

Caseflow Management

Key Principles and the Systems to Support Them

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Legal Vice Presidency The World Bank

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Foreword

This short working paper is based on a document that was originally written at the request of the Ministry of Justice of Morocco. The aim was to provide a brief overview of and introduction to the key principles of case management and case management systems, as well as software solutions to support such systems. Since such information is often requested by Bank staff and judiciaries that are starting to embark on reforms that include process enhancements and automation, the paper was adjusted to reflect the needs of other judiciaries that are in similar situations. This paper provides a quick overview of case management for courts, the systems to support it and general steps involved in planning for and implementing appropriate case management approaches and automation that reflects the needs and capacities of the jurisdiction. A more detailed guide to the development of automated case management systems that outlines the alternatives available and steps involved in more detail and in light of a typical lending project cycle will also be available shortly.

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Caseflow Management: Key Principles and the Systems to Support Them

by Dr. Heike P. Gramckow and Valerie Nussenblatt

Abstract

It has become increasingly clear that courts across the globe must do more to better organize and manage their caseload and that automation alone is not the answer. In response to this need, caseflow management has emerged to become the central method of promoting greater court responsibility and accountability for efficient case processing. For over thirty years court case management concepts have evolved, starting in the US, spreading to other industrialized common law countries initially. Yet, for many judicial systems, the concept, techniques, and supporting systems of caseflow management are still relatively new ideas that need to be more fully understood. This paper helps develop a basic understanding of caseflow management by defining the concept, outlining the various techniques used, presenting in general the different case management information systems that support those techniques, and outlining the core steps a judicial system can take to plan for, select, and implement case management software. The aim is to provide an introduction for assisting judiciaries in developing a caseflow management approach that works best in their own environment.

1. Introduction

The notion that courts need to have mechanisms in place to actively control and manage their caseload beyond the processing rules laid out in procedural codes is a relatively new one. The first country to recognize the need for active case management within a court setting was the

United States. Beginning in the 1970s, courts there began to apply case management techniques—or more precisely *caseflow management*. Based on workflow management techniques developed by management improvement experts in other sectors, courts started to develop approaches that would help keep track of cases, thus ensuring that they would move through the court system in a more efficient manner, and also providing information to allocate time and resources based on case requirements (Steelman 1997, 158–60).

The lessons and experiences of various U.S. jurisdictions were first replicated in Canada and other industrialized common law jurisdictions, such as the United Kingdom, Ireland, and Australia. In the late 1980s, the first civil law

Track Record

Case management techniques were first applied in the United States in the late 1970s. Today, these techniques are applied in courts on every continent and in countries that follow different legal traditions and have different judicial needs. This includes countries such as Chile and Mexico, Jordan and Egypt, Nigeria and South Africa, Macedonia and Ukraine, Singapore and Hong Kong, and Mongolia and the Philippines.

jurisdictions to experiment with these approaches were the evolving democracies in Latin America, largely as a result of U.S.-influenced development assistance. Since then, and particularly since the beginning of the 21st century, caseflow management has become the defining element across the globe of greater court responsibility and accountability for efficient case processing without sacrificing quality, not just in high-income countries and irrespective of the underlying legal framework. Nevertheless, for many judiciaries, the concepts of caseflow management, the systems required to implement good case management techniques, and the automated solutions to support those systems are all new ideas that still need to be more fully understood to develop approaches that work best in each court's own environment.

2. What is Caseflow Management within a Court Environment?

Caseflow management is a set of principles and techniques that enhance greater processing efficiency, thereby reducing delays and case backlogs and encouraging generally better services from courts. Caseflow management promotes early court control of cases and active court management of the progression of cases from initial filing to disposition, covering all phases,

including those that follow the initial disposition, such as appeals and enforcement.¹ It provides for greater predictability of court events, which can increase public trust, and also increases the transparency and accountability of courts due to greater adherence to standardized processing steps and better reporting capacities.

Although courts have differed in how they apply caseflow management concepts depending on their own needs and local legal culture, courts across the globe have applied standard principles to manage cases efficiently that have evolved into a set range of caseflow management techniques. The underlying principle is that—in compliance with the guiding procedural codes—the court, and not lawyers or litigants, controls the manner in which each case will be processed through the system.

