



DESIGNING AND IMPLEMENTING COURT AUTOMATION PROJECTS

Practical Guidance for USAID DRG Officers

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INTRODUCTION

In the course of its rule of law (ROL) work, USAID's Democracy, Rights and Governance (DRG) officers often encounter requests from cooperating country governments and judicial officials that USAID provide financial and technical support in automating their courts. This is not surprising, since many ministers of justice, chief justices, and court presidents from developing democracies have been exposed to modern, automated case management systems when they have visited courts in North America or Europe. Moreover, in a sector where assistance is not always very tangible (consisting of training or expert advice) and the results (better justice delivery) difficult to measure, automation assistance can be both very tangible (e.g., delivery of ICT hardware), and can result in readily measurable impact (e.g., improved case processing times or reductions in case backlogs). So the allure is strong, for both the providers and recipients of assistance. As such, over the last decade, USAID has supported numerous court automation projects in a broad array of countries, touching every geographic sector where USAID works – E&E, LAC, MENA, Africa, and Asia.

Court automation projects, however, also carry risks and potential downsides. Most obviously, automation can be expensive, requiring a significant allocation of USAID and host country resources. Automation, moreover, begs the question of sustainability: will the host country be able to maintain the automated system once USAID or other donor support ends? The risk that a short term "win" on delivery of an automated system will result in a wasted investment over time is very real. As in other areas of development, the key to mitigating that risk is to engage in careful advanced planning based on an in-depth assessment of needs, capacity, and commitment. The following manual is intended to provide USAID DRG officers with sufficient information and guidance to enable them to ask the right questions when deciding whether to support such projects. It is also intended to provide them with best practicesdrawn from prior experience in the design and implementation of court automation projects, to ensure that they provide the expected benefits to court managers and users. But court automation is not a one-size fits all undertaking. Any USAID mission that decides to support a court automation initiative must do so fully informed by both international and local expertise. The following manual does not purport to serve as a substitute for the targeted advice and expertise that should go into planning specific court automation projects.

This manual is based on reviews of reports, evaluations and assessments from numerous USAID projects from around the globe, as well as key informant interviews with DRG officers, chiefs of parties, court administrators, and others who have previously implemented or are currently implementing court automation projects. It has also been informed by the authors' own experiences in designing, implementing, and managing automation projects. This manual is structured, after addressing some definitional issues and highlighting the benefits of automation, around three key steps: first, how a DRG officer should assess a request from the government for automation assistance, and questions that the DRG officer should keep in mind as he or she considers that request; second, assuming that the request is meritorious, guidance in the design of the project; and third, some considerations regarding implementation.

COURT AUTOMATION DEFINED

Before getting into the heart of assessing needs and designing projects, we should first define what we mean by court automation, and differentiate it from the term case management system, as the two terms often are used interchangeably. In early efforts to support the delivery of technology to developing countries, court automation was the more frequently used term as those projects focused more on delivery of computers whereas later projects began to include the software for workflow management that became the basis for the term case management systems. Today, projects are more inclusive; accordingly, for the purpose of this report, the term court automation will be used.

A workable definition of court automation for the purposes of this report is the introduction of electronic and mechanical equipment that, together with software usage and revision of processes, reduces or eliminates the manual efforts associated with the processing of court cases. Court automation is not limited to computers or computer systems as equipment as simple as a highly efficient copying machine or mechanical shelving can, in many cases, produce significant improved efficiencies in courts. From a functional prospective, court automation can include automated random case assignment, electronic calendaring, e-filing systems, case management systems (CMS), automated recording systems (digital audio recording), and public information kiosks. Court automation can range from

COMMON COMPONENTS OF COURT AUTOMATION

HARDWARE FUNCTION:

- High speed coping
- High speed printing
- Scanning
- Network connectivity
- Internet connectivity

SOFTWARE FUNCTION:

- Workflow management
- E-filing
- Video conferencing
- Audio and video recordings of proceedings
- Document (template based) generation
- Electronic service of process
- Staff management
- Statistical reporting
- On-line document review
- Digital archiving

automating just the tracking and processing of cases in courts to having a fully automated system across the justice system, used by police and prosecutors, as well as judges (in the criminal justice context, something that would track a defendant's case from arrest, to pre-trial detention, to appointment of counsel, to trial, to incarceration, etc.). Although court automation can encompass a lot of different issues or activities, for the purposes of this report, we will be focusing on the introduction of electronic systems and mechanical equipment in order to reduce or eliminate manual efforts associated with the processing of cases – but many of the lessons noted below can apply to other types of automation and equipment procurement.

BENEFITS OF COURT AUTOMATION

Much of what follows addresses the risks of court automation projects, but we do not want the manifold benefits to be lost. Well designed and implemented court automation projects can lead to a number of important significant benefits, including:

- **Increase in efficiency,** if used as a management tool to track cases and case backlogs, for example by automatically establishing a trial calendar, task notices, and setting status review dates. These increased efficiencies can help courts keep on top of their caseloads while helping to solve case backlogs.
- Greater efficiency means more rapid dispensation of justice, which promotes public confidence in the courts, and in the government overall. Automation can even help promote the protection of human rights, by better tracking of detainees and calendaring (and sending notices of) of trials and hearings.
- Improved quality of decision-making: In too many countries, valuable judicial time is expended on management issues, such as tracking performance of judges or assigning cases, instead of on doing the work that judges should be doing: deciding cases. Court automation can contribute to increasing the amount of time judges have to do the work they should be doing, thereby improving the overall quality of justice.
- Improved access to justice through better information sharing: Case information can be shared everywhere it is needed, whenever it is needed, in the form of case status queries, notifications, and management reports without the limitations of movement of paper files. Judges, lawyers, prosecutors, managers, and end users of the system can all benefit from automation. E-filing, electronic notifications, online access, and other automated tools can make important contributions to improving access to justice.
- Automation also provides more reliable and timely statistics. Better and more accurate data can be used to drive policy and budgeting decisions, determine how judicial resources (including personnel) should be allocated, and can also be used to advocate for increased allocation of resources to the judicial system overall.
- Better data can serve as an important tool for measuring court performance, thereby increasing judicial accountability.
- Increased transparency and decreased opportunities for corruption: Automation is a vital tool for combatting corruption, including through the use of automated random case

