



DESIGNING AND IMPLEMENTING COURT AUTOMATION PROJECTS

Practical Guidance for USAID DRG Officers

August 2019

This report is made possible by the support of the American People through the United States Agency for International Development (USAID). The contents of this report are the sole responsibility of the East-West Management Institute and do not necessarily reflect the views of USAID or the United States Government.

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CONTENTS

INTRODUCTION	1
COURT AUTOMATION DEFINED	2
BENEFITS OF COURT AUTOMATION	3
STAGE ONE: ANALYZING THE NEED AND/OR REQUEST FOR ASSISTANCE	5
A. ASSESS THE HOST GOVERNMENT COMMITMENT TO AUTOMATION AND REFORM	5
B. UNDERSTAND THE TECHNOLOGICAL CAPACITY OF THE HOST COUNTRY AND ITS JUDICIARY	8
C. KNOW WHAT OTHER DONORS ARE DOING OR HAVE DONE	9
D. GATHER THE UNDERLYING DATA AND DOCUMENTATION	10
STAGE TWO: DESIGNING THE PROJECT	12
A. CALL IN THE EXPERTS	12
B. CLEARLY STATE PROJECT GOALS AND IDENTIFY AVAILABLE RESOURCES	12
C. UNDERSTAND THE CURRENT LAW, PRACTICES, AND DATA	13
D. UNDERSTAND THE TECHNOLOGY BASE	14
E. UNDERSTAND HUMAN RESOURCE NEEDS AND REQUIREMENTS	15
F. USE OF PILOT PROGRAMS: WHAT ARE THE POSITIVES AND NEGATIVES?	16
STAGE THREE: IMPLEMENTATION	18
SOURCES	23

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INTRODUCTION

In the course of its rule of law (ROL) work, USAID's Democracy, Rights and Governance (DRG) officers often receive 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) are difficult to measure, automation assistance can be tantalizingly concrete (e.g., delivery of ICT hardware) and measurable (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 significant risks and potential downsides. Most obviously, automation can be expensive, requiring a significant allocation of USAID and host country resources. Automation, moreover, begs the important 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 careful advanced planning based on an in-depth assessment of needs, capacity, and commitment. This manual is intended to provide USAID staff with the 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 practices drawn 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 should do so fully informed by both international and local expertise. This manual is not a substitute for the targeted, expert assessment and implementation assistance necessary to the success of any court automation project.

This guidance 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 multiple automation projects. The structure of this manual mirrors the three key steps USAID staff should take to during successful court automation programming: first, understanding how to assess the need or opportunity and/or a request from a host government for automation assistance; second, asking the crucial questions, obtaining the necessary information, and reviewing the important considerations required to create an effective court automation project design that maximizes the prospect of success; and third, identifying the key issues and concerns likely to arise during implementation.

COURT AUTOMATION DEFINED

What is court automation? Is it interchangeable with the often-used “case management” or distinct? Perhaps the most significant distinction is temporal. In early efforts to support developing country justice sector institutions, the term “court automation” was used more frequently, as those projects centered on the delivery of computer equipment to support various functions. In later projects, as donors and their partners improved their understanding of the mechanics of various court systems, assistance efforts narrowed their focus. Projects sought to use software to streamline workflow management for justice sector institutions, which were termed “case management systems.” Today, these types of projects encompass a wide variety of electronic and software support for processes in the justice system; accordingly, the more inclusive term, court automation, will be used for this guidance manual.

For purposes of this manual, court automation is the introduction of electronic and mechanical equipment and software to reduce or eliminate the manual efforts associated with the processing of justice system cases. Court automation can support a single justice sector institution or enable interoperability between justice sector actors, including police, prosecutors, and judges. Court automation can range from automating the tracking and processing of cases to a fully automated system across the entire justice system (e.g., in the criminal context, a system that would track a defendant’s case from arrest to pre-trial detention, appointment of counsel to trial, and through to disposition and, possibly, incarceration, etc.).