In order to develop meaningful rules for implementing caseflow management, courts first must review their own operations and then define performance goals and measures, such as creating timelines for processing cases that follow

Standard Management Principles

The standard principles courts apply to manage cases efficiently include:

- Introduction of early court engagement in managing case information exchanges and continuous monitoring of case progress
- Creation of realistic schedules and meaningful pretrial court events that aim at early disclosure, reducing late process motions, and facilitating early settlement
- Development of fast and reliable notification options
- Introduction of feasible early and alternative settlement options for some or all dispute issues
- Establishment of firm and realistic appearance dates and other procedural timelines internally and externally
- Development of different processing tracks that allow for swift processing of simple cases and adequate timelines for more complex case types
- Team management of court cases and court calendars by the judge and court staff
- Transfer of administrative responsibilities from judges to court support staff
- Development of mechanisms that control frivolous appeals and allow for reasonable limits to appeals in minor cases

¹ See for example, the description of caseflow management on the website of the National Association of Court Management, at http://www.nacmnet.org/CCCG/cccg_3_corecompetency_cfm.html.

acceptable time standards for different case types and processing steps, and adjusting work practices to be more efficient to better meet these goals. Such changes require different and more consistent administrative actions from court staff as well as changes in the judge's role in the process.

The following caseflow management techniques have been developed and are currently being applied to address several of the above principles:

- *Timelines for key case processing steps*, such as from filing to notification, from notification to first hearing, and so forth. These timelines will need to differ by case complexity to focus resources toward processing cases in a timely fashion without sacrificing fairness and quality. Realistically, such timelines will allow for some flexibility by case type and for special circumstances; ideally, they are also combined with certain enforcement measures, such as fines or even case dismissal to ensure discipline among all parties involved.
- *Firm and credible hearing dates and limits to the number of hearing adjournments,* meaning that the court establishes and publishes hearing dates and policies that allow for reasonable adjournment justifications, and enforces its own rules within a reasonable margin of discretion.
- *Pretrial and scheduling conferences* to narrow down contentious issues and evidentiary questions before the trial, while discouraging unnecessary pretrial motions or other delay tactics. These also help ensure that all parties understand what information needs to be provided when and what each party is expected to do at each processing stage.
- *Early disclosure requirements and limits to late submission of evidence* to ensure that both parties are aware of the evidence that will be presented and that available evidence is not held back to delay the trial and force trial continuations.
- *Alternative dispute settlement* processes that may encompass a broad range of options to resolve cases through mediation outside of the court or as a court-annexed function, arbitration, and the establishment of small claims courts. For criminal cases this can mean the introduction of case deferrals pending completion of a condition and certain forms of negotiating charges and sentences via plea agreements.
- *Summary judgments* and similar forms of no contest processes that allow courts to make a decision without a trial, often based on written statements and evidence presented for the record when there is no dispute as to the facts of the case and one party is entitled to judgment as a matter of law.²
- *Differentiated case management (DCM)* processes that provide multiple tracks for case disposition with differing procedural requirements and timeframes depending on the complexity of the case type. Based on the different processing needs, courts establish

² See http://www.answers.com/topic/summary-judgment.

special track timelines and a screening process to assign cases to the appropriate tracks. Courts then continuously monitor case progress to ensure adherence to track deadlines and requirements, and establish procedures for changing the track assignment if needed (Cooper, Solomon, and Bakke 1993; NCSC 2001a, 28). DCM projects can potentially reduce case processing times and increase court productivity because greater numbers of cases can be handled more efficiently without sacrificing quality or increasing resources (see Jacoby, Gramckow, and Ratledge 1992).

Caseflow management also means that the court develops the operational policies and tools to guide and adhere to new procedures, assesses and adjusts resource needs to effectively manage cases, monitors performance and outcomes to assure quality and justice, and effectively communicates processing standards and requirements internally and externally.

3. What are Case Management Information Systems?

Case management information systems (CMIS) are tools that support caseflow management either manually and in hard copy or, with the advancement of technology, more commonly, through automation. A good CMIS is developed to support the above outlined caseflow management techniques and the related organizational functions throughout the entire court process. If appropriate case management techniques are developed and translated into CMIS, they offer the ability to effectively track the status of cases and their position in the court process, support the development of caseload and possibly workload statistics and management reports, and monitor case processes, all of which contribute to performance monitoring. Regularly

gathered statistical information of the flow of cases through the court process can identify process bottlenecks and case delays, which together can inform about needed resource and process adjustments. CMIS, whether automated or not, also provide judges with the information needed to control timely processing and produce a complete and reliable case record. Since such a system helps locate and preserve case records (see USAID 2001), it can also facilitate and likely reduce appellate reviews.

