with the legal system for those that lack knowledge. Accessibility of justice is also improved by focusing on streamlining processes for individuals to interact with courts. In Portugal, the Ministry of Justice partnered with Microsoft, signing a protocol to “improve the Information Systems of the courts and registries, exploit synergies and improve communication between all stakeholders of justice.” This served as the basis for the “Tribunal+” pilot project, which aims to simplify administrative processes and provide a better experience interacting with Higher Councils, local courts, and district management bodies. Further, this partnership has led to setting up kiosks in local courts to allocate time slots and provide information to persons required to be in court on a given day. Parties, court officers, and judges all receive real-time information regarding the scheduling of proceedings. This eases the flow of cases, while the use of strategic indicators to scheduled trials and other court operations has vastly improved customer service.

E-filing systems can also provide easier avenues to access services and lower the logistical hurdles that citizens or lawyers must overcome to submit petitions and filings. This enables them to by-pass limitations including specific filing locations and hours, saving time and resources. These systems can also be leveraged for alternative, lower-cost options to resolve disputes before any party must appear in court. Online Dispute Resolution (ODR) technologies enable users to access the information that they need to file petitions and/or complaints, select potential resolution options, including to participate in mediation proceedings.

Canada became one of the first countries in the world to introduce public ODR services in 2012. Most notably, the Civil Resolution Tribunal (CRT) of British Columbia provides a collection of resources for users to obtain information regarding the law and dispute settlement options. The CRT is built on the Modria platform, a cloud-based platform on which businesses and public bodies can customize and build their own ODR services. One of its features is a “Solution Explorer”, allows users to “diagnose” their cases, and provides appropriate legal information and self-help tools. Once a case is filed, the CRT facilitates a negotiation process through a cloud-based online portal. Once the negotiation process is started, the online process proceeds offline, and parties reach out to one another over the telephone, email, mail, or fax. Before July 2016, resolution of a certain type of housing dispute in British Columbia was required to be conducted by the provincial government.

---

21 Pedro Pinto Lourenco for Microsoft, “Ministry of Justice and Microsoft, signed Digital Transformation Protocol”, LinkedIn article (May 2016).
23 The Canadian Bar Association, “Online Dispute Resolution is Coming: Are We Ready?” (August 2017)
Supreme Court, where a one-day trial could cost a litigant between $20,000–$35,000 CAD. Between July 2016 and December 2016, more than 200 files were opened in the CRT for such claims, representing substantial costs saved.\(^{25}\) This easy access, inexpensive dispute resolution option reduces costs that accompanies civil litigation, supporting a more positive environment to conduct business.

Digital tools can also be leveraged to expand access for those with disabilities. The Global Initiative for Inclusive ICTs (G3ICT) calls attention to the need to ensure digital transformation solutions address these communities. Their recent paper on leveraging technology to enhance access to justice explores the implications of digitalization of a courtroom environment for these groups, concluding that it holds real potential – if digital applications are appropriately designed.\(^ {26}\) For example, real-time captioning of court proceedings can facilitate the active and real-time participation for the deaf or hard of hearing. Similarly video links – in addition to enhancing accessibility for a range of non-disabled communities – can also be used to supply remote interpretation of sign language. Accounting for the needs of persons with disabilities in technology solutions can also enable court professionals with disabilities to contribute to the success of their organization.

**Transparency and Accountability**

Public trust is a key component supporting the effectiveness of the justice system, but one that is sorely lacking in some countries. Corruption and opaque court operations are a roadblock for many systems. While there is no substitute for a commitment to ensuring the impartiality of judges and prosecutors, technology can help the justice sector improve accountability through different means, including: the development of mechanisms that improve access to information (e.g., enabling free access to transcripts, court records, and judgments online); mechanisms to provide feedback such as court user surveys and grievance redress (e.g., Kenya’s judiciary dialogue cards); and, ensuring that administrators and community advocates can maintain visibility to processes that are prone to corruption.