"Case management and related data collection does not require automation. since the focus is on realistic rules for moving cases forward and solid mechanisms to track and enforce adherence to these rules. Still, automation can greatly enhance the speed, reliability, monitoring, and tracking of case processes, resulting in better reporting and analytical capacities to guide the management of cases."

H. Gramckow and V. Nussenblatt, "Caseflow Management: Key Principles and the Systems to Support Them," Justice and Development Working Paper, the World Bank (2013).

assignment systems so that important cases cannot be manually assigned to particularly malleable judges. In addition, better tracking of case files also means that fewer can be "lost," a common means by which parties and lawyers can use bribes to court administrators or judges to avoid a final judgment. Improved efficiency also addresses some of the incentives for corruption; one of the frequent purposes of a bribe, for example, is to have a case file moved to the top (or the bottom) of the pile of cases that a judge is considering. Another aspect of automation, digital audio recording, can produce a complete record of court proceedings, thereby promoting judicial professionalism and inhibiting corruption.

So, court automation can clearly hold much promise. Note, however, that many of these issues can be addressed without automation, and mere automation does not guarantee that all of the problems in a court or in a country's system will be solved. But it is an important tool, and when the conditions are right, it should be used.

STEP ONE: ASSESSING THE REQUEST

When a DRG officer enters into a meeting with a minister of justice, the chief justice, or the head of a judicial council, and asks how USAID can help strengthen that country's justice system, the reply is unlikely to be, "We have a terrible problem with corruption," or "Our judges are poorly trained and educated" – even if those really are the preeminent problems. Rather, he or she is more likely to hear, "We have a terrible backlog of cases, and we do not have the resources needed to address it; there are too many cases being filed!" Or, "I was just on a visit to America, and I saw this amazing case management system that the federal courts there use - we would like something like that!" So, how does the DRG officer respond? No doubt, as described above, automation may help to improve efficiency, combat corruption, and improve the quality of justice, but this may cost a lot of money what more information should be gathered before determining whether to move forward? In order to answer that question, we recommend that USAID engage in the following assessment and dialogue with representatives of the host country.

A. ASSESS THE HOST GOVERNMENT COMMITMENT TO AUTOMATION - AND REFORM

It will be necessary to engage in extensive and detailed discussions with the political leadership of the host country before deciding to fund or design a court automation project. Such discussions should be held with the entity charged with managing the courts, whether the Ministry of Justice (MOJ) and/or some judicial council, the Chief lustice, the chief administrative officer of the courts, court presidents and managers of large and important courts, the president of the national bar association, the chief prosecutor, senior representatives of the Ministry of Finance, and any government agency charged with overall ICT management or procurement, if such exists.

The key questions to ask your host country counterparts must include: "What are your goals and objectives for court automation? Why do you want to do this? And how will you measure success?" In addition to learning their goals and objectives (e.g., improve efficiency, transparency, resource tracking

and allocation, etc.), these questions create a barometer of how much effort the courts and their leadership are willing to put into the effort. If you walk away from the discussion with a sense that your counterparts have not articulated clear goals or objectives, you can be pretty sure that the courts have not determined how much effort they will put towards accomplishing automation. You need to make sure that the host country is not seeking automation just for the sake of automating or simply to obtain "trophy" equipment.

You also need to discuss with your counterparts whether the proposed automation will address the identified problems. If the problem is case backlog in the civil sector, for example, automation may be a part of the solution, but the problem may be really be rooted in the civil procedure code, court practices, or enforcement of judgment mechanisms. "Though it may be surprising to some, a successful automation project is not about technology. A successful automation project is about identifying and seizing opportunities that computer technologies and connectivity bring to courts. It's about vision, leadership, and innovation. It's about investing wisely, making best use of technology, managing risk and ensuring sustainability. It's about developing the skills, knowledge and capacity to improve court performance."

USAID/MCC Report on Strengthening the Strategy for a National Court Case Management System, Ukraine, 2008

As one experienced court administrator has noted, the "Golden Rule is that it is not technology that drives change, it is change that drives technology. Building a project scope with this in mind instead of from a perspective of simply delivering technology is the first step in success."

An important related question to explore is: What impact will automation have on existing entrenched interests? How will judges, court clerks, and lawyers respond? Automation can upset some **existing incentive structures**; e-filing, for example, may remove opportunities for corruption, but the bar and court managers may resist it because it will likely damage their informal income – so what will that mean for the likelihood of success? The bureaucracy will be resistant to real change, especially if they have vested interests in the existing system. One experienced expert said, "Having a good sense of where the resistance will come from is very important." As one assessment of a USAID court automation project

in Haiti noted, "As with many large IT-related initiatives, the most difficult challenges are human and cultural, not structural." The greater transparency effected by automation is likely to make some actors uncomfortable; for example, a lawyer may not be happy that her client can see that her lawyer was responsible for a continuance in a case. Highlighting the benefits of transparency for key stakeholders can help promote acceptance. In Moldova, for example, judges began to realize that the transparency introduced by automation could serve to protect them when accused of corrupt practices. On the other hand, an early effort to automate selected courts in Ukraine failed when the judges figured out that the CMS would be used to measure their workloads and efficiency - they just stopped using it, and reverted to the manual system.