3.1 Core Functions to Promote Efficiency

There are some core functions that CMIS usually support to ensure that cases move efficiently through the court, regardless of the type of case or the legal system in which the court is operating (USAID 2001; Gramckow 2005). They include:

Varying Degrees of Computerization

Case management information systems are not always computerized. In fact, the degree of sophistication varies among case management systems applied in courts across the globe, as does the degree of automation. 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.

- 1) Controlling data and defining electronic, paper, and other media³ input to case records. The system provides control over the format and content of forms that have to be entered into court records. It delineates the information and case papers that need to be submitted and in which form for the creation of valid and complete court records, ensuring uniformity of the data elements entered into the CMIS and ultimately the completeness of the record.
- 2) *Establishing record control.* The system establishes a framework for record control by assigning numerical identifiers to the case; by entering the case into the index by number, date of filing, or names of parties; and by creating a folder located in the record system.
- 3) *Managing case processing and record updating*. The system maintains and continuously updates records and case histories, allowing for the case's status and progress to be traced and delays to be detected. This also provides judges and court staff with an overview of activity in each case, helps in maintaining control over cases, and provides for transparency and external accountability.
- 4) Scheduling case events and tasks and sending notifications. The system can include tools to facilitate calendar and scheduling functions for case events, such as hearings and other tasks, sending out notices to relevant parties or attorneys ensuring efficient use of time by judges, attorneys, and all parties involved. Calendars announce court events, and also indicate judicial assignments and allocate courtrooms. Random judicial assignments can help to assure fairness and build public trust in the court system.
- 5) *Controlling and storing final records*. Case information systems also ensure that the case history is entered at the conclusion of a case, and that it is archived as a closed case.
- 6) *Reporting management information*. The system provides statistics or other court management information on the size and nature of caseloads and their successful handling. Statistics can either be an automatic byproduct of a system or the result of a separate process to gather statistical information. Most case management systems generate management reports on caseload data regarding the nature and number of dispositions, including the case clearance rate, size of the pending workload, identification of cases that are languishing in the system, and the extent of delays from filing to disposition.
- 7) *Bolstering court administration support functions*. Enhanced support for broader court management functions can include expenditure accounting, budgeting, tracking, collecting and accounting for filing fees, revenue accounting, and accounts receivable, as well as the full range of human resource and talent management functions. These applications can be integrated with or at least connected to case management solutions thereby enabling the court to manage its resources according to case volume and demands.⁴

³ Such other media today can be photos, electronic scans of documents, video, audio or digital recordings.

⁴ In Belgium, already in 2001, the IT programs of penitentiary institutions had an automated system that dealt with accounting logistic services and administration of staff; in the late 1990s, software for the Courts of Ontario was developed that would integrate document management, scheduling and financial management.

3.2 Extended Functionalities

In addition to these core functions, other technology applications that support court operations more broadly are available and preferably linked to the case management system not developed and applied as a separate solution. These include systems for electronic document management, electronic filing, or judicial decision-making support functions.

- *Electronic document management.* This function provides for document storage and databases, and also for the production of standardized and automated forms (i.e. for decisions, notifications, letters, etc.) that increase the efficiency and accuracy of court staff and judges, which in turn can potentially increase the number of processes completed and hearings that can be held per day, reduce errors and limit undesired manipulations of the process, including reducing the opportunities for corruption. It entails the imaging of all paper documents filed with the court and converting them to manageable and searchable text files. These functions may be part of a case management system, or may be introduced on their own into courts, sometimes as precursors to more complex case management systems (NCSC 2004).
- *E-filing and paperless courts.* Electronic filing and judicial electronic data and document
- interchange can further enhance case information systems. Proper legislative provisions are needed, however, to procedures establish and implement measures for assuring the authenticity and integrity of court information held in electronic form (Fabri 2001). The introduction of paperless courts, where parties, court staff, and judges work with and create electronic documents, requires an electronic data management system that consists of a repository for storing electronic documents, a relational database, and the necessary software to manage the system. The process involves scanning to convert paper documents to imaged ones, as well as indexing for efficient access to the imaged documents (Abdulaziz and Druke 2003).
- Judicial decision-making support functions. In addition to case and court management functions, more advanced court information systems typically also have legal research support components (World Bank 2007; Fabri 2001, 11; Velicogna 2009, 29), which give judges virtual access to statutory

Functions that Support Judicial Decision Making: Country Examples

Caseflow management is not just about efficient administrative processes but also about efficient and better informed judicial decision making.