Despite connectivity challenge, Kenya leverages digital administrative tools to track case management and reduce the scope for corruption. Faced with what observers charged was widespread corruption and inefficiencies\(^ {27}\) (even Kenya’s Chief Justice Willy Mutunga acknowledged that the courts were “deficient in integrity”) Kenyan judicial authorities implemented a series of measures since 2012 as part of its Judiciary Transformation Framework. In order to measure job performance and better balance caseloads, authorities utilized a simple tool: an Excel spreadsheet. Officials at regional courts were responsible for reporting metrics such as updates on case assignments and processing times on a daily basis. This helped central authorities maintain visibility on regional and local courts to identify where problems existed, and to make better staffing and resourcing decisions.\(^ {28}\) While connectivity challenges precluded roll-out of a more comprehensive digital case management system at the time, administrators could leverage this tool to support a nation-wide overhaul of case management process. This is an example of how even a simple,

---

\(^{25}\) [“Factsheet: Civil Resolution Tribunal” Government of British Columbia, accessed 18 June 2018.](https://www.gov.bc.ca/gov/content/civil-resolution-tribunal)


commercially available software tool, when leveraged intelligently by those with a clear understanding of what is needed to improve internal processes, can have transformative outcomes.

Both Turkey and the United Kingdom have implemented a series of reforms to facilitate the flow of information between courts, law firms, citizens, and other justice system institutions. Turkey’s Ministry of Justice first introduced its National Judiciary Informatics System (UYAP) in 2000, networking all courts, Offices of Public Prosecutors, and law offices together with the Ministry of Justice. The project was implemented in two phases: the first phase automated the central organization of the Ministry of Justice in Ankara; the second phase saw the creation of “UYAP Provincial Units” and a country-wide automation process to enable electronic transactions of legal documents between judicial institutions. In order to achieve this, all judiciary units were connected to each other via a central network through territorial lines and satellite links. Significant infrastructure was developed to create a “databank” of legislation, regulations, circulars, studies, and sample decisions. All data and software is held on servers hosted and managed by the Ministry of Justice. Audio and video recording systems for courts are operated through the network, which are available to all registered users. Some of the prominent features of UYAP that resulted in greater transparency include:

- **Citizen and Lawyer portals**: These portals can be used to easily submit and examine documentation, deposit, collect case fees, and obtain relevant information, maintaining a record of all monetary transactions and documents.
- **SMS information system**: Users can opt-in to an SMS service that provides them timely information on ongoing cases, dates of court hearings, and the latest development in their case.
- **Document Management System**: UYAP’s database contains previous cases which can be accessed easily by users. Files and documents produced by courts and enforcement units are also readily available to users.

In the United Kingdom, the Ministry of Justice (MoJ) and Her Majesty’s Courts and Tribunals Service (HMCTS) are also executing a digital transformation strategy with important implications for transparency. In 2014, the HMCTS launched the CE File (Electronic Court) on a full-time basis, an e-filing, case management, and electronic fee payment system. In 2017, the MoJ revealed that it was partnering with UKCloud Ltd, a British public cloud company, to develop the HMCTS common platform. Some notable projects undertaken as part of these sweeping reforms that address transparency include:

- **The Criminal Justice System Common Platform Program**: The reform aims to replace the existing patchwork of case information systems with a single system in partnership with the Crown Prosecution Service, which will improve the flow of information between police, prosecutors and the courts.
- **The Crown Court Digital Case System (CCDCS)**: CCDCS is designed to solve the problem of large quantities of ill-sorted paper evidence slowing trials. The system is now available in all Crown Courts in the UK, and enables all professionals involved in a criminal case to share and access

---

30 “National Judiciary Informatics System,” Turkish Government eJustice Portal, accessed 18 June 2018,
31 British government transparency data, “HM Courts & Tribunals Service spend: October 2017” (April 2018)
documents via a cloud-based platform built for the Ministry of Justice. Users – both judges and lawyers – can access this system from any location and on any device.