In addition, court automation is not limited to computers or computer systems; in some instances, equipment as simple as a powerful copy machine or mechanical shelving can contribute to substantial efficiency gains. Functionally, as the box at right summarizes, court automation can encompass many distinct capabilities. Substantively, court automation support can focus on diverse workflow processes, from random case assignment to electronic calendaring; e-filing to digital audio recording; case tracking to public information kiosks. This manual focuses on – and uses the terminology of – the introduction of electronic systems and mechanical equipment to reduce or eliminate manual efforts associated with the processing of court cases. However, most, if not all, of the lessons and guidance summarized below applies to other types of automation programming and related equipment procurement.

COMMON COMPONENTS OF COURT AUTOMATION

HARDWARE FUNCTIONS

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

SOFTWARE FUNCTIONS

- 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

BENEFITS OF COURT AUTOMATION

Court automation projects carry significant risks, but also can lead to positive outcomes. Well-designed and -implemented court automation projects can lead to significant benefits, including:

- **Efficiency.** Used as a management tool, court automation projects can substantially improve the efficacy of key court processes. Appropriate software can track cases, maintain trial calendars and dockets, manage task notices, and regularly provide case status review dates. These increased efficiencies can help courts keep on top of their caseloads while helping to avoid or resolve case backlogs.
- **Public Confidence.** Improved efficiency can mean more rapid and documented administration of justice, which studies show contributes to improved public confidence in the courts, and the justice system overall. Automation can also help promote the protection of human rights, by better tracking of detainees and calendaring (and sending notices of) of trials and hearings.
- **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, rather than 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.
- **Access to Justice.** The process of the administration of justice can often be opaque and dissuade citizens from seeking relief. Court automation can enable 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.
- **Data.** Automation provides more reliable and timely statistics, which in turn can drive improved policy and management decision-making. Judicial resources can be

“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, WORLD BANK 2012

allocated according to defined need and oversight of their use can be facilitated.

- **Management.** Courts are more than judges; a huge staff interacts with the public, maintains records, and manages administrative processes. With improved data provided by court automation interventions, court leaders gain an important tool for measuring and managing performance, which in turn improves accountability.
- **Transparency.** Automation is a vital tool for creating a public “window” into the administration of justice. With the curtain drawn back on how courts operate, the public learns what to expect, those engaged in oversight see whether what is expected occurs, and courthouse managers can improve what occurs to match what is expected. As such (and noted above), automation improves performance management, data and statistics, and public confidence. Digital audio recording, for example, can produce a complete record of court proceedings and establish a new incentive for adhering to judicial professional standards. Indeed, court automation interventions are valuable tools for combatting corruption. For example, use of automated random case assignment systems means cases cannot be manually assigned to particular judges. In addition, better tracking of case files addresses a key facilitator of corruption: that the system is out of public view. The opacity of judicial systems is a factor that corrupt actors count on when using bribes, for example, to “lose” cases and avoid a final judgment or to have a case file moved to the top (or bottom) of a judge’s caseload.

So, court automation can clearly hold significant promise. Court automation interventions are not the only solution that can produce these outcomes and, of course, cannot resolve all the issues afflicting a developing country justice system. Nevertheless, they are important tools and, when conditions are right, should be used.

STAGE ONE: ANALYZING THE NEED AND/OR REQUEST FOR ASSISTANCE

Very often, there is a mismatch between the identified rationale for a court automation intervention and the outcomes court automation can produce. When USAID engages with a minister of justice, chief justice, or head of a judicial council on key justice sector needs, it is likely the need identified and described will focus on a specific manifestation of a problem. Such as: “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!” The observable phenomenon of a backlog is likely to be the result of many inter-related, inter-dependent sub-problems. For example, the judiciary may have a significant problem with corruption; its judges and court staff may be poorly trained; and there may be a substantial trust gap between justice sector institutions (for example, between the police and the prosecutors; between the prosecutors and the courts; and between the public and the courts) hampering effective interoperability.