In *Croatia*, a networked and searchable legal information system in pilot courts is now functioning. In the *Basque Region* in Spain, a Documentary Information System provides databases on jurisprudence and legislation. In *Ireland*, an "Electronic Bench Book" is a Lotus Notes application providing judges with online access to rules, statutes, regulations, and other electronic legal information services such as Lexis-Nexis and Justis.com. In *England and Wales*, the eLIS (electronic Library and Information Services) provides a portal to legal information on the Internet to the judiciary.

Providing judges with instant access to databases of court decisions, software to simplify drafting of decisions, and access to data bases such as criminal records, incomes, or property registers supports the work of individual judges and greatly contributes to increasing consistency among judges and overall court predictability. codes, judicial opinions, treatises, legal journals, and other sources. Combined with content management software that allows for relational searches to find relevant text components or to support indexing and document creation with text templates and text search functions, these further ease the work of the court. These support functions can also potentially reduce error and enhance the quality of court decisions by freeing up time for research and formulating decisions.

In addition, *sentencing support tools* can provide judges with access to a range of databases from courts and other agencies that provide them with much needed background information on offenders and relevant sentencing patterns in similar cases. The information can help focus sentencing hearings and plea negotiations (where allowed) on public safety outcomes (Marcus 2006).

3.3 Different System Functions and Terminology

As the automation of courts, along with the application of increasingly modern case and court management approaches, have evolved, so have the systems supporting them. As a result, the terminology used to describe these systems has changed to reflect increasingly complex operations. At the same time, use of different terms is not always consistent which can lead to misunderstanding as to what functions a particular system actually supports. The below paragraphs provide some clarification of the terminology applied to these systems.

Case tracking systems. Case tracking systems provide information to track the status and location of a case from filing through disposition. A manual case tracking process collects data in registry and docket ledgers or registers of actions that provide information regarding case status, documents received, case events, and case results. Automated case tracking systems will generally collect and sort this information by case type, event, judge, or location and distribute it to a presiding judge, individual judges, and/or court management staff. The combined information provides an overview of case activities and a comprehensive case record, and can also detect processing delays. Today, a majority of courts in higher-income and even middle-income countries have at least an automated case tracking system.⁵ In many of these countries, the functions supported by these automated systems also include electronic registering of cases, development of cases for trial, printing of cases lists, and storing of court records and records of judgments (see, for example, Bauer 2001, 53; Schmidt 2001; Rabineau and Beltrame 2001; Bork and Schroeder 2001). Basic case tracking systems have also been introduced in low income countries, often with support of international donors.⁶

As outlined above, more sophisticated electronic CMIS will include all the information and functions of a case tracking system plus other functions to ensure cases move efficiently through

⁵ For example, according to data collected by European Commission for the Efficiency of Justice (CEPEJ), already in 2004 about half of the 45 responding countries in Europe had case tracking systems in 100 percent of the courts, nine in more than 50 percent of the courts, five in less than 50 percent, and six in less than 10 percent. See Velicogna (2009, 23). Similarly, courts in many Latin American countries are supported by at least basic automated systems. See Hammergren (20011, 7).

⁶ Examples of such support provided by USAID, for example, can be found in pilot courts in Afghanistan, Indonesia, Nigeria, and Nepal, all courts across Mongolia, and many other developing nations.

the system. This can include not only random case assignment to judges, but assignment and reminders of processing tasks for staff and judges; not just production of forms, templates, and checklists to support efficient and standard data and information entry but creation of case files and court records and automated sending of notifications; and production of more comprehensive management reports and court statistics. Where electronic filing is available, the system will guide data entry from external parties and integrate this externally submitted information into the case file. The new system may also include an archive component that allows for easy retrieval of archived court documents.

To increase public accessibility, many of these systems can be connected to Internet-based information portals where case status and court decisions may be published and accessible to the public externally or on information kiosks located in the courts. In combination with other information technology solutions, such systems can generate automatic notifications that may be sent via e-mail or short message service (SMS), or to message boards in the court.

Court management systems. Such systems support broader court management functions in addition to those focusing on managing cases. They can include modules that bolster budget and financial management, human resource management, facility and asset management, and even internal and external information and knowledge management. Courts often have different software applications to handle these components. The integration of these different parts into the case management system is desirable and cost effective in the long run, but requires a significant investment of time and effort for development and implementation on the part of the court and other related agencies. Particularly if information exchange and integration with other courts and agencies (such as prosecution and corrections or municipal agencies) is desired, it requires significant work to ensure that all agencies hold the same vision for data integration and are willing to share data and systems.