- **The Better Case Management Initiative**: Launched in 2015, BCM aims to overcome blockages and disparities stemming from divergent local court case management practices by reforming and unifying procedures. Digital solutions are just one piece of HMCTS’s efforts to optimize process, but a key one. By developing new ways of working for courts and laws, it speeds trials and eases the burdens on prosecutors and defence attorneys in adjusting to individual court particularities.\(^{34}\) In addition to unifying and rationalizing existing court processes, it also introduced a new national Early Guilty Plea scheme and Crown Court Disclosure in document-heavy cases. The reform was aimed at providing simplified information regarding criminal cases in magistrates’ courts.\(^{35}\)

- **Best Evidence Cloud Knowledge (BECK)**: The Traffic Penalty Tribunal (TPT) of England and Wales recently launched a web-based portal for resolution on traffic-related disputes. The TPT enables appellants to appeal, upload evidence, and follow cases and hearings under one evidence screen and account.\(^{36}\)

---


BARRIERS TO REALIZING SMART COURTS

Despite potentially wide benefits, there are several barriers that get in the way of justice system professionals that pursue digital transformation of their court. Some of these are similar to challenges encountered across government agencies and other large organizations; shifting cost structures, changing entrenched user habits, and overcoming staff resistance to change can complicate digital transformation implementation efforts in organizations of all types. However, courts do face some particular difficulties that other types of organizations do not.

The power of digital transformation is best unlocked when users are able to shape the tools that allow them to do their own jobs better. To this end, cloud-based applications allow for constant experimentation and refinement of solutions to suit user needs. However, cloud-based tools also bring new challenges to procurement systems for hardware and software. Several previous technology procurement efforts in Africa and around the world haven’t adequately dealt with this, resulting in poor-fit solutions.

Research and conversations with justice sector professionals have identified several key barriers that hamper the adoption of new digital tools, which can roughly be grouped into three categories. These cumulatively prove a high hurdle for those in the justice sector, can sap the sustained political will necessary to implement solutions, and undermine outcomes so that eventual systems can be poorly adapted to user needs.

Administrative and Financial Barriers

- **Costs** — New investments require mustering political will in any government agency, and courts are no exception. Administrators may face difficulty finding the resources to make upfront investments in new solutions. Additionally, many balk at the prospect of paying ongoing costs for solutions, such as licenses or subscription fees for cloud-based software, without performing a full accounting of how their cost structure may be impacted or how new cost recovery models can defray costs.

- **Procurement procedures** — The way public agencies purchase goods and services is a common problem for digital solutions, but this problem may be more severe for the justice sector. Court systems typically use a separate tendering agency, whose procedures often limit the input into procurement decisions from the actual end-users: judges, staff, lawyers, and citizens. Many digital justice applications – such as case management systems – are complex and unfamiliar to procurement officials outside the justice sector. Coupled with lack of technical familiarity among tendering staff with issues such as cloud computing this can lead to outcomes that are poorly adapted to the needs of users.

- **Staff resistance** — Administrative staff often resist new digital tools and optimization efforts, since they see them as a threat to their jobs. Depending on national administrative arrangements, some government IT entities also resist relinquishing control over tech issues to an outsourced solution which would forego the revenue they could previously collect in their position. Digital transformation efforts can also be an opportunity for staff to re-orient their work to the more
productive and rewarding aspects of their job, not to mention free up resources to develop greater value-added services for court professionals and citizens. However, this opportunity can be hard to see at the beginning or in the middle of a digital transformation journey.

