



Problems with Court Filing and Case Management Systems: Perspectives from Advocates and Vendors

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Introduction and methodology

In March and April 2024, we conducted interviews with 16 advocates and vendors interested in an “open case management or filing system.” Many of the initial interviewees approached us when we announced our case management project, and others were suggested by initial interviewees.

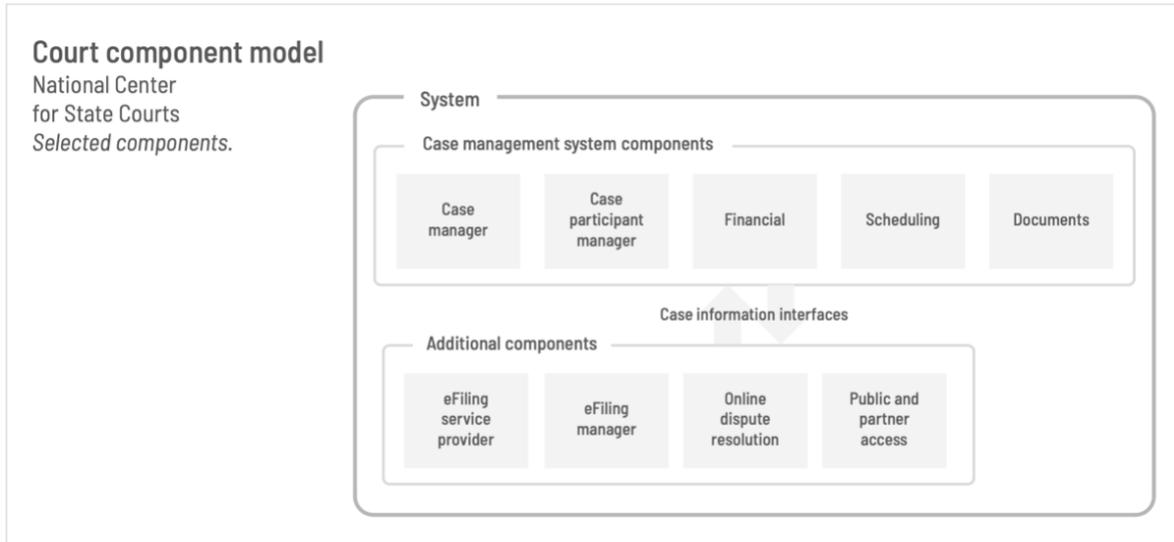
Our main goal for these interviews was learning:

- **What problems do existing vendors and advocates see with filing and case management systems**
- **What are their ideas for fixing them?**

To learn the answers, Colin MacArthur led 30-60 minute interviews, where he asked open-ended questions about each interviewee about the “unsolved problems” and ideas for fixing them, as well as more details about their current work. You can see the rough script for the interviews in the research plan.

Basics

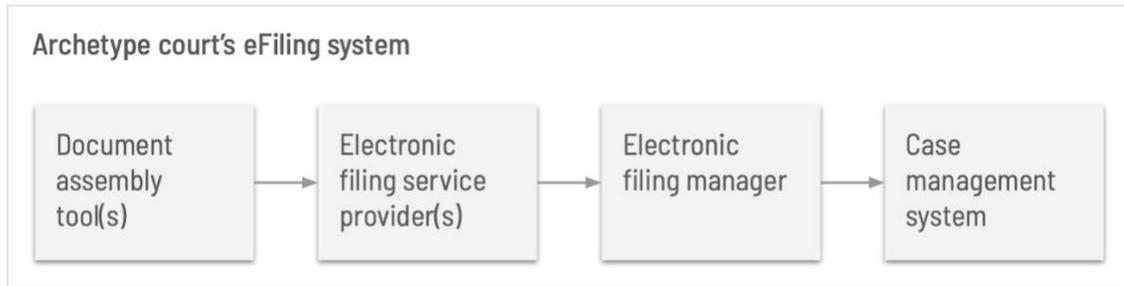
What are case management systems?



Case management systems (CMS) are the core information systems in courts; they hold the basic information about each case, its history and disposition. Case management systems often (but not always) include a:

- Docketing system, used for setting the hearing schedule and recording important deadlines
- Document management system, used for actually storing the documents referenced in each case
- Participant management system, used for tracking the contain information of the people involved in the case
- Payment collection system, used for collecting fees from court users

What are filing systems? What are their components?