Integrated justice information systems. Case management systems may also be designed to connect to other courts and relevant justice system or municipal agencies for information transfer and coordination of operations. The integration of information systems and case management options across courts and other relevant agencies has many benefits, but also involves a number of legal, organizational, managerial, technical, and security barriers, such as variations in the organizational culture, information dissemination and privacy policies, or technical issues related to differences in information system automation across courts and agencies (Bureau of Justice Assistance 1999). Other issues that may arise are concerns over data security or the need for a reliable and accepted system for assuring the security and integrity of court information that is held and transmitted in electronic form (Fabri 2001, 10).

Elements of a Good Case Management System

Indicators of a good data control system

- Data categories and elements are clearly defined and coherent and consistent throughout the court database.
- Data elements are compatible with other related information systems in other agencies (i.e., the police and prosecution).
- The system controls the quality, completeness, and format of forms coming into the court and

generated by the court.

Indicators of a good record control system

- Each case has its own numerical identifier that can be tracked across different court levels and ideally also across agencies.
- Cases are numbered within each year, and not consecutively over a multiyear period.
- An index provides cross-references to the names of all parties and related case files.
- Non-electronic material is held in folders or other containers and stored in an orderly way.
- New documents for cases are placed accurately and in a timely manner in the folder—in hard copy and/or electronically.
- There is a system for tracking the location of folders and related documents/exhibits that may be temporarily held elsewhere.

Indicators of a good case process/record updating system

- There is an accessible register of all events and filings for each case.
- The register is accurate and up to date.

Indicators of a good scheduling system

- It enables the court to move cases effectively to disposition according to time standards and procedures developed in consultation with relevant stakeholders.
- It avoids the rescheduling of the same event.
- It has a timely and efficient notification system.
- It stimulates efficient use of time by judges, attorneys, and parties.

Indicators of a good case closure system

- There is a comprehensive and timely case-closing routine.
- The system can store and archive records.
- Court judgments are made available and enforceable.

Indicators of a good management reporting system

- The reports facilitate the management of case movement.
- The reports help to identify processing and other work patterns that need to be changed.
- The reports encourage and affect justice system reforms.

Source: USAID (2001).

4. Planning for, Selecting, and Implementing New Case Management Software

As outlined above, case management systems are tools that support case management techniques and organizational adjustments aimed at making the court process more efficient, predictable, and transparent. Before computers were affordable enough to be used widely in courts, this included just a well-designed manual system of registers, records books, ledgers, calendars, forms, and index cards. Automation of these "systems" means that manual processes and paperbased information are translated into software programs that greatly enhance the speed, reliability, and tracking of case processes, resulting in better reporting and analytical capacities for the management of cases. Naturally, the basis for a good automated system is a well-structured and streamlined manual system, as automation alone will not make inefficient processes better.

The many steps involved in developing and implementing a case management system can be broken down into four main phases, some of which overlap: (1) assessment and planning, (2) procurement, (3) development and testing, and (4) implementation.

4.1 Assessment and Planning

The introduction of automation to handle cases requires careful planning, effort, and time, each of which will vary according to system complexity. 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.

Ideally, the court reviews its business processes, maps case flow through the court, assesses and evaluates operations and management systems in place, and determines whether there is a need to redesign processes before embarking on major automation. In addition, the collection of reliable court data will be essential for determining where automation will have a significant impact and what

Automation: Where to Start?

The civil caseload tends to be the largest in many courts across the globe. Starting automation there is thus likely to have a significant impact on court operations. Automating civil case procedures also tends to be less difficult, since there are fewer important information elements that need to be tracked than in criminal cases, and the need to link information to other agencies is lower. Courts in jurisdictions as diverse as Abu Dhabi and Mongolia have opted for automating civil cases first for these reasons.

When fewer resources are available, targeting a smaller but still high-impact caseload, such as commercial cases, can be very effective to demonstrate the benefit of automation. Morocco and Serbia are countries that have successfully taken this approach.

