

**ASSESSING ELECTRONIC FILING VIABILITY
FOR THE FRANKLIN COUNTY MUNICIPAL COURT**

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Abstract

Courts representing every level of the judiciary are engaged in determining how Electronic Filing (E-Filing) can help them remain true to their duties, in the face of rapidly advancing technological means and systems for managing information. “Court procedures should be simple, clear, streamlined and uniform to facilitate expeditious processing of cases with the lowest possible costs.” (National Center for State Courts, 2012, p. iii)

Electronic Filing is one method with a proven history of achieving these and other benefits where it has been deployed. However most courts have yet to adopt e-filing, and they remain dependent on paper for creating and storing court records, which inherently has many limitations. Some of those limitations relate to storage space, accountability, security, and access.

The purpose of this project is to determine why many courts have been reluctant to move to electronic filing; how best to address the issues relating to their reluctance; and in doing so identifying the process elements which are necessary for the implementation of an e-filing system that will be effective and sustainable for the Franklin County Municipal Court. The primary questions covered within this project are:

1. What implementation processes should be used to ensure the viability of e-filing?
2. Is the FCMC staff ready to participate in an electronic filing implementation?

3. What is the readiness level of the technology infrastructure at the Franklin County Municipal Court?
4. What are potential barriers to implementing a viable e-filing solution?

The processes necessary for e-filing success were identified by way of reviewing literature relating to e-filing implementation, and also through interviews with jurisdictions that have successfully launched e-filing. To assess staff readiness, a survey was given to court and clerk personnel, with questions on their understanding of e-filing and its intended benefits, as well as on their comfort level with the concept of e-filing. To determine the readiness level of the FCMC infrastructure, its technology specialists were surveyed using questionnaires and assessment tools designed by court and technology specialists. The interviews and literature review also provided insights into barriers some courts have encountered during their implementation process. To establish baseline measurements to help assess the post-implementation impact of e-filing, current data entry staff allocations were measured, and three NCSC CourTools were used to capture current data on case clearance rate, time to disposition, and active pending caseload.

Through the literature review and interviews, it was determined that for e-filing to be viable it must be implemented using proven project methodologies. Through the operational staff survey, it was found that FCMC staff will require training on e-filing competencies, as well as the concept of e-filing and its intended benefits. The survey tools used to assess the maturity of FCMC's technology systems showed that the court is at the "some electronic" processes level; has a sound level of technology infrastructure; and is positioned in that regard

for an e-filing solution. Through the interviews and literature review it was determined that many e-filing implementation challenges largely relate to process and practice rather than to the technology. The baseline assessment of FCMC staff data entry personnel found that the court has both personnel who are tasked exclusively with new case data entry responsibilities, and those who perform the task as a part of much broader job assignments. The CourTools measures, while showing that the FCMC presently performs within accepted guidelines in case processing, have established, along with the data entry staff allocation measures, a set of comparative numbers which will be used for future viability assessments of e-filing.

This project largely concludes that; e-filing offers significant benefits for all stakeholders, that can be achieved through the use of effective implementation processes; that preparing personnel to serve in an e-filing user support role, and training for line staff as well as judges should be e-filing project priorities; that providing judges with the proper technology tools for interacting with electronic records is essential for e-filing success; and that potential barriers to e-filing can pertain to resistance to change, questions on funding, end user e-filing skill sets, questions on mandatory e-filing, managing dual paper and electronic systems, and accommodating self-represented litigants. It further concludes that solidifying the viability of e-filing will require the ability to demonstrate its effects on operational considerations, such as personnel efficiencies and case flow management.

Among this projects recommendations are:

- That a proven project governance model be adopted
- That a full time project manager be appointed to supervise e-filing implementation

- That a change control procedure be employed.
- That established project management tools be utilized
- That a formalized e-filing familiarization initiative for line personnel and judges be developed.
- That a training program coordinator be appointed
- That judges are provided with effective tools for electronic document interaction
- That budget assessment tools should be used, such as a budget planning work sheet.
- That a multifaceted education program for end users be developed.
- That e-filing should be mandatory for attorneys.
- That courts must resolve to expeditiously transition away from paper files
- That Self-Represented Litigants e-filing needs should be accommodated
- That measurable items captured before e-filing implementation should be reassessed at intervals of six months and one year after implementation to evaluate its impact on those measures.