Perceptual Barriers

- **Security misconceptions** — Misconceptions regarding security of cloud and digital tools are common, and discourage many from exploring digital transformation. Without a full understanding of the inherent technical security measures, many implicitly distrust government data being handled by a third party, especially when it may be transferred overseas. The reality is that cloud solutions — especially from large global providers — typically offer security measures far in excess of what the government can provide itself. What’s more, as court documents are a matter of public record in many justice systems, only a small proportion of judicial documents actually require confidential treatment.

- **Fear of dependence on a vendor** — Some administrators manifest a resistance to committing to a specific vendor based on the need for long-term continuity. In some countries public contracts must be re-evaluated on a regular basis regardless of performance. In this context, some are reluctant to pursue outsourced solutions, especially given questions of migrating data from one cloud service to another.

- **User habits** — Habits can be hard to break, especially for many judges and staff that have used certain working methods for decades. Many people fail to see how new digital tools can help them work better and complement their working methods. Younger generations rising through the legal ranks tend to have higher digital literacy and are slowly changing entrenched habits in the legal profession. However, quicker action is needed to ensure stakeholders can see opportunity in new tools, not just disruption.

Policy Barriers

- **Data and IT restrictions** — Some governments maintain tighter control over provision of technology to government entities through specialized agencies. Procurement of cloud tools by justice systems can also be negatively impacted by related government policies, for example legal barriers to cross border data flows or unnecessarily restrictive security standards. These can preclude agencies from selecting many solutions provided by global firms.

- **Enabling infrastructure** — Some enthusiastic officials attempt to implement digital tools for courtrooms not yet equipped to use them. Judges in developing countries point towards connectivity challenges, especially for rural courts, as a significant barrier to implementing cloud-based solutions. These tools cannot be leveraged if a courtroom lacks stable electricity not to mention reliable broadband.

In the face of these barriers, well-meaning efforts to promote the use of technology in courts can and have fallen flat. However, these are not insurmountable barriers. By identifying what they are and some ways to overcome them, justice system professionals will have a leg up when they decide to pursue digital transformation.
HOLISTIC ROADMAP FOR DIGITAL TRANSFORMATION OF COURTS

There are many potential pitfalls on the path to digital transformation, but justice system professionals confronting these problems can take heart: they are not the first to confront these challenges, and there are proven ways to overcome barriers. Though uptake of digital and cloud-based solutions by courts has lagged, both successes and failures by early adopters can provide valuable lessons on how officials can make their courts smart.

Our conversations with IT and justice system professionals from Africa, as well as some in other countries such as the UK and UAE, have revealed some successful best practices to bear in mind when pursuing digitalization of courts. Below, we outline a systematic and practical roadmap for justice system professions to navigate these obstacles and facilitate successful digital transformation.

1. Evaluating the Opportunity Holistically

Consult stakeholders to assess what needs are unmet

Thorough involvement of all stakeholders from the beginning of a process is an important component of successful efforts, as is continuing to consult them throughout a procurement process. Digital tools are ultimately for the benefit of court staff and users, who are best positioned to articulate which of their problems are most pressing and what tools would best help them. Gathering these views and holding them top of mind will help leaders driving digital transformation to identify the areas of highest impact so that they can focus their efforts on the aspects of justice system processes with the most to gain from digital transformation.

Relevant parties include not just judges, but also existing IT staff, citizen advocacy groups, groups representing disadvantaged groups or those with disabilities, and lawyers and law firms who most frequently interact with the courts. At more advanced stages of this process, having involved these individuals from the beginning will ease implementation of tools and new processes by ensuring that these groups provide input in the transformational efforts being undertaken.

Consultations should be calibrated to identify discrete solutions that would best respond to the most pressing needs of courts. While integrated, comprehensive solutions addressing several different types of needs may appear attractive, implementation of overly ambitious overhauls often flounder in the face
of unexpected challenges and resistance from different stakeholders. Identifying targeted but impactful interventions is more likely to lead to success.