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.

functions should have priority for automation. A court may decide to first focus on automating its civil caseload, which often represents the majority of cases for many courts. The larger the percentage of a court's work supported by automation, the greater the impact of a well-designed system. The assessment also has to consider staff capacities and training requirements and other end-user needs and capacities, as well as whether current court facilities and other infrastructure can support the envisioned automation. IT development costs as well as likely future use and maintenance costs incurred by the system must be considered equally. The results of the assessment need to clearly state under what circumstances automation would add value to court operations, and what options for streamlining and automation are available. The review of court functions and procedures to be supported by case management software should begin with core case processing functions, starting with case filing and then moving along the process through the court until final disposition. Adequate sequencing of automation of the different processing steps is important, but this does not always mean that the initial steps need to be fully automated before stages later in the process can be considered. For example, archiving functions are often sufficiently separate from the ongoing court operations such that they can be successfully automated even when the core court process is still undergoing procedural changes and is in the earlier automation stages.

The use of pilot courts to initially introduce new case management systems with the expectation of a roll-out to the rest of the country's courts is a means to test the efficiency and effectiveness of a new system and to learn lessons for developing and maintaining a strong application.

4.2 Procurement Decisions

The functions to be supported by case management systems and the degree of sophistication needed will influence the choice of software, together with other factors, such as the availability of human and financial resources to develop, maintain, and continuously upgrade the system.

Depending on what a court needs and can afford, courts may turn to off-the-shelf case management information system software packages that then have to be customized to the court's requirements, or, like the commercial courts in Morocco, they may develop their own customized case management information software from scratch.

What matters most when selecting software to automate efficient case processing and management in any court system is that the software properly meets the needs and resources of the court and supports organizational adjustments required now and in the future. To be successful, case management information software should be chosen only after automation needs and resources for the design and for continuous maintenance and upgrading have been thoroughly reviewed. This includes implications on hardware requirements, such as server capacities, and staff capacities to apply and maintain the application over time. Ideally, a courtwide or even justice sector ICT strategy is in place or conducted to ensure the software is appropriately supported and is the right fit now and at least for a couple of years into the future. The actual design should happen only after the court's business procedures have also been reviewed for opportunities to streamline operations, and after management information needs have been established.

Once a court has a clear picture of its automation requirements and some possible solutions, it can determine what software options are the most appropriate—that is, whether to upgrade or modify existing software, change to a new software solution, or develop a system in-house with little or more external assistance.

For those courts with an existing system, the decision on whether to upgrade or replace an existing configuration, possibly even using a different software platform, requires research into costs, time, and expertise requirements, as well as the adequacy of current facilities and resources (Webster 1996).

A court may choose to acquire off-the-shelf solutions for a range of processes from specialized vendors, but these too must be modified and adapted to meet its specific needs. These applications have generally been created with the special needs of a particular country's courts in mind (the most prevalent ones promoted today tend to be based on U.S., Australian, and Finnish court models), which means that adjustment to local needs will be more difficult the more a court's processes and needs differ from the base model. Like other proprietary systems, many off-the-shelf solutions are subject to costly licensing fees; at the same time, their vendors may offer attractive options for the provision of continued maintenance and future updates or additional functionalities to the system.

Other courts decide to develop customized software for various applications, such as case tracking, human resource management, and so on, using either proprietary or open source software platforms. This is an attractive option when courts have access to affordable quality human resource capacities internally or via consultants, as well as to contracting companies to develop, maintain, and continuously upgrade and extend the solution to other agencies. If the chosen software platform is easily adaptable to all court levels and possibly other relevant agencies in a particular jurisdiction, its potential for national-level roll-out and connectivity to other courts and related agencies is high and will likely result in a cost-effective solution.

Advantages of open source software include the reduced dependence on software vendors and the lower total cost of ownership. Unlike proprietary software applications that are subject to licensing fees, open source software may be modified, incorporated into other software, and even redistributed without requiring a royalty or fee. Open source software also makes available the source code and the right to modify it, to redistribute any modifications and improvements to it, and to use the software in any way needed. A common concern related to the use of open source software, however, is that the court itself is responsible for maintenance and the ongoing need for upgrading. In the end, which platform to choose is context specific and depends on financial, time, and human resource considerations, including the availability of software packages that can be adjusted.

Today, among the major brands of proprietary software platforms that allow for complex operations tracking and management functions, few major differences exist. As late as 2011, Oracle-based systems or IBM- and Microsoft-based systems have been used with almost equal results for providing solid platforms for case and court management software. This means that it is more important to identify the platform that can support envisioned automation results and be maintained and adjusted in the near and mid-term future, with local resources and the need for local cross-agency connectivity in mind.