"Before starting any automation enhancement process, courts need to have a clear vision of their automation goals, fully understanding what is involved and what impact the desired changes will have. The court must clearly define its needs, goals, and objectives, as well as identify what processing and automation changes can be made within the existing legal framework and resource capacities and where amendments will be needed."

H. Gramckow and V. Nussenblatt, "Caseflow Management: Key Principles and the Systems to Support Them," Justice and Development Working Paper, the World Bank (2013).

The real test of commitment will be the answer to this question: what **resources** will the host country commit to court automation? The answer is critical not only to understanding the commitment to achieving the agreed upon goals and objectives, but it also starts the thought process that will delineate the contours of the actual project. Assessing these resources includes:

- Understanding the technology resources: both the necessary rotation of computer hardware and
 future upgrades to the software must be calculated in advance in order to assess the true cost of
 automation. Technology capacity is discussed in greater detail below.
- What are the existing and potential future staff and training resources? Ensuring that courts have
 professional IT employees is essential, as judges and court staff will require on-site IT support. Host
 countries must not only be prepared to commit the necessary resources to that end, in many cases
 they may need to reform their civil service laws and regulations to allow the judiciary to hire IT staff.
 As two Australian court reformers have noted, "Very often a donor sponsored ICT program will
 only fund basic capital costs with only cursory attention to the change management processes

associated with introducing and sustaining that investment." (B. Walsh and T. Lansdell, "Exporting Australian Court Technologies to the Developing World – Help or Hindrance?").

• Budget support, essential to sustainable change. What expenditures will the host country need to make or ultimately assume? Have they thought about paying future licenses, the future need to maintain and replace equipment and update software? Increased electrical costs/need to acquire and maintain generators? Increased costs for well-trained personnel to maintain the system? As one of the authors of this report has stated, "I always use the rule of thumb of if the host country does not have at least an amount equal to 25% of the USAID investment to assign to the budget each year, we are funding a death march."

"Most court systems in developing countries that benefit from donor programs have personnel systems and manual work procedures that have changed little since the Second World War. These systems are typically under-funded, as may be evidenced by low salary rates for staff, sustained understaffing against formal approved establishment numbers and deficient or non-existent funding programs for building maintenance and essentials like electricity and telephone services. These kinds of deficiencies often produce consequential effects that accelerate the problem, such as high rates of down time and absenteeism, poor workplace discipline and accountability and low level corruption. How can new ICT be installed and used in a court that is under recurrent funding duress? The Australian experience over the last 30 years suggests that without reforms to ensure there is adequate provision for sustaining new technology, the benefits of its introduction are unlikely to be sustained."

B. Walsh and T. Lansdell, "Exporting Australian Court Technologies to the Developing World – Help or Hindrance?" 4th AlJA Law and Technology Conference, Sydney, Australia, June 2008.

Before project start, it is essential that USAID and the host country memorialize the agreed upon goals in a written document, such as aide memoire or a **memorandum of understanding** (MOU). This can include or later be amended to include what USAID (and other donors) are agreeing to provide, as well as the resources and commitments that the host government is willing to make.

B. UNDERSTAND THE TECHNOLOGICAL CAPACITY OF THE HOST COUNTRY AND ITS JUDICIARY

A question of significant importance to ask up front is: What is the judiciary's **technology governance**? What we mean by technology governance is, who has the authority to make decisions regarding IT in the courts? Does this power reside with someone at the MOJ, the Supreme Court, or some government-wide ICT agency? And what is the structure of the governance down into the court level? If the country lacks a technology governance structure, successful introduction of new technology will be tough if not impossible and will likely result in an unmanageable IT hodge-podge. USAID and other donors have been working on court automation in Albania since 2004, but the job remains unfinished, largely because there has never been any technology governance, or commitment to creating one.

On a more tangible level, what is the current country wide **infrastructure** for IT? Is there a reliable electrical supply? Is there a centralized processing capability? Are there government wide licenses available to the courts for products such as Microsoft Windows, Microsoft Server, anti-virus software, etc.? Is there some kind of centralized support and planning, or do courts operate with autonomy? (In Albania, for example, each court pays for its own internet). These are issues that, left unaddressed, frequently result in cost overruns.

C. KNOW WHAT OTHER DONORS ARE DOING OR HAVE DONE

Donor coordination is a practice best honored in its breach, but in the case of court automation it is absolutely essential to possess a detailed grasp of what other donors are doing or previously have done to support automation in the courts. This means understanding their objectives, funding levels, geographic and jurisdictional scopes, their successes, failures, and plans for the future. Other donors can also provide information regarding the practical and technological challenges likely to be encountered, as well as insights into the commitment of the host government, i.e., which courts, judges and judicial leaders will be the best potential partners. Donor coordination is particularly important if a new project is being envisioned that will arrive in the middle of an ongoing automation effort, or will be expected to build on what has come before. It will be essential to confirm that USAID's approach to automation is in philosophical alignment with that of any other projects. This may present at least a superficial challenge where a European donor, for example, is working in another civil law country and may argue that American common law approaches are inapposite. Our experience is that court automation is a management issue more than a legal issue, and that such concerns can easily be addressed. It is more important that donors put aside any philosophical or historical differences to get the job done. This is especially essential if the host government is not living up to its representations and obligations – in that case, all donors must work in a concerted fashion to advocate for ongoing and future host government support.