**Consider all aspects of the financial impact**

After identifying which needs are most important to address and what tools would best help court users and operators, administrators need to thoroughly evaluate the financial impact of different technology options, and balance the most pressing needs with available resources. The financial implications of digital and cloud-based tools should be assessed holistically, including the impact not just on upfront capital expenditure and ongoing operational expenditure for licensing costs. Other savings including printing, staff time, and reduced inefficiencies should be considered. Many courts have also explored creative cost recovery methods that should be evaluated to defray new operational expenses, for example charging fees to large legal firms who routinely interact with courts or passing on costs through annual bar association fees for lawyers.

**Consider timing and triggers**

There are sometimes logical points, from an administrative perspective, to implement new tools. Assessing where these points are can help force action and facilitate implementation. For example, existing IT systems may be scheduled for replacement or upgrade, or existing contracts set to expire. If a court system depends on a budget allocation process controlled by another entity, or draws on external grant-making sources, administrators are well served to carefully consider when is the optimal time to engage and make a request.

**Consider policy aspects**

Aspects of government policy may impact court procurement decisions but may not necessarily be top of mind for justice system administrators. For digital tools, these issues primarily concern regulation on data, for example restrictions on the cross border transfer of certain types of information or mandatory data security standards. Identifying where these barriers exist will help administrators successfully navigate procurement process and consider when a special exemption may need to be sought, if available.

**2. Executing Successfully**

**Navigate procurement processes**

Every justice system has different procurement procedures that they must comply with. Understanding how these rules constrain the latitude of administrators is particularly important for digital and cloud-based tools, since those who operate these processes are typically less familiar with them. As a result, even well-intentioned efforts can yield inadequate solutions if tenders fail to consider or articulate the full needs of those who will use those tools.

Depending on how procurement processes are structured, leaders driving digital transformation of courts need to work carefully to ensure that the needs of court users are fully elaborated and articulated before launching a tender. These needs also must be properly translated into technical parameters that will yield appropriate responses to tenders. This requires bringing together line of business leaders who will use a system with IT experts who can appropriately articulate these needs.
Finally, since the full potential of cloud-based tools lie in their flexibility, tendering processes should ensure that outcomes can continue to be refined and tailored after purchase, and that court system IT staff have the latitude to continue to experiment and add new components that respond to the needs of users.

Select appropriate solutions

Responses to public tenders must be carefully evaluated to ensure that they speak to the needs of courts, and are technically sound. This requires consultations with both the potential users of digital tools as well as IT experts. The lowest cost proposal may not always provide the greatest value for courts if it would be less useful to users, is harder to tailor and refine, or does not provide the necessary quality of service.

Keeping in view the necessary level of security that courtroom data may — or may not — require, it is recommended to choose cloud providers that can provide adequate protection for data with appropriate security solutions. Looking to recognized international cloud standards can be a useful benchmark to aid administrators in this decision. After selecting a provider in compliance with all requirements, administrators must execute a service level agreement (SLA) that provides for the core needs of the justice system and identifies relevant technical, legal, and quality of service terms, including aspects such as data retention, confidentiality and integrity, disaster recovery, business continuity, and availability, as appropriate.

Launch an “iteration 1”

After all of the above have been completed, administrators are ready to begin implementing solutions. As a first step, small scale applications are typically best, which start either with a small number of functions or a small pool of users. Testing these small-scale solutions allows administrators to refine the operation of new tools and demonstrate their value to stakeholders. This should be thought of not as a discrete, time-limited pilot, but as the first stage in a process of iteration in response to feedback from users. Subsequently, a larger-scale role-out that responds to this feedback will be more successful.

3. Managing Change Robustly

Digital transformation is not accomplished with the purchase of a new solution. Conclusion of a procurement process is only the beginning of a process of implementation and refinement that will bring benefits to court users, if obstacles are successfully navigated.