Electronic filing systems are the “front door” to the court and case management systems. These systems provide a way for litigants to submit their case to the court using a computer. Usually electronic filing includes at least two systems:

- **An electronic filing service provider (EFSP)**, or the actual website that a litigant visits to input their case details.
- **An electronic filing manager (EFM)**, or a system which receives documents from EFSPs via an application programming interface (API). It has to decide where to “file” the newly incoming documents, and often gives clerks an option of whether to accept them.

For some courts, there is only a single EFSP for their EFM. For others, there is a “marketplace” of EFSPs that all connect to the EFM.

Sometimes courts, legal aid societies or others create another component of the filing system: the **document assembly tool (DAT)**. This website (or desktop software) helps users compile the documents needed for particular filings. Often, it steps users through a series of questions about their case to help them complete more accurate, and complete, documents. Usually, DATs output a PDF, which litigants then upload into the EFSP themselves. (A few DATs are better integrated with EFSPs).

Vendors will sell you a single package that includes a CMS, EFM, EFSP and DAT. But many courts use different vendors for different parts of the system.

Who purchases and runs case management systems?

In some states, each trial and appeal court purchases and manages their own CMS. Particularly in “non-unified” state judicial branches, where individual courts and judges maintain substantial control over their own operations, each court buys its own CMS.

Sometimes, courts in a district will band together to share a system — but this is usually a bottom-up collaboration.

In more unified state judicial branches, the state often purchases and runs a system for the benefit of all the courts in the state. But often, even in more unified systems, court districts retain substantial control of IT systems — there are unified judicial systems without unified case management systems.

Also worth noting: large and complex court systems sometimes have multiple CMS, each for a different case type. For example, Los Angeles Superior Court maintains three CMS.

Who purchases and runs filing systems?

In some states, a state-level entity runs a central EFM. And all the court CMS are required to receive cases from it. Many non-unified states have attempted to simplify electronic filing through this kind of architecture: there are many EFSPs, one state-wide EFM, and many CMS.

In other states, the state judicial branch has mandated a single CMS, selected a single EFM, and single EFSP, for the entire state.

And in others, each court is doing their own thing.

Outstanding problems

From the filers' perspective

Many of our interviewees' organizations work (directly or indirectly) with people who file cases in court. They described how existing filing and case management systems are **not designed for self-represented litigants**. Lawyers and their staff use these systems over-and-over and learn their quirks; SRLs do not. According to several interviewees, this is particularly true for off-the-shelf systems from major vendors.

In particular, SRLs using filing and case management systems often face:

- **Basic usability issues.** Basic usability issues, like buttons in unexpected places and court-specific jargon. For example, users often have to choose between one of many filing types and document types with little explanation of the differences between each.
- **Paradox of system choice.** In some jurisdictions, having to choose between one of several filing systems, without understanding the impact (if any) their choice has on their case and cost. The choice is supposed to be good for the end user, but often confuses them instead.
- **The PDF air gap.** If the SRL uses a document generation system (a series of questions designed to help them fill out the form) to help them prepare their, they usually have to download it, and re-upload it in another system. This download-and-re-upload step usually involves many steps, including creating a different account. (And when courts receive PDF filings, they often manually re-enter elements in the PDF.)
- **Poor mobile interfaces.** These problems compound for users accessing these systems on a phone, instead of a computer. Filing systems follow even fewer usability conventions at their mobile width, and handling PDF download-upload is even harder on a mobile device. One interviewee commented that courts think the work is done when people have internet access (via a phone or computer); but people who use mobile devices to access these systems have a far worse experience.

Ultimately, these problems likely reduce SRL's trust in the judicial process and its fairness.

From the system integrator's perspective

Why don't advocacy organizations or entrepreneurs create new systems that address these issues? Many of our interviewees also have experience building tools that connect to case

management systems, or helping courts configure the systems themselves. They try to build on top of (or get data out of) the existing systems, to make them work better for SRLs.