While strong donor coordination can enable USAID to leverage a previous investment to maximize impact, the opposite can make conditions worse than they were before the donors stepped in, thus violating that most fundamental of development imperatives, "Do no harm!" In the worst case scenario, a grab bag of different donor or locally provided management systems are created, operating at different levels of courts or in different geographic areas. Different systems may not do the same things, may operate on different platforms, and may impede scale up, etc., making the situation ultimately worse than if there had been no automation at all. In Kenya, there have been up to seven different donor driven initiatives. In Ukraine, there were at least four different court automation initiatives, some driven by donors and some locally. As a 2008 USAID assessment in Ukraine found, "Though well intentioned, these projects are contributing to an increasingly complex court technology landscape and are incongruent with Council of Judges intentions to have a 'unified' case management system. Such projects should be considered a transitory phase leading to a comprehensive national 'unified' case management system as envisioned by the Council of Judges." This discussion raises the issue of the pluses and minuses of taking a pilot approach to automation – discussed below.

D. GATHER THE UNDERLYING DATA AND DOCUMENTATION

Even before the design stage starts, USAID should seek to collect as much court performance data as possible. This will be used to inform the assessment, and will be needed by the design team in any event. The following is a list of documents that USAID will want to request:

- · Five years of court annual reports, which may eventually need to be synthesized down to identify trend patterns concerning caseloads, backlogs, etc., which will become the baseline for measuring improvements;
- Five years of court budgets, which may require some digging into to determine what has been allocated to technology (or no digging, if little or no such funding has been allocated);
- A list of other donor supported reform efforts and related progress reports. While some of those efforts may not deal directly with court automation, it is important to know what other donors are working on, how such efforts might affect court administration and automation (for example efforts to revise procedural codes), and how they may drain away limited court resources (through donor fatigue);
- Annual reports from any relevant current and previous USAID sponsored projects, which will be helpful for the design team in educating them concerning the level of cooperation and the major players in the justice sector; and
- The country's "book of court rules" the regulations that prescribe how the courts are supposed to function on a procedural level. It is very easy to assess the amount of process change possible by looking at the book of court rules. More than one project has encountered predictable delays caused when courts claim that proposed changes cannot be implemented without changes to these rules, which may require legislative action.

At the end of the initial assessment period, you may decide that the wiser course is to focus on concepts of judicial management, i.e., judges and court managers taking responsibility for and working to proactively manage their case files, rather than on automation. But if you decide to proceed with automation, even more detailed planning, led by an experienced expert in court automation, must go into the design of the project. The following are some considerations to take in program design, many of which not surprisingly track the issues discussed above relating to the initial assessment phase.

STEP TWO: DESIGNING THE PROJECT

A. CALL IN THE EXPERTS

Our first recommendation in the design phase is to call in outside experts to assist. Court automation is a highly technical field, and there is no reason to reinvent the wheel. The design team should include an international expert in court automation with prior experience designing court automation projects and two very strong local experts, one who is a lawyer who understands the workings of the court system, knows the book of court rules, and also knows the procedural codes; and the other, a local IT expert. The design team must be fully briefed on the initial USAID assessment, and any MOUs or aide memoires must be provided. The design team should then engage in a "deep dive" with future counterparts at the MOI and/or judicial council, the targeted courts, the bar, the prosecutors, the judicial and clerical training institutions, etc. This deep dive will also include a close examination of the documents previously obtained (as described above), the procedural codes, and a study of the current digital practices (a barrier to introducing effective automated case management systems is sometimes the lack of digital signature legislation). Extensive consultations with host country counterparts at all levels is required to ensure that the end product meets their stated needs, that there will be sufficient buy-in to the new system (change management actually begins at this stage), and to ensure sustainability. Project design should also incorporate consultations with the bar, civil society, and to the extent possible endusers, or groups representing them. The following tips are intended to help you guide the work of the design team.

B. INCLUDE CLEARLY STATED PROJECT GOALS, DESIGNED WITH AN UNDERSTANDING OF AVAILABLE RESOURCES

The project design must be driven by identified goals! And delineated by available resources, including budget constraints. The resulting design document, which will consist of or include a scope of work (SOW) for the future implementer, should also clearly address the following issues:

- Not to be a broken record, but: What is the scope of the project? What are the expectations? Are you planning a relatively simple case management system? Or something more expansive, covering for example, the entire criminal justice sector, which may involve automating police, prosecutorial, judicial, and correctional functions? Will there be an e-filing component? Digital audio recording? In any event, remember that in most circumstances in most of the countries where USAID works, "Gold plated systems cannot be sustained."
- What host government agency will ultimately take responsibility for the new court automation?
 This is the technology governance question.
- What is the timeframe for obtaining measurable results? There may be a conflict between host country and USAID expectations or both may expect too much too soon. The design team needs to set realistic goals for all parties, and USAID needs to make the counterparts aware of the length of time it will take to select an implementer to actually do the job. It is entirely possible that obtaining realistic results may occur after the completion of a USAID funded project.

C. UNDERSTAND THE CURRENT LAW, PRACTICES - AND DATA

As noted above, the design team should include a local lawyer, and the team should be familiar with the procedural codes and the book of court rules, as well as any other local rules or practices affecting court administration. An essential threshold question will be whether you are seeking to automate the existing manual process, or creating a new or revised one. In either case, the design team will need to map out how cases work their way through the system, correlated to existing or planned laws and regulations (this can and often is done at the implementation stage, but a better outcome can be expected if it is done at the design stage).