Another factor driving focus on automation as a solution may be an unstated desire on the part of host country officials to “leapfrog” into the modern era. Having experienced training or study tours to modern judiciaries, officials can readily set their sights on the “amazing system” they saw in Washington or Chicago or Berlin.

So, how to respond? No doubt, as described above, automation may provide tangible benefits; but financial and administrative costs are substantial, and sustainability is a major challenge. Moreover, the cost will rise if efforts to identify and define the problem automation is sought to solve are not robust. In order to answer that question, USAID should conduct a focused assessment and detailed dialogue with representatives of the host country to clarify the need and match it with an appropriate solution.

“Before starting any automation 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

A. ASSESS THE HOST GOVERNMENT COMMITMENT TO AUTOMATION AND REFORM

The most crucial variable for the success of a court automation project is the commitment of the host country institutions. It is their system; no investment will produce durable results without their active and intentional cooperation. Accordingly, it is necessary to engage in extensive and detailed discussions with the political leadership of the host country prior to deciding to fund a court automation project. Important center-of-authority discussions should be held with those charged with managing the courts, e.g., the Ministry of Justice (MOJ) and/or judicial council, Chief Justice, and chief court administrative

officer. In addition, further discussions should be held with other stakeholders, such as legislative representatives, ministry of finance, government IT experts, and procurement authorities. In addition, verification and triangulation discussions should be held with court presidents and managers of large and important courts, national bar association representatives, and sub-national and/or local authorities in major cities outside the capital.

Key questions include: “What are the **goals and objectives** for court automation? Why is this project necessary? How will progress, and eventually, success be measured?” In addition to learning more about the host country institutions’ goals and objectives (e.g., improve efficiency, transparency, resource tracking and allocation, etc.), these questions create a barometer of host country support for the court automation effort. If these discussions do not produce a clear understanding that host country counterparts have clearly articulated goals and objectives, USAID should be skeptical of the nature and depth of support available to the automation project. Prior experience suggests that some host country leaders see automation projects as beneficial, not for their potential to increase efficiency or accountability, but for their visibility and the resulting “trophy” equipment.

Beyond a clear understanding of the overarching goals and objectives to a prospective automation project, it is also strongly advised that USAID identify with counterparts whether and how the proposed automation will address the identified problems. If the problem is case backlog, for example, automation may be a part of the solution, but the problem may be really be rooted in inter-institutional coordination (e.g., mismatched procedures for evidence production, control, and maintenance between police and prosecutors), or in the civil context, dissenting court practices or enforcement of judgment mechanisms. 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.”

Important questions to explore include: What impact will automation have on existing entrenched interests? How will judges, court clerks, and lawyers respond? There is always resistance. Automation upsets **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 reduce their informal income. What will this opposition mean for the likelihood of success? The existing system or bureaucracy is likely to resist 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.” An assessment of a USAID-funded court automation project in Haiti noted, “As with many large IT-related initiatives, the most difficult challenges are human and cultural, not technical.”¹

¹ Wily, Robert, *Judicial Case Management System Assessment – Haiti*, 5 (Chemonics International, 2017) available at https://pdf.usaid.gov/pdf_docs/PA00TRXP.pdf

In addition, external stakeholders are also sources of potential resistance. The enhanced transparency automation can provide may make some actors uncomfortable; for example, lawyers in developing countries often enjoy the status that comes with “translating” legal proceedings for their clients. When a client can, via the results of a court automation project, suddenly learn on her own that her lawyer was responsible for a continuance in a case (that might cost her additional fees) may disrupt the attorney-client hierarchy.