4.3 Development and Testing

The process and organizational review conducted during the planning phase will have determined which procedures will be automated and when, and the information they will capture for operations and management, information exchange, and interconnectivity requirements. In addition, this phase will determine the capabilities the software should provide and the data it must maintain. To be successful, this process will also result in developing procedural and information standards. More importantly, full functional standards and technical specifications

have to be developed for each implementation phase. The creation of a user group to guide the process and work hand in hand with the software developers is essential for:

- defining and communicating the scope and nature of the proposed system
- communicating the functional requirements to vendors who can supply software or to systems designers, if the plan is to use in-house staff to build or modify a preexisting system
- providing a benchmark for evaluating and selecting software, if the decision is made to procure a new software system (Webster 1996)

Based on a solid caseflow mapping process, functional standards and specification details can be developed. These also have to reflect any process modifications that resulted from the earlier analysis of the business flow models. While the functional specifications are developed, additional areas for process improvement may be identified and considered for possible inclusion (see Kujanen and Sarvilinna 2001, 41).

Functional standards help in identifying data requirements for the different functions the system is expected to perform, such as case initiation, case maintenance, and calendaring. For each function, the needed range of data has to be defined, which tend to cluster around four core data types: (1) persons-related data (defendants, parties, attorneys) (2) time-related data, such as processing, decision-making, and hearing data, (3) case data (history, event, statistics, and records), and (4) financial data (fees, fines, resources, maintenance, and services, including jail). Each type of data relates to the other and is interrelated, creating a relational database. These relationships have to be defined when building a court case management information system that will successfully retrieve and store information (Steelman, McMillan, and Goerdt 2000). A case management system links the data types as they are needed throughout the court process to individual functions and decisions, and compiles them into reports.

Case	Person	Event	Financial	Document and Report Generation	System and Utility
Case data type by key case categories. Depending on the jurisdiction this may include: • Tort • Contracts • Real property • Small claims • Family • Traffic • Misdemeanor • Felonies • Other	Information on litigants, judges, attorneys, and other individual and organizational participants	 Information on past and future events in a case Filings Scheduled events Hearings Disposition Post-trial activity 	Financial data on activities in cases i.e. payments, financial obligations, accounting activities (fees, judgments), etc.	 Information on official court documents Summons and other served processes Forms and other documents issued by the court Management and statistical information 	 Information on functions ancillary to case processing Exhibits (property management) File management Document management

Main Data Groups for a Case Management Information System

Source: Adjusted from NCSC (2001b).

Once the overall structure and data details and relationships are defined, the design is translated into code. Individual system components are then tested first, followed by tests of the entire system. It is good practice to conduct these tests with several sample cases and then repeat them to allow for process simulation over time, thereby generating the kind of management reports the court will need. Here, like in all other earlier process steps, the user group needs to be involved in reviewing the test results.

4.4 Implementation

As mentioned above, using a few pilot courts to experiment with the new application is a good approach to identify if further adjustments to the system and its operations need to be made, to develop a better understanding of training and user support needs, and to plan and budget for a realistic roll-out to other courts.

It is also important to monitor and evaluate progress and results when implementing a case management automation project. Detailed and concrete implementation milestones and outcome indicators should be set to measure project performance and the quality of implementation.

5. Conclusions

Case management and supporting systems are at the core of well-functioning courts that deliver fair and just decisions in a timely manner. The basis of any system is the design of an efficient process – a key requirement that can be taken by any court that desires to perform well even when resources are scarce and automation may be out of reach for some time. Considering the advancements of technology and the ever sinking cost of computer systems, automation of at least the basic case management processes to track the flow of cases is within reach of almost any court that has access to steady electricity, a relatively sound infrastructure and a workforce that can manage simple computer entries. These basic systems are not very complex, greatly increase court efficiency and accountability and are no longer very costly; when well designed, they can reduce operational costs. At the same time, they require a solid assessment of current operations, the desire to develop optimal processes and commitment to deliver good court services. They require time and commitment to design a good system from the court itself – no software developer be this a local expert or an international software company can design a wellfunctioning system unless the court's leadership and relevant court users are extensively involved in the design, testing and roll-out. And no case management system, even the most sophisticated automated one can deliver results if the data it collects are not translated into management reports that those in charge are actively using and responding to. That is what good case management is all about - establishing effective processes, tracking if the processes are adhered to and responding when things do not develop as they should.