Moreover, data conversion is a complex process during the design phase – the design team must understand the data available, how it is being collected, and how much of the data should be or can be converted to use under a new automated system.

The design team should also have been provided with any existing data concerning court performance (backlogs, time to disposition, allocation of cases around the country, etc.). This will be essential to understanding what practices or laws may be contributing to inefficiencies in the courts, and to confirming that court automation will help to address those inefficiencies and backlogs. In much of the former Yugoslavia, for example, courts complained of terrible caseloads and backlogs, but these were due largely to state utility claims against citizens, and was more of a societal concern than a

"[M] any ICT innovations in courts are vulnerable to the risk of duplicating, rather than substituting new technology for paper processes. A success criterion for new ICT in courts ought to be that it must substantially replace a process with something that is superior in terms of both efficiency and effectiveness. If a court is not willing to allow well designed new technology to retire old paper processes, then the intended benefits used to justify investing in new technology can often be squandered."

B. Walsh and T. Lansdell, "Exporting Australian Court Technologies to the Developing World – Help or Hindrance?"

management issue – even though it was frequently treated as one. In any event, the design team needs to understand the causes of delays, and have access to the data that supports the claims that lawyers and judges make concerning delays and backlogs.

Whether or not you will be introducing fundamental changes to the procedural codes at the same time that you are automating, the design team will need to identify existing legislative and regulatory impediments to change. It is very likely that amendments to the codes of criminal or civil procedure, the civil service code, or to the book of court rules will be needed – what body has the authority to make such changes, and how long will it take to make them? In Bosnia, the USAID project totally re-wrote the book of rules as a basis for automation. In more than one country (Montenegro is a perfect example) the book of rules became a roadblock to meaningful change when automation was implemented. (If, for example, the book of rules states that a blue ink stamp must be affixed to every court document you can be pretty certain that the book of rules will require significant amendment). One approach to legislative or regulatory impediments, used effectively by the USAID project in Macedonia, is to condition some of the court automation donations on the prior adoption of appropriate laws or subregulations.

Another concern to be addressed at this stage is citizen privacy. The laws in many European and civil law countries are much stricter than in the US concerning the identification of parties, and access to

information regarding lawsuits. In addition, justice sector IT systems need to be highly secure from outside breaches, for a variety of obvious reasons. The design team needs to take into account what the existing law requires in this area, and be prepared to make recommendations to ensure enhanced security of the system.

D. UNDERSTAND THE TECHNOLOGY BASE

The design team needs to grasp and describe the technology base that the project will be building on. It is essential to keep in mind the country's inventory of technology resources (people and equipment) and ensure that what is being proposed builds on that. As one long time expert in the field said, "I have seen projects deliver an Oracle based system only to find out the technical schools in the country are not teaching that technology. This is critical to success. If a USAID project introduces a new set of technologies the project will either fail or be elongated as the court resources are brought up to speed on the new technology. I have seen it more than once where the thought pattern was the court resources could learn by watching a project develop and implement automation. Does not happen."

Based on what the team learns about the technology base, it might be preferable to start from scratch than to try to build on an inadequate base or a poorly planned prior work. Some other considerations include:

- The design team must take into account the rapid progression of ICT technology. Recently, technology has moved away from using servers, hosting systems in the cloud instead, and there is an increasing focus on smart phones and tablets rather than on desk tops. What will the next technology wave bring?
- If to be hosted in the cloud, what internet connectivity issues and associated ongoing costs need to be considered? In many countries data privacy laws prohibit use of cloud computing. In one USAID automation project in Haiti, the project paid for the CMS internet connection, but when the project ended, payments for the internet connection ceased, as did use of the new CMS. If not in the cloud, will the data be stored in a centralized location, or decentralized (servers in multiple courts)?
- Will there be a public interface and how does that impact project design?
- What are the hardware needs? Need an inventory of needed servers, laptops, desktops, printers, scanners, etc., as well as of existing equipment.
- What are the software needs? Will you be seeking the design of a new system, or adapting something off the shelf? If you need to design a new system, what are the resources in-country for doing so? Many of the countries in which USAID works have outstanding and inexpensive IT expertise.
- Are Open Source development and operating systems the right technology architecture? Open Source is often seen as the only viable cost option for developing countries, but it has drawbacks.
 Open source by its nature relies on an informal community of technologist for continued support. This often means that over time the support begins to lag and in many cases ceases, leaving users with an out of date architecture. The lag is most evident in the timeliness of security patches and

support of emerging technologies. The debate on the appropriate technology platform must be done on a country by country basis as there is no one answer fits all to this question.

E. UNDERSTAND THE HUMAN RESOURCE NEEDS AND AVAILABILITY

As previously noted, court automation needs to be introduced through a change management lens. In many countries, automation will be met with suspicion and fear that it means that people will be losing their jobs. On the flip side, different skills will indeed be needed to ensure that automation initiatives can succeed. The design team will need to take these considerations into account, and be prepared to answer the following questions:

- How much training will be required, or other personnel support? What local training institutions will be available to provide support?
- What is the computer literacy of the workforce available to the courts? This can often be assessed
 by looking at the level of internet penetration in homes, a statistic that is often available from
 internet providers in the country. Another measure is the number of classrooms that have
 computers.
- Another issue to be aware of is the demand for technical resources in the county's commercial
 world. In Bosnia the court had a tough time hiring good Oracle resources because there was such
 a demand for them in the commercial side. The implementing partner there ultimately took the
 risk with Oracle because of a commitment from Sarajevo University to increase the exposure to
 Oracle in its technology curriculum.