Through these conclusions and recommendations this project intends to have established for the FCMC, and other observers, a basic sense of effective implementation processes, staff readiness considerations, technology systems status implications, and the potential barriers that could be encountered during e-filing implementation. Armed with this information it is hoped that the court can proceed confidently toward a viable e-filing solution.

Introduction

Presently most courts operate in a paper-intensive environment where case workflow is dependent on accepting, creating, managing, storing, and accessing physical paper documents. The Franklin County Municipal Court (FCMC) based in Columbus, Ohio is among the majority of courts who fit this description.

The Court: The Franklin County Municipal Court is a state court in a non-unified Ohio court system, and has county-wide jurisdiction. It is divided into two Divisions, a General Division and an Environmental Division. The General Division is served by fourteen municipal judges and the Environmental Division is served by one municipal environmental judge. Six magistrates also serve with the court. The Franklin County Municipal Court judges are elected officials, and serve for a term of six years. The court staffs around 230 employees. (Franklin County Municipal Court, 2014, p. 5)

The Clerk: As in most jurisdictions the FCMC Clerk is charged with accurately maintaining, safeguarding and storing all court case documents in accordance with file retention requirements, as well as with collecting and disbursing all monies as directed by legal mandates. It consists of one (1) administrative department, five (5) operational departments, and three (3) support departments. It staffs around 160 employees. The Franklin County Municipal Court Clerk is an elected official who serves for a term of six years. (Franklin County Municipal Court, 2014, p. 5)

Franklin County is the second most populated county in the state of Ohio with approximately 1.21 million residents in July 2013, according to the U. S. Census Bureau. It trails only Cuyahoga County, which has approximately 1.26 million residents. Projections however are that Franklin County will, within the next 5 years, eclipse Cuyahoga County as the most populated Ohio county based on Census Bureau growth patterns. (Exner, 2014) This projected pattern reinforces that it is prudent for the FCMC to be consistently mindful of methods that create operational efficiencies, to ensure it is prepared to effectively manage any potential increased workload associated with upward trending population growth. With a county-wide jurisdiction the FCMC already boasts the largest case volume in the state of Ohio of any municipal court.

For the Franklin County Municipal Court Clerk, physically processing and keeping paper documents also presents the challenge of storing and retaining significant tonnage of case files and boxes. This challenge for the FCMC Clerk literally reached a breaking point some years ago.

Shortly after the newly elected Franklin County Municipal Court Clerk took office in 2006, she met with the facilities manager for the building where the FCMC Court and Clerk are housed. The lone agenda item pertained to the storage space the Clerk's office had for years been using to keep case records post disposition. Since the FCMC is the largest court by volume in the state of Ohio, storage is an ever expanding need. Because of this, cases were being stored on the building's uppermost 18th floor. According to the facilities manager, due to years of case storage on this floor, an important issue had developed. She advised that

during a routine building inspection, it was discovered that the weight now stressing the 18th floor had caused a significant crack to develop. The floor was indeed broken. The new Clerk of Court subsequently had to take immediate action to move the files.

While this was achieved, it required that the Clerk's office acquire offsite warehouse space at significant cost. Because a good percentage of the cases stored offsite needed to be accessible for records requests, case history review and other reasons, the Clerk's office had to staff the warehouse for security purposes, and to shuttle case records back to the courthouse. This had adverse impact on efficiency, timeliness, operating costs, and more.

What became clear was that the limitations inherent in a paper environment can create challenges which can have significant unintended impact on the administration of justice. It was also clear that in the future, case management options for the FCMC would have to evolve from one requiring paper as the principle case record format.

With the advance of technology; particularly in internet connectivity, potential alternatives to an environment dominated by paper have developed. These alternatives have generated discussions, in the judicial community, around using technology to become paperless electronic courts (e-courts). This concept proposes that all court records and procedures can be thoroughly managed through electronic methods. "In a fully electronic court, digital documents replace paper documents, and automated processes replace manual processes as the court conducts its daily business. Judges hear cases at the bench using an electronic case

file with all necessary information immediately accessible to them on a computer.”