People who try to build and manage connected systems note that:

- **There are few useful APIs.** In general, very few existing case management systems offer useful, well-documented application programming interfaces for exchanging data. Vendors often create “walled weed gardens” (as one participant put it); there are few ways to systematically get data in and out of the system. As a result, courts and others can’t build their own components over existing systems; they’re driven to buy additional tools from the same vendors.
- **“Open electronic filing”** is far from open. At the very least, many states and courts claim to offer at least one easy way to integrate into their systems: an open filing interface. Often, these states offer a common interface, based on the OASIS Electronic Court Filing data standard, to submit new files to their systems. But despite years of development, it’s difficult to actually build and integrate new electronic filing service providers for existing systems.
 - **Uneven standards implementation.** Even the standards’ maintainers admit that different case management systems follow the standards to different degrees. ECF standards are over 10 years old, but many vendors only started to comply with them when courts included them in contract renewals. Furthermore, many vendor systems still use ECF4, which is less specific than ECF5. (ECF5 systems are easy to integrate with, presumably.)
 - **Additional court-specific requirements for filings.** Even if a case management system implements ECF well, courts may add additional rules for the format and structure of filings. For example, one court may require that documents be submitted in a particular order, or another could require certain filers use a mandatory court form which is not used elsewhere. These court-specific requirements are not machine-readable; they’re usually just written on a website somewhere. As a result, it’s very difficult to build a single submission system that works for many courts, particularly in a non-unified court system.
 - **Certification processes make assumptions about filing systems.** To even gain access to electronic filing APIs, integrations often have to go through a “certification process.” This process often assumes that filing services all work roughly the same way: they make users choose a case type and upload files. But if you try to build a system that works differently (like by asking the user a series of questions to determine their case type), it’s difficult to receive a certification.

- **Case management and filing systems are aging and becoming less secure.** Many of these systems were initially purchased and implemented over 10 years ago. Some have a commercial provider who actively maintains them. Some of them are custom-built systems, with varying degrees of maintenance. And for some, the developer has long ago disappeared. The older systems tend to be even more difficult to integrate with. And, as several recent high profile examples show, several of these systems contain serious security flaws which remain unpatched.

Structural reasons for these challenges

Many interviewees commented that the aforementioned challenges were “structural,” or the result of the number, structure, processes and funding of courts themselves:

- **Courts are a simultaneously small and heterogeneous market.** Although there are a few thousand court “purchasers” of case management and filing systems, the market is far smaller than for other core enterprise systems. For example, despite being a dominant vendor for court systems, Tyler Technologies has far more “municipality management system” customers. At the same time, courts and their judges retain substantial power to set their own rules and processes. As a result, they have vastly different requirements and expectations of their case management systems. One vendor claims that their CMS implementations are “often losses” and that each court’s different process poses substantial challenges to vendors. According to some, building a case management system is an effort in pleasing a small number of people with very different needs - and that’s hard to make “economically viable.”
- **There are undoubtedly a few, dominant vendors of case management systems,** and a slightly larger set of filing providers. Some argue this is the inevitable result of the small market; others quietly note that vendors may purposely attempt to maintain their monopolies by locking data into their systems (see the above section on limited APIs). But most agree that these vendors operate with an incumbent advantage: they know how courts—and their purchasing processes—work, and use that knowledge when they compete for contracts.
- **This incumbent advantage may be reinforced by the limited court funding for new systems** and how existing vendors compensate. Several interviewees noted that most courts have a relatively small budget for case management systems, and almost no budget for filing systems. To offer appealing pricing, vendors seek recompense from other system users. For example, vendors offer filing systems to courts for free, but charge each filer a fee. New vendors have to compete against existing vendors offering services that are heavily subsidized by their end users.

In theory, a competitive contracting process encourages existing vendors to do their best work, or open the contract to others which could do better. Like most government entities, most courts issue “requests for proposal” that list all the system’s requirements, and then contracts with the winning bidder for 5-10 years. Vendors submit responses to these requests and compete for the contract, based both on the price and quality of their services.

- **But in reality, this contract process often does not ensure good systems, or a competitive market.** This process assumes that the system doesn’t change much over 10 years, and that the bidder will remain capable of meeting those needs. In reality, courts’ needs change (for example, text message reminders did not seem useful in the 2000s, when many large courts purchased their systems). Vendors change, as do vendor capabilities. Several interviewees also noted that the RFP process favors vendors with the overhead and time to write long documents.

In sum, according to our interviewees:

- Given the relatively small number of courts (compared to other enterprise software customers), and their varying requirements, it’s difficult to make and maintain case management systems that are economically viable.
- Within this challenging market, there are already a few dominant vendors, who enjoy an incumbent advantage.
- Reinforcing their incumbent advantage, vendors often shift some of the system’s costs from courts themselves to others, including litigants. This allows them to offer courts heavily-subsidized systems, at a higher cost to people using them.
- Although a competitive procurement process should ensure systems’ quality, and keep the market open, it often doesn’t. Long contracts with pre-set requirements prevent courts from adapting their systems to evolving needs.