References

- Abdulaziz, Mohyeddin K., and William E. Druke. 2003. "Building the 'Paperless' Court." Paper presented at the Eighth National Court Technology Conference, Kansas City, MO, October.
- Bauer, Peter. 2001. "A Show Case for the Future: E-Justice in Austria." In *Justice and Technology in Europe: How ICT is Changing the Judicial Business*, ed. Marco Fabri and Francesco Contini, 45–66. The Hague: Kluwer Law International.
- Bork, Katrine, and Rune Schroeder. 2001. "The Development of Case Management Systems: ICT in the Danish Judicial System." In *Justice and Technology in Europe: How ICT is Changing the Judicial Business*, ed. Marco Fabri and Francesco Contini, 163–173. The Hague: Kluwer Law International.
- Bureau of Justice Assistance. 1999. "Report of the National Task Force on Court Automation and Integration." Bureau of Justice Assistance, U.S. Department of Justice, Washington, DC.
- Cooper, Caroline, Maureen Solomon, and Holly Bakke. 1993. "Differentiated Case Management: Implementation Manual." Bureau of Justice Assistance, U.S. Department of Justice, Washington, DC.
- Fabri, Marco. 2001. "Introduction: State of the Art, Critical Issues, and Trends of ICT in European Judicial Systems." *In Justice and Technology in Europe: How ICT is Changing the Judicial Business*, ed. Marco Fabri and Francesco Contini. The Hague: Kluwer Law International.
- Gramckow, Heike. 2005. "Can US-Type Court Management Approaches Work in Civil Law Systems? Experiences from the Balkans and Beyond." *European Journal on Criminal Policy and Research* 11 (1): 97–120.

Hammergren, Linn. 2011. "Judicial Governance and the Use of ICT." In *Buenas Prácticas para la implementación de soluciones tecnológicas en la administración de justicia*. Mexico: Instituto de Investigación para la Justicia.

- Jacoby, Joan E., Heike P. Gramckow, and Edward C. Ratledge. 1992. An Evaluation of the Expedited Drug Case Management Program. Report Grant 89-DD-CX-0057. Washington, DC: National Institute of Justice.
- Kujanen, Kari, and Sami Sarvilinna. 2001. "Approaching Integration: ICT in the Finnish Judicial System." *In Justice and Technology in Europe: How ICT is Changing the Judicial Business*, ed. Marco Fabri and Francesco Contini, 29–43. The Hague: Kluwer Law International.

- Marcus, Michael. 2006. "Sentencing Support Tools. User Manual for Attorneys." Multnomah County, Oregon Judicial Department, Portland, OR.
- NCSC (National Center for State Courts). 2005. "Court Case Management System Functional Standards." National Center for State Courts, Williamsburg, VA.
- ———. 2004. "Court Improvement Project: Croatia, Final Report September 2000 April 2004." USAID Court Improvement Project, USAID and NCSC, Washington, DC and Williamsburg, VA.
- ------. 2001a. "Report on Caseflow Management and Court Administration, Nigeria Rule of Law Assistance Program." National Center for State Courts, Williamsburg, VA.
- ———. 2001b. "Civil Case Processing System Functional Standards." National Center for State Courts, Williamsburg, VA.
- Rabineau, Yves, and Damiano Beltrame. 2001. "The First Step in a New Era: ICT in the French Judicial System." In *Justice and Technology in Europe: How ICT is Changing the Judicial Business*, ed. Marco Fabri and Francesco Contini, 177–194. The Hague: Kluwer Law International.
- Schmidt, Aernout. 2001. "Re-Engineering Independence and Control: ICT in the Dutch Judicial System." In Justice and Technology in Europe: How ICT is Changing the Judicial Business, ed. Marco Fabri and Franceso Contini, 147–161. The Hague: Kluwer Law International.
- Steelman, David C. 1997. "What Have We Learned about Court Delay, 'Local Legal Culture,' and Caseflow Management Since the Late 1970s?" *The Justice System Journal* 19 (2): 158–60.
- Steelman, David C., James E. McMillan, and John C. Goerdt. 2000. "Caseflow Management: The Heart of Court Management in the New Millennium." National Center for State Courts, Williamsburg, VA.
- USAID (U.S. Agency for International Development). 2001. "Case Tracking and Management Guide." Center for Democracy and Governance, U.S. Agency for International Development, Washington, DC.
- Velicogna, Marco. 2009. "Use of Information and Communication Technologies (ICT) in European Judicial Systems." European Commission for the Efficiency of Justice (CEPEJ), Strasbourg.
- Webster, Lawrence. 1996. "Automating Court Systems." National Center for State Courts, Williamsburg, VA.

World Bank. 2007. "Croatia – Court and Bankruptcy Administration Project." Implementation Completion and Results Report ICR0000536, World Bank, Washington, DC.

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