(Imagesoft, 2013)

Many courts such as Michigan’s 13th Circuit Court have already achieved a fully electronic platform. The unified court system in Utah has also achieved a totally paperless court system. By doing so they estimate they have saved \$300,000.00 annually by eliminating the cost of file folders alone. More significantly over time they have seen a staff reduction of 114 full time employees through attrition, and savings of approximately 2.5 million dollars in associated salary and benefits. They were subsequently able to reinvest those savings back into further professionalizing their staff.

One of the most discussed components of the e-court concept is electronic filing, or e-filing. E-filing can be broadly described as an opportunity for those who have a need to file documents with the court to do so in digital form. The opportunity for a court to provide a functional e-filing solution to litigants and stakeholders has existed for over 20 years. In the early years of e-filing, most who endeavored to put a system in place were unsuccessful for two reasons. One reason was that courts were not prepared to work with electronic documents, and thus they effectively became print shops for lawyers. This created more burden than benefit for courts and clerks. Secondly they were unsuccessful because attorneys were not prepared to use the filing protocols, or file documents in the proper format. One can infer that this was because many attorneys were still in the relatively early stages of integrating personal computer and web-based concepts into their operations. Because we have seen far greater familiarity with, and acceptance of the applications of personal

computing and internet principles over the last 20 years, these two barriers are generally considered no longer to be of concern. Many jurisdictions are now reaping the benefits of successful e-filing systems. Among the documented benefits of E-filing are greater efficiencies, cost savings, accuracy, and transparency. However, despite these potential gains and success stories, a large majority of courts in America have yet to utilize these technologies.

This project will attempt to develop an understanding of why this is the case and, in doing so also, identify the potential barriers and obstacles that the Franklin County Municipal Court must consider to ensure any e-filing solution it might pursue will be viable. Ideally this project will help facilitate an e-filing solution for the FCMC that is fiscally responsible, secure, accessible, intuitive, technically stable, and sustainable. Along with these objectives, we will assess the readiness of the FCMC to take on an e-filing implementation in a manner that aligns with all legal mandates and requirements, without compromising operational effectiveness.

To do so this project focused on the following research questions:

1. What implementation methodologies should be used to ensure the viability of e-filing?
2. Is the FCMC staff ready to participate in an electronic filing implementation?
3. What is the readiness level of the technology infrastructure at the Franklin County Municipal Court?
4. What are potential barriers to implementing a viable e-filing solution?

To address these questions this project reviewed existing articles, white papers, and other documents which speak to the opportunities, benefits, and challenges e-filing presents. Included also is feedback via interviews from staff members of courts that have implemented e-filing programs. Surveys of FCMC operational and technology staff were also used to achieve project objectives around readiness. To capture baseline measures on current data entry staff allocations, and case flow measures, a personnel assignment review was conducted, and three NCSC CourTools were employed.

The literature review and interviews provided the basis to address the research question relating to successfully implementing a viable e-filing solution. Insights into the project question of whether the FCMC staff are ready to participate in an e-filing initiative were gained by surveying them on their knowledge of the concept of e-filing, the benefits that it is intended to provide, and their level of comfort with the process. Surveys of FCMC technology specialists also provided the means to address this project's question pertaining to the readiness of technology infrastructure. Literature review and interviews also provided insight into the research question regarding what barriers have historically been encountered by courts while implementing e-filing. The staff allocation assessment, and the CourTools, establish quantifiable measures that are to be used for comparative purposes once e-filing is operational, for the purpose of establishing its effect on personnel and case flow efficiencies.

Described within this report are the research methods used to gather and analyze information that pertains to implementing e-filing technologies. We discuss findings based on this analysis, followed by conclusions and recommendations emerging from the analysis.