Existing ideas for solving these problems

Many interviewees shared ideas for solving these problems. Some of these ideas are under early development (or have been tried in select courts); others are completely untested.

Improving the filer experience

To ease the usability problems SRLs face, interviewees suggested:

- **Further improving guidance and form-fillers for SRLs.** Perhaps the most obvious (and immediate) way to improve SRLs' experience is to give them better instructions. Or walk them through the process in a more thoughtful way. Docassemble, and the many efforts to implement it at Suffolk LITLab, are trying hard to improve the usability of these forms. Many states, like California, have growing and robust "self-help" initiatives to coach filers interacting with the systems. All of these improvements take a common approach: better prepare the filer for the morass of court systems and process (not necessarily change the process).
- **Using LLMs to further automate form-filling.** Almost all our interviewees suggested using AI to help SRLs. A common idea was using LLMs to extract key data from an SRL's long-form story. In other words, SRLs could write what happened in a big text box, and the LLM would decide what type of case they needed to file, fill in the appropriate form, and ask follow-up questions. As one interviewee put it, they suggest using AI to "turbocharge existing SRL self-help efforts."
- **Creating a "one stop shop" for filers.** Filers often have to move between multiple systems to file a complaint. They fill out questions in one, have to upload PDFs in another, and then go to yet another to find the status of their case. Several interviewees noted the "dream" was to "connect all these systems up." In this dream, SRLs access a single system (or what appears to be a single system) where they complete all these tasks.. LITLab has tried to build such a system with Illinois Legal Aid, but the integrations were technically difficult (for the reasons described in the "integration" section above).

Making it easier to integrate with existing systems

To make it easier to build systems that connect to existing case management and filing systems, interviewees suggested:

- **Writing contracts and RFPs that force vendors to provide more APIs (not just for filing).** Very few contracts for case management or filing systems require vendors to provide an open API for various types of data. Often, APIs are an add-on service for which vendors charge extra, after an implementation is complete. Several interviewees suggested that data-interchange requirements should be detailed in the vendor's contract.
- **Pressure vendors to better implement existing filing API standards, like ECF5.** Many electronic filing managers and service providers support the existing filing standards. But several interviewees noted that this required a continuous "pressure campaign" - start-level directives to implement it, certification processes that required it, etc. They also note that certification processes often forced vendors to adopt ECF. These interviewees argue that the same degree of pressure has to continue to push vendors to not just implement the standards, but use them well.
- **Building a middleware that speeds up integration .** Others have given up on adding good APIs to the core systems. CourtStack is building an "abstract layer" that sits on top of existing case management systems, and provides better APIs for interacting with them. The hope is that this new API will spur additional development of other systems, based on these data. So far, CourtStack has only been implemented in southern California.
- **Working with courts to create standard filing requirements, at least for SRLs.** Several advocacy organizations have made attempts to get courts to agree on simple, standard processes for certain kinds of common filings. By doing so, they hoped to make it easier to build guided filing systems (for SRLs) that could easily apply to multiple states. Unfortunately, none of these efforts have been successful - states often claim that their laws force them to have wildly different processes (although some advocates doubt this).

Hacking away at structural problems

Most interviewees noted that the structural problems were harder to fix, and they had fewer ideas about solving "intractable problems." But a few ideas did surface:

- **Better data collection and metrics reporting on SRL experiences in the current system.** Gathering data about and publishing the following statistics could shine light on the limitations of the current approach. Such metrics
 - The rate at which SRL filings are rejected by clerks
 - The amount of revenue vendors collect directly from filers vs. courts
- **Educating courts to be more knowledgeable buyers of technology.** Some interviews argue that making judicial leaders (usually judges) more aware of basic technology best practice could help them be better buyers. [Keith Porcaro](#) at Duke Law has an ongoing program to do just this.
- **Exploring different models for courts to fund and support court software development.** As one person put it “It’s very difficult for new and innovative builders to get a contract for a new CMS.” Several interviewees wondered if there was a better or different way, including:
 - Moving more software development in-house (like the federal government has done with 18F or the United States Digital Service)
 - Having states join forces in cooperatives or trusts, which in turn develop software for their own needs. The cooperative retains ownership of the software itself; the developer is simply the “managing” trustee. Some people argue this structure would reduce the incentives of the vendor to lock people into the system.
 - Further modularizing or splitting systems procurement into more pieces, which have to communicate via API (as described in the 18F Technology Derisking Guide)