Lessons Learned from Montenegro: When EWMI started a USAID court automation project in Montenegro, an existing case management system (CMS) had been in place for about 10 years, but it was not being used in a consistent way across the country's 22 courts, and was not creating any efficiencies because the courts were using both the CMS and the old manual system – and relying more on the manual system. The staff remained tethered to the manual system because they thought that the law required written entries, and no one had ever told them otherwise. In addition, during the design phase there had been little or no consultation with the end-users (registrars, clerks, etc.). So the CMS was regarded as just an extra burden to their work, and untrustworthy because it generated data that did not conform to the written entries. As one of the court administrators working on the project observes, "The lack of engagement of end-users in the beginning is one of the most common mistakes made. Good IT experts were involved, but they were not connected to the work of the court, and did not understand the needs of the end-users." Fortunately, Montenegro's high court council, which had clear responsibility for managing the CMS, was willing to work with EWMI to solve the problem by sending joint teams into each court to reconcile the paper trail with the automated system. An immediate result was a finding that more cases had been closed than had been previously recognized because not all closed cases had been registered as such on the CMS. The reconciliation teams also worked with court staff to demonstrate how the CMS was more efficient and easier to use than the manual system, thereby building trust in the system. At the same time, the courts' rules were rewritten to make clear that the courts were obligated to use the CMS, which was also revamped to make it more responsive to the courts' needs. At the end of the project, the courts were using the system in a standardized manner, and follow-on work was handed off in a coordinated fashion to a new EU project.

- What resources might be needed for data entry? You will also need a data conversion strategy. The case backlogs of many inefficient court systems include long-dormant cases that should be dismissed, or "phantom cases" assigned to multiple judges. Developing a plan to weed out such cases and avoid unnecessary data entry can make the data conversion process more efficient.
- Do IT policies exist? Do rules exist within the judiciary or are government level rules to apply? Is this the time for the judiciary to build IT independence from other government agencies? Is there a central authority for defining rules for maintenance and usage, and some enforcement to make sure equipment is being used solely for appropriate purposes?

F. USE OF PILOT PROGRAMS: WHAT ARE THE POSITIVES AND NEGATIVES?

Many court automation projects have begun as pilot programs. There are some real benefits to starting out this way because pilots can demonstrate success (especially if they are introduced in reform-minded courts) and can be used to work out bugs and identify IT or practical issues that can subsequently be addressed. Moreover, sometimes this is all the donor or the host government can afford. The benefits were noted in the following commentary by two long term experts in the field:

"When resistance to changing processes is high and staff and other resource capacities to support automation are initially low, focusing on the automation of only a few court processes where impact can be seen quickly is a good option. For example, Egypt piloted the creation of a one-stop filing counter in the North Cairo First Instance Court, which has the highest caseload in the country. The impact was significant, since the new filing process required only three steps in one location, instead of over 40 actions that had to be conducted in various offices across the court." H. Gramckow and V. Nussenblatt, "Caseflow Management: Key Principles and the Systems to Support Them."

On the other hand, there are risks that the government and judiciary never get fully behind the initiative, that it will fail due to a lack of centralized IT support, or that it will contribute to the problem of Balkanized automation (apologies to our friends in the region), with different degrees and types of automation being used in different jurisdictions, thereby defeating many of the benefits that come from automation in the areas of data collection, performance monitoring, and resource allocation. Two other observers commented as follows:

"Very often the funding to develop ICT systems of any kind in a recipient country is deficient or is not sustained. Donors may be the principal or only source of funding and donor policies seldom permit them to underwrite recurrent costs in any recipient country. Of course, the availability of healthy levels of recurrent revenues, rather than capital funding, is normally what makes IT contract developers motivated. Capital deficiencies are liable to lead to decisions to acquire substandard or poorly supported hardware systems. Worse still, capital shortages often lead to decisions to provide ICT infrastructure to only a minority of courts in a system often under the label of "pilot courts," creating shortages which complicate and weaken the prospects of successful implementation. Would a computer system be worth developing in an Australian system if it could only realistically be provided to a minority of courts? In most cases, probably not." B. Walsh and T. Lansdell, "Exporting Australian Court Technologies to the Developing World – Help or Hindrance?"

The design team, accordingly, will need to take a hard look at whether it should recommend and design a pilot-driven approach. If it does, it will need to clearly identify what USAID and the host government seek to achieve through the pilot program, and what are the prospects and plans for scaling up.

A FINAL NOTE: Design can be incorporated into the beginning stages of implementation, but we recommend having a separate design phase before project award to ensure, to the maximum extent possible, that all parties (donors, host government officials, judges, lawyers, etc.) understand the scope of the planned project well before it begins, and that risks are identified and mitigated before a major initiative is commenced.

STEP THREE: IMPLEMENTATION

It goes without saying that the best laid project designs can go awry without effective implementation. This is particularly true in the realm of court automation. In this section we address key issues DRG officers should be alert to in overseeing such a project, and identify some implementation tools that have proven effective.

As a starting point, it is best to assume that the court automation initiative will be met with considerable skepticism among system users and broader stakeholders. As discussed above, court automation will represent a fundamental shift in how courts operate. Accordingly, it is essential that comprehensive and well-planned **change management strategies** are brought to bear early in the process, both to prepare personnel for change, and counter existing incentive structures. The bedrock of such strategies must be a firm commitment to change management from the highest levels of the judiciary, and from individual court leaders where pilot court initiatives are undertaken. It is also important to garner support from beyond the judiciary; the change management strategy, accordingly, must also address the questions and concerns of the broader legal community and civil society.