While technology may offer excellent solutions for many traditional case record management challenges, the complexities involved in employing them can delay the ability of many courts, including the FCMC, to fully exploit them. This report hopes to outline certain responses to these complexities that may mitigate or significantly reduce delays in implementation. Doing so should align with the current administrative judge for the Franklin County Municipal Court's statement that; "The increasing complexity of laws, and the desire to meet the needs of every citizen who appears in this Court all present substantial challenges to our judges and staff. As the largest and busiest municipal court in Ohio, we continually strive to improve our services and fulfill our obligation to fairly interpret the laws of Ohio." (Franklin County Municipal Court, 2014)

Advances and innovations in technologies for document, image, and data management, present an opportunity to remake our environment into that of a paperless platform. E-filing presents an opportunity to take a giant step in this direction by achieving significant advances in accuracy, the timeliness of processing case records, simultaneous records access, storage space cost savings, 24-hour filing by parties, personnel efficiencies, and many other benefits. The business of courts centers on equal justice and the timely administration thereof. The goal is to implement e-filing in a way that results in a modernized FCMC court system, where those it serves would benefit from, and experience, a more effective and accessible justice system.

Literature Review

The focus of this document is determining key elements that should be assessed to ensure the long term viability of an electronic filing (e-filing) initiative for the FCMC.

The Joint Technology Committee (JTC), formed by the Conference of State Court Administrators (COSCA), the National Association of Court Management (NACM), and the National Center for State Courts (NCSC), in 2013 published the bulletin: “Strategic Issues to Consider before Starting an E-filing Initiative”. It expresses a number of specific assumptions and requirements, which are necessary for e-filing success, as follows:

- The electronic record is the official record
- E-filing should be mandatory (eventually)
- Judicial buy-in and leadership
- Self-Represented Litigants must ultimately be accommodated
- Public Access to electronic documents must be part of the strategy
- Technical infrastructure
- Security of the Network
- Courthouse Space and Courtrooms, Public Access
- E-service should be part of the e-filing strategy
- Paper still kept for a while
- Business Intelligence Tools
- Electronic Files need smart Electronic Workspaces

Among the inferences that can be drawn from this list are; that in the e-filing implementation phase a court must have a non-negotiable commitment to ensuring that its leadership culture leans toward adaptability; that there is an adequate physical environment (both technically and structurally); and that court rules must always consider judicial principles. The National Association for Court Management (NACM) began a process of surveying its members in 1990. The information gleaned from the surveys over time helped

establish NACM's ten (10) core competencies that court leaders must understand and be able to do. (National Association for Court Management, 2003) Of the ten competencies, "information technology management" and "case flow management" seem to most closely relate to e-filing.

"Case flow Management is the process by which courts move cases from filing to closure". (NACM, 2003) The efficiency and accuracy with which cases move through the judicial system directly affects the ability of a court to ensure due process is inherent in the administration of justice.

Technology can be described as the application of science to affect processes relating to our interaction with each other, our environment, or society at large. Court technology is the same, with specific intent toward affecting the business of the court. Since there is no promise of success with the implementation of any technology, it is important for an e-filing solution to reside where the competencies of case flow management and information technology management intersect. While all of the competencies will ultimately be a part of such a solution, these are two which can draw focus to whether an e-filing project will be viable

In part Merriam-Webster's online dictionary (Merriam-Webster, 2015) provides the following definitions of the word viable:

"3 *a* : capable of working, functioning, or developing adequately <*viable* alternatives>

b : capable of existence and development as an independent unit <the colony is now a *viable* state>

c (1) : having a reasonable chance of succeeding <a *viable* candidate> (2)
: financially sustainable <a *viable* enterprise>

This project addresses e-filing viability rather than feasibility based on three considerations. The first is that in recent years, through the implementation of e-filing systems in various courts throughout the country, the feasibility and benefits that can result from e-filing are well documented. The National Judicial College (NJC) Judicial Survey: Electronic Filing in U.S. State Trial Courts, expressed among its findings that:

Courts that have already implemented e-filing strongly believe that the use of e-filing will increase. Eighty percent of judges expect an increase while only nineteen percent think the level will remain constant. Many judges mention the importance of mandatory rules for e-filing and involvement of the state supreme courts in the decision to implement such initiatives.