Discussions of incentive relationships and structures can help advance discussions of project design requirements. For example, a project may need to budget and plan for awareness raising and education campaigns. Highlighting the benefits of transparency for key stakeholders can help dispel assumptions and 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. However, an early effort to automate selected courts in Ukraine failed when the judges figured out that the new case management system (CMS) would be used to measure their workloads and efficiency – they just stopped using it and reverted to the manual system.

Perhaps the most important test of host country commitment will be in the **resources and assets** (e.g., human, administrative, financial, and physical) the host country is willing to commit to court automation? The answer is critical not only to understanding the commitment to achieving the agreed upon goals and objectives, but also because it initiates a process to delineate the contours of the potential project. Assessing these resources includes will require additional analysis and

“Most court systems 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 AIJA
LAW AND TECHNOLOGY CONFERENCE,
SYDNEY, AUSTRALIA, JUNE 2008**

consultation.

Key questions include:

- What technology changes will be required? Understanding the computer hardware and software upgrades or other changes needed helps 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 explain, too often donor-sponsored IT programs only fund basic capital costs and fail to pay sufficient attention to the change management processes associated with introducing and sustaining that investment.
- What expenditures will the host country need to make or ultimately assume? Budget support is essential to sustainable change. Have host country counterparts considered that they must (and how they will) pay for future license fees, maintenance and replacement costs, and software updates or upgrades? Will increased electrical costs/needs necessitate the acquisition and subsequent maintenance of generators? Personnel costs are also vital. Systems last when maintained by well-trained personnel, which carries additional salary, pension, office, and management costs. One of the authors of this report explains: “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.”

Finally, having gathered this detailed understanding of host country capacity and commitment, it is crucial to memorialize it. Prior to commencing any court automation project, USAID and the host country should reduce agreed upon goals and commitments to 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

The sustainability of a court automation project turns fundamentally on the **technology governance system** within the host country’s courts and justice system. Technology governance is a descriptive catch-all term for the authorities and responsibilities regarding information technology (IT). For example, does such decision-making power reside within the MOJ, the Supreme Court, or some government-wide information technology agency? Does the governance structure exist at the court level? If the country lacks a technology governance structure, successful introduction of new technology will be at best difficult, if not impossible. An ill-used, poorly understood, or broken technology governance system will likely result in an unmanageable technological 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 a functional technology governance system, nor the local commitment needed to develop one.

On a more functional and tangible level, understanding the national **IT infrastructure** is also important. Is there a reliable electrical supply? Is there a centralized processing capability? Too often government software procurement involves purchasing pirated software copies at local markets. 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 its own internet). costs These are issues that, left unaddressed, frequently result in cost overruns.

The availability of IT maintenance expertise and capacity is likewise important. Too often court automation projects seek to deliver the current state of the art software and hardware only to learn after the fact that the country's IT support capacity cannot sustain it. Undertaking an analysis of current IT vendor usage and capacity is often a revealing exercise with significant import for the eventual project design.

C. KNOW WHAT OTHER DONORS ARE DOING OR HAVE DONE

Donor coordination is a practice too often honored in the breach. In the case of court automation, however, it is truly essential to possess a detailed grasp of what other donors have previously attempted or accomplished as well as what they plan to do to support automation in the courts or other justice system actors. This means understanding their objectives, funding levels, geographic and jurisdictional scopes, successes and failures, as well as future plans. 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.

Such coordination is particularly important if a new project may commence in the middle of another, ongoing automation effort, or if it will be expected to build on what has been done before. It will be essential to confirm that USAID's approach to automation is in philosophical and priority alignment with previous projects. USAID's assessment process should accord generally with the assessment conclusions or experience of other donors, or USAID should have a clear understanding of why not.

Coordination may present other, superficial challenges. For example, U.S.-funded projects in countries with civil law legal frameworks have sometimes confronted European donors who argue that American common law experiences and approaches are inapposite. In fact, USAID's experience shows court automation is more a management issue than a legal one, and most 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.