Developing a Change Management Plan to Ensure Successful Implementation:

"New technology implementations sometimes fail because of the human tendency to revert to familiar routines. A change management plan anticipates that tendency, and proactively ensures that new programs become embedded within a culture. Change management planning should anticipate what circumstances are likely to cause judges to revert to old routines, and then develop mechanisms to address those issues. Identifying those circumstances may require user surveys, one-on-one meetings, work group retreats, or mock work sessions.

Perhaps the most important element of change management is having engaged and invested stakeholders and decision makers involved at the commencement of the project. Recognized subject-matter experts, good communicators, and respected leaders will be able to help their peers' transition effectively to the new tools and processes."

"Implementing Judicial Tools," JTC Resource Bulletin, Joint Technology Committee (2016)

An important change management tool will be an **advisory or steering committee** comprised of project staff and senior officials within the judiciary, the Ministry of Justice, and the bar. Such a committee should play several key roles: it can help develop and maintain champions for the new system among key stakeholders, ensure that a unified vision of the objectives of automation is sustained, and provide guidance on key automation policy issues that will need to be addressed prior to software design. Engaging the media in support or automation efforts, by highlighting the increased court data that should become available to them, is another approach that has been helpful. Some projects have started a newsletter to provide regular updates on the development of the technology and how it will improve performance. The more proponents of automation one can cultivate, the better the chances of success. An experienced court automation expert implementing an ongoing project in Nigeria noted that the fact that the bar leadership supports the new case management system makes it more likely that the judges will like it. As this expert emphasized, while the system developed must ultimately sell itself, a good marketing campaign is essential to building acceptance.

As noted above, the advisory or steering committee should agree upon clear policy parameters that will guide the design of the new automation system. Such policy issues often include the desirability of electronic filing, system security and redaction features, interconnectivity with other systems, how external participants should be managed, and the scope of desired court performance indicators that the system should generate. Only once consensus is reached on such issues should software design commence.

Once system functions and requirements are identified, the next step is procurement of the necessary software. Implementers should first consider whether any off-the-shelf systems will suffice, or could be adapted to meet the identified needs. If not, the next question is whether the software can be developed locally, in country. This is the preferred approach, as it improves local ownership, service, and sustainability. Once the initial version of the software is developed, it is essential that it undergo comprehensive **user testing** in multiple courts. Limiting testing to only one or two courts, and/or to limited aspects of the software's functionality, increase the risk that bugs will not be identified. The software developer should ensure that all problems are corrected before the system is rolled out for pilot implementation.

To inform the development of the system software, an effective tool is to establish system **user committees** to develop system functions and requirements, with expert input from project team members. In Macedonia, for example, the USAID project created four distinct user groups, consisting of judges, court intake staff, court presidents, and court administrators, respectively. Two American court IT consultants worked closely with the four groups to identify over 250 desired system functions. Creating change management teams within individual courts, comprised of the court president or chief judge, the head of court administration and key department heads, has also proven to be an effective approach. Such teams can serve as interlocutors for project team staff, alerting the implementer to practical challenges that arise and ensuring that the vision of change is permeated throughout the court staff.

Many court systems are staffed with older employees who are not adept at adjusting to new technology and have spent decades immersed in manual paperwork. Diving right into CMS training may be putting the cart before the horse. In Moldova, before beginning CMS training, the USAID project rolled out a comprehensive **training in basic computer skills** for judges and court staff. In Kenya, another country where judicial personnel had little prior experience with computers and automation, a gradual, iterative introduction of automation has proven to be effective. The recent court automation initiative there began with establishing simple internet access for judicial staff, which helped acclimate staff to basic computer use and skills. Next, system wide email was introduced. The courts then adopted a basic case tracking system and then finally automated case management. User incentives were introduced at each step; for example, once the email system was established, pay slips for court staff were provided exclusively by email. In Macedonia, the USAID project produced a special version of the CMS for the Judicial Council and encouraged it to use the special version when evaluating the annual performance of judges. As the system automatically produced a monthly statistical performance report for each judge, the judges realized that only their work completed through the CMS would be recognized as contributing to their monthly performance quotas and annual evaluations by the Judicial Council.

Success in Automating Serbia's Misdemeanor Courts: A significant part of a USAID project implemented by the National Center for State Courts (NCSC) involved automating Serbia's misdemeanor courts. Importantly, the automation process was linked to legislative reforms to the misdemeanor code. About 80% of the cases involved traffic violations, so the law was changed to require automated payment of fines, and linked to car registration and driver licensing (drivers could not get renewals if they did not pay fines). As a result, revenues went way up, and the automation was hugely popular with officials. The writing of code for the CMS was accompanied by a massive training program for judges and court staff, including on the basics of computer use. According to one of the project managers, the keys to success were: strong needs assessment upfront, strong local staff writing code and doing training, and strong connection with and support from the MOJ, captured in an MOU.

Regardless of the automation skills environment, CMS trainings lasting one or even several days are unlikely to be effective. In Macedonia, the USAID project arranged for CMS trainings to be conducted on-site during office hours, every day for a period of almost six months (and even longer for some courts). For this reason, it is imperative that courts have adequate **on-site IT staff** to assist court users of the new system. Large courts should have at least one full-time staff IT officer, and smaller courts should have access to part-time or consultant assistance. Court IT staff should be trained by the software developer early on for this purpose. Civil service codes and court rules in some countries make it difficult or impossible for courts to engage IT staff; such obstacles should be identified and addressed well in advance. Even after the successful introduction and adoption of CMS by the courts, an institutionalized form of regular CMS training is important. New judges and staff entering the judiciary will require training, and existing users will need refresher training and training on system updates. In Moldova, for example, more than a decade after the introduction of court automation, the national judicial training institute offers 2-4 courses per year for judges and court staff on the CMS.