Communicate with all stakeholders

Even the best designed tools can be stymied if users and staff resist them: stakeholders may not understand or may feel threatened by new digitized processes; judges and lawyers may resent making adjustments to their working methods; while IT staff can see new tools as a threat to their position.
Building upon earlier consultations to assess needs and design tools, involvement of stakeholders — including judges, lawyers, administrative staff, and civil society groups — in the implementation of tools will make them feel involved, identify where they have concerns, and demonstrate how new solutions can free them to focus on more productive and rewarding aspects of their jobs. It is also important to ensure that existing IT staff see a path to adjusting to the new environment — without losing their jobs.

**Train and retrain staff**

Users need to be equipped to use new tools effectively. This means that they need adequate training to understand its capabilities, as well as additional resources at their disposal when most needed. Many users are also more receptive when they receive training and insights from their peers, for example judges sharing their tips and tricks with other judges. Administrative staff may also require retraining to ensure that they can adequately use and support new IT systems. Newly redundant staff can be effectively redeployed to new roles such as training staff, maintaining networks, or developing new user tools for a cloud platform.

**Iterate in response to feedback**

Rolling out a new digital tool is not the conclusion, but the beginning of a process of refinement. Users — including judges, administrative staff, lawyers, and citizens — will have useful feedback on how systems can be improved and should be consulted on a regular basis. Administrators should create a mechanism to gather this feedback and use it to refine and build better features into systems. This will make solutions more useful for all stakeholders and better at solving the problems of courts. As users of tools come to better understand how tools can be adapted, they will provide better feedback and help facilitate true digital transformation of their own processes to improve productivity and the quality of court services.
CONCLUSIONS AND NEXT STEPS

The potential of digital transformation for African courts is clear. By leveraging cloud and other technology tools, courts can optimize their internal process and improve services to users through more efficient use of resources, increased reach and accessibility of justice, and improved transparency and accountability of court activities. However, while judicial transformation must be driven by court system professionals and users, it is imperative that policy makers create the correct framework and enabling environment to foster this. The private sector and civil society also have an important role to play to reduce the scale of the challenges court professionals face.

In order to support justice sector professionals as they pursue more rapid digitalization of African courts, there are a few productive areas in which stakeholders should focus their efforts:

- **Procurement process reforms** — Lawmakers and regulators should ensure that procurement procedures that apply to court systems are properly updated and adapted to the needs of court technology procurement. Ensuring that procurement processes are impartial, free of corruption, facilitate the input of relevant parties, and provide court systems adequate latitude to define their needs at the necessary level of complexity to acquire complex tools is important. Qualified technical staff also need to be available to both ensure that these needs are appropriately translated into technical parameters and to evaluate the appropriateness of responses to tenders, for example through the input of a technical evaluation committee.

- **Enabling environment for technology** — For government to fully leverage the benefits of technology, a positive environment for investment in and use of technology is essential. Policy frameworks should protect and facilitate the free cross-border transfers of data that enable competitive markets for cloud computing services and ensure there are low regulatory and technical barriers to trade in cloud services.

- **Further research** — While it is clear from anecdotes of judicial sector and technology industry professionals that courts tend to be lagging adopters of digital solutions, systematic evidence of this is sparse. Further research to assess the level of digitalization of courts in different countries will help identify which applications have found the most success, who the laggards are, and what resources would best support them.

- **Capacity building** — Judges and court administrators are often eager to adopt new tools, but lack the expertise to successfully navigate procurement processes or manage cloud-based solutions. The roadmap developed in this paper (see also the Annex for a different presentation of this) is a first step to aid justice sector leaders with a methodical process for digital transformation, however court administrators and IT staff require much greater support at the technical level in order to succeed. The public and private sectors should cooperate to arm those who are eager to improve their courts with the tools to navigate digital transformation, for example by supporting the sharing of procurement best practices between court system professionals.
BIBLIOGRAPHY

- “100% Digital,” Tribunal de Justiça Estado de São Paulo, http://www.tjsp.jus.br/CemPorCentoDigital/