Strong donor coordination can enable USAID to leverage previous investments to maximize impact. However, lack of donor coordination can make conditions worse than before the donors stepped in, thus violating the development imperative of "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 accomplish the same (or any!) goals, may operate on different platforms, and may impede scale up, etc.

Such a jumbled approach is worse than no automation as it complicates the reform landscape, imperiling future efficiency, automation, and management reform efforts. In Kenya, there have been up to seven different donor-driven court automation initiatives. Ukraine has seen at least four such initiatives, some driven by donors and some arising from local impetus. As a 2009 USAID assessment in Ukraine found, “Though well intentioned, these projects are contributing to an increasingly complex court technology landscape and are incongruent with the 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.”² 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

As part of the process described above, USAID should seek to collect as much court performance data as possible. This data 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. This information is likely to 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, and how such efforts might affect court administration and automation (for example, donor projects to revise civil or criminal procedural codes), and how they may drain away limited court resources (for example, through “donor fatigue”);
- Annual reports from any relevant current and previous USAID sponsored projects, which will be helpful for the design team in understanding the past 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.

² Stussy, Norris, *Strengthening the Strategy for a National Court Case Management System*, 8 (Chemonics International 2008), available at https://pdf.usaid.gov/pdf_docs/PNADPI58.pdf.

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.

STAGE TWO: DESIGNING THE PROJECT

A. CALL IN THE EXPERTS

Court automation is a highly technical field for which expert assistance is readily available. As described above, it is easy for court automation projects to have serious hidden flaws; moreover, there is no reason to reinvent the wheel. Accordingly, the design team should include an international expert in court automation with prior experience designing court automation projects.

In addition, the team should include at least two capable local experts. One should be deeply knowledgeable regarding the court system's real-life operations, structure, and personalities as well as the book of court rules and procedural codes. The other local team member should be expert in the country's IT capacity, infrastructure, and support community.

If not previously part of the above-described assessment process, the design team must be fully briefed on the initial USAID assessment and have access to the collected documentation. Also, the team should be briefed on and have access to any MOUs or aide memoires developed as part of the assessment or project conceptualization process.

The design team should then engage in a “deep dive” with future counterparts at the MOJ and/or judicial council, the courts targeted as potential pilots for automation efforts, the bar, the prosecutors, the judicial and clerical training institutions, etc. This review 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 also required to ensure the outcome of the automation project meets identified needs, commands sufficient buy-in from key counterparts, and can be sustained. The design process is functionally the commencement of the change management process inherent in any automation project. Project design should also incorporate consultations with the bar, civil society, and to the extent possible end-users, or groups representing them. The following tips are intended to help you guide the work of the design team.

B. CLEARLY STATE PROJECT GOALS AND IDENTIFY 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:

- The scope of the project. What are the expectations? Is the plan to create 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, so-called “gold plated” systems are difficult to sustain.

- Host government agency responsibility. How will the system be overseen, managed, and maintained? Who will take responsibility for it? This is the technology governance question.
- Project timing. 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 actually take to select an implementer and for them to complete the job. Moreover, 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

An essential threshold question in project design will be whether the court automation project seeks to automate the existing manual processes, revise them, or create new ones. In either case, the design team will need to map out how cases work their way through the system and correlate this process to existing or planned laws and regulations. This mapping process can, and often is, completed during project implementation, but better outcomes can be expected if it is done at the design stage.

Moreover, data is a complex concern. During the design phase, the design team must understand the data available and how it is being collected. Data conversion can be complex, so the team should also gather sufficient information to understand how much of the old system’s data should be or can be converted to use under a new automated system.

The design team should have been provided with 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. These backlogs were more of a societal concern or process issue but were often treated as a management issue for the courts. In any event, the crucial lesson is that the design team needs to understand the causes of observed delays and have access to the data that supports the claims that lawyers and judges make regarding delays and backlogs.

“Many 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 HINDERANCE?”