A common problem is that court staff continue to use the pre-existing manual system even after a CMS has been installed. To some extent this problem is inevitable, as manual records will need to be maintained during the transition to automation. Left unaddressed, however, the **parallel system problem** will result in duplication, waste of human resources, and delays in the adoption of automation. An assessment of CMS platforms in Serbia undertaken for USAID found that "the current practice of reliance on a single original paper file for most business processes will circumscribe all reform efforts absent meaningful changes in business practices." USAID Assessment of Case Management Systems, Serbia, 2014. Change management tools and incentives, referenced above, can help address this problem. Establishing a firm conversion date to full automation, on the basis of careful and realistic planning, is a good practice to ensure effective transition from a manual to an automated system.

Another challenge to be addressed during the implementation phase is **data entry** into the new CMS. All courts will have to enter existing active cases into the new system. To reduce the scope of this burden, project teams should work with courts to weed out "deadwood" cases, long inactive litigation that should be dismissed. Such efforts can be revealing: in Macedonia, there proved to be many "phantom" cases, i.e., instances in which a single case had been assigned to multiple judges, or cases simply fabricated entirely, presumably to meet the prescribed work quotas of judges. Depending on the volume of existing cases ultimately identified, it may be necessary to plan for the engagement of temporary data entry teams (such as teams of law students) to expedite the process.

The project implementation challenges noted above may be exacerbated by time constraints imposed by the duration of the project award, which, for any number of reasons, may be shorter than ideal. Even with motivated local counterparts, implementers may find themselves racing against the clock when the counterparts are unable to move as quickly as necessary. In such circumstances, it may be necessary to reallocate project resources to intensify material or technical support for the automation effort (see accompanying text box).

"Whereas it is important for the counterparts to have significant responsibility in implementation of IT initiatives to promote ownership and sustainability, the overall lesson learned was that the Project needed to be prepared to step in to compensate for delays or shortcomings, especially when a rigid time schedule is involved. Projects must accordingly evaluate risks to the implementation process, make appropriate contingency and mitigation arrangements, and plan for the allocation of necessary project resources to be able to compensate for problems and delays with partner(s) in meeting their commitments. Specific approaches successfully employed by the Project included extensive meetings at all operational levels of the Ministry of Justice and judiciary, and initiation of numerous joint work groups and committees. Especially effective was the conducting of promotional and preparatory meetings with relevant senior officials prior to any new or intensified field activity in order to gain their leadership support."

USAID Judicial Reform Implementation Project (JRIP) in Macedonia, Final Report (2011).

As with any USAID project, an effective system of monitoring and evaluation of court automation projects is critical. It is important that performance indicators go beyond the number of courts in which automation has been introduced, and the number of judicial personnel trained, to capture performance improvements linked to automation. Such indicators may include case backlog reduction benchmarks and compliance with case disposition time standards. Ideally, these performance indicators should be linked to performance management functions built into the new CMS itself. In this way, the USAID project's M&E work reinforces the efforts of court managers to use and showcase the system's utility in generating performance management data. Court user surveys are another effective tool to measure the degree of acceptance of automation by court users and identify any impediments.

To ensure sustainability, the close-out of a court automation project must be planned with care. Software developed by a USAID project, and equipment procured by the project, must be legally transferred to relevant local counterparts through property transfer agreements. As referenced above, adequate long-term software licensing and service agreements must be in place. In most cases, wisely, USAID retains officially ownership of equipment until the waning months of the project. It also retains rights in any software that has been developed.

Comprehensive court automation initiatives often span the life of more than one USAID project, and involve multiple implementers. In addition, USAID projects may succeed or be succeeded by automation efforts of other donors. Many initiatives have been hampered by ineffective transitions from one project to another, which may result in lost data, duplication of effort, system incompatibility issues and frustration on the part of local counterparts. Careful project transition planning, done well in advance, can help mitigate such problems.

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The authors reviewed reports, assessments, and evaluations for the following USAID projects:

- Albania Justice for All Project (2018)
- Bosnia Judicial Strengthening and Development Project (2014)
- Ghana Case Tracking System (CTS) Design (2017)
- Haiti Judicial Case Management Information System (CMIS) Assessment (2017) and Update (2018)
- Kenya Case Management Assessment (2016)
- Kosovo Property Rights Program (2015)
- Macedonia Judicial Reform Implementation Project (2011)
- Moldova Rule of Law Institutional Strengthening Program (2013)
- Serbia Separation of Powers Program (2013)
- Serbia Judicial Reform and Government Accountability Project (JRGA) (2016)
- Ukraine Combating Corruption and Strengthening the Rule of Law Project (2009)

In addition, we also drew on the following publications:

- "Caseflow Management: Key Principles and the Systems to Support Them," Heike Gramckow and Valerie Nussenblatt (World Bank, 2013)
- "Case Studies in Justice Sector Development in Sub-Saharan Africa," Barry Walsh (World Bank, 2010)
- "Case Tracking and Management Guide," USAID (2001)
- "Exporting Australian Court Technologies to the Developing World Help or Hindrance?",
 Barry Walsh and Tony Lansdell, 4th AlJA Law and Technology Conference (2008)
- "Implementing Judicial Tools," JTC Resource Bulletin, Joint Technology Committee established by the Conference of State Court Administrators (CSCA), the National Association for Court Management (NACM) and the National Center for State Courts (NCSC) (2016)

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