Whether or not the USAID project will be introducing fundamental changes to the procedural codes at the same time as the automation, 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 – which agency or 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, to use an actual example, the book of rules states that a blue ink stamp must be affixed to every court document, it is highly likely that the book of rules will require significant amendment. One approach to legislative or regulatory impediments used effectively by the USAID project in Macedonia has been to condition court automation investments on the prior adoption of appropriate laws or sub-regulations.

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 understand and account for what 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 has observed:

“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. Other considerations include:

- The design team must account for the on-going rapid progression of 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 desktops. What will the next technological 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? How will it be tested?
- What are the hardware needs? An inventory of needed servers, laptops, desktops, printers, scanners, etc., as well as of existing equipment, is an important requirement.
- What are the software needs? Will the project seek to design a new system, or adapt off the shelf software? If new system is to be designed, 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 appropriate 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 HUMAN RESOURCE NEEDS AND REQUIREMENTS

As previously noted, court automation needs to be seen through a change management lens and introduced with appropriately resourced change management support. In many countries, automation will be met with suspicion; often, many people fear that the advent of new technology means lost jobs. In addition, it is true that different skills will be needed to ensure that automation initiatives can succeed. The design team may wish to make use of existing USAID tools, including the Human Institutional Capacity Development Handbook, to assess organizational change management challenges and possible solutions. 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 experts with strong knowledge of the Oracle software 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 the software in its technology curriculum.

- What resources might be needed for data entry? A thorough data conversion strategy is highly important. 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

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.

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 begin as pilot programs. There are some real benefits to starting out this way because pilots can demonstrate success, especially if they occur in, and are supported by the leadership of, reform-minded courts. In addition, pilots can be used to work out bugs and identify IT or

practical issues that can be addressed prior to scaling up. Moreover, a pilot may be 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 the risks. The government and/or the judiciary may never get fully behind the initiative. Or, the lack of centralized IT support might doom the project. Or, the effort may be another contribution to a growing problem of Balkanized automation (apologies to our friends in the region), as different jurisdictions adopt different degrees and types of automation and thereby defeat the benefits that can come from automation. Two experienced 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.

STAGE THREE: IMPLEMENTATION

It goes without saying that the best 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 USAID staff 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 the broader network of interested 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.

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 of 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

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.”

Source: “Implementing Judicial Tools,” JTC Resource Bulletin, Joint Technology Committee (2016)

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**, ideally in multiple courts. Limiting testing to only one or two courts, and/or to limited aspects of the software's functionality, increases 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 proved 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.

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

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.

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.”³ Change management tools and incentives, referenced above, can help address this problem. Establishing a firm conversion date to full automation that is grounded in 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, court automation projects identified many “phantom” cases (i.e., instances in which a single case had been assigned to multiple judges or cases had simply been entirely fabricated), presumably entered to meet previously-prescribed judicial work quotas. Depending on the

³ Serbia Rule of Law Efficiency Review, p. 44 (USAID 2014) (available at https://pdf.usaid.gov/pdf_docs/PA00K7M4.pdf)

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

volume of existing cases ultimately identified, it may be necessary to plan for the engagement of temporary data entry teams (teams of law students are often cost-effective) 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.

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 monitoring efforts reinforces those 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 also 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 official 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.

SOURCES

This report is based on the authors' personal experiences managing and implementing court automation projects, intensive review of numerous project reports, and interviews with court administration experts, chiefs of party, and others involved in donor-supported court automation efforts.

The authors gratefully acknowledge the efforts of the many experts who selflessly shared their time, experiences, and insights with us. Of course, we alone are responsible for the final product. We would note, however, that a definite consensus emerged quickly on key points and while there are other experts we would have enjoyed conferring with, we determined our findings and recommendations would not significantly change. Having said that, we would welcome comments or corrections, which should be submitted to Mark Dietrich, at mdietrich@ewmi.org.

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 AIJA Law and Technology Conference (2008).
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