Roughly one in four judges indicated that they have plans to implement e-filing, and the majority of those with plans expect to do so in the next 12 – 18 months. Over eighty percent of judges see e-filing as superior to paper and almost ninety percent expressed interest in learning more about e-filing. Further, more than two-thirds of judges see reduced paper volumes, better access to information, and improved clerk efficiency as benefits of e-filing. (The National Judicial College)

Momentum is growing for e-filing. Benefits such as the ability to view and interact with documents by multiple parties at the same time, the ability to view documents remotely, reducing the incidence of lost or misfiled information, and the ability to have multiple backups of court record are among the most noted positive attributes of managing electronic records. (Kraski, Taming the Paper Tiger, 2010, p. 14) Lower paper costs, reduced storage expenses, and staff reductions through attrition are additional benefits highlighted when e-filing is discussed. (Winters, 2005, p. 3)

Secondly, this project focused on viability because, assuming that a technology proven to work with one organization can seamlessly be adopted by other organizations that have their own unique conditions and dynamics, can result in systems that prove more burdensome than if not implemented at all. “An e-filing system that is poorly designed and implemented can actually increase staff needs, cost, processing time, and human effort in court operations, instead of decreasing them.” (National Center for State Courts, 2011) Therefore it is important to consider viability from each courts operational perspective.

Third and most specifically this project focuses on viability because the FCMC Clerk of Court in 2013 commissioned through an outside vendor, a study that examined whether an e-filing system is feasible for this jurisdiction. (3SG, 2013) That study engaged a variety of stakeholders to ensure their varied perspectives were considered. Along with the Court and the Clerk’s office, were the Franklin County Sheriff’s Office, Public Defenders, The Columbus City Attorney’s Office, The Columbus Division of Police, the Columbus Bar Association, and a number of other municipal and county partners. The study focused on whether an e-filing solution could have a positive impact from a fiscal perspective, as well as from an operational perspective.

The study found that the: “FCMC and its stakeholders’ processes are mainly paper driven, with personnel at each agency involved with large amounts of redundant data entry and duplication of printing and mailing like or same documents”. It also concluded that there are several opportunities for cost savings and improvements. Mainly with regard to overhead relating to employee time, supplies, cost of paper, as well as printing and mailings costs. The

study stated that these improvements would reduce wasted time, errors and the reliance on enormous volumes of paper records. Those feasibility study conclusions were significant in that they provided evidence that e-filing could be of benefit to the court. Since the study concluded that e-filing for the FCMC is feasible, and could result in numerous positive outcomes, the Court and Clerk jointly decided to move forward with an e-filing initiative.

What remains is to assess how best to proceed toward implementing a solution that is successful and sustainable. This literature review focuses on the previously stated project questions relating to project implementation dynamics, staff readiness, technical readiness, and overcoming barriers to implementation.

Project Implementation Processes

This section focuses on the key aspects of project implementation that were identified through interviews and the literature review. It discusses the importance of setting goals, project scope, risk assessment, project governance, change management, vendor selection, and court culture. These are important concepts to consider as they relate to projects in general, but are perhaps more important in technology initiatives.

Goals and objectives.

During the implementation of e-filing it is important that those charged with making it work have an understanding of why the project has been approved. Those who have been engaged throughout the pre-implementation phase likely have a good sense of what e-filing is intended to achieve. As implementation begins, other personnel and stakeholders must

participate. They will likely have a cursory understanding that e-filing involves electronically transmitting documents to the court, but each must also have a comprehensive appreciation of what e-filing is expected to accomplish. It should collectively be understood for example that some of the goals of e-filing are to:

- Enhance customer service
 - Eliminate work redundancy
 - Improve workflow patterns
 - Augment staff performance measures
 - Reduce the need for redundant record systems
 - Significantly reduce the need to pull files, insert file documents, and refile folders
 - Improve physical space usage
 - Create stronger records security
 - Reduce the incidents of damaged records.
- (McMillan, Walker, & Webster, 1998)

Outcomes such as these within a court will in some way impact essentially everyone. Ensuring that there is energized proactive involvement by those tasked with making e-filing work, requires that implementation participants have top of mind awareness about what is in it for them. Engaging project participants and stakeholders early in setting project goals and objectives will make it more likely this will be the case.

For stakeholders to have view of the impact of e-filing, not only should the goals be articulated and understood before implementation, the effect of the project on these goals should be measurable after implementation wherever possible. Effectiveness is measured by generating sufficient data to determine change in a system as the result of comparing pre-project and/or historical data to post-project data. (Colorado Nonpoint Source Community, 2014) This comparative information can be used to demonstrate that intended goals and

objectives have been achieved, further solidifying the value stakeholders will have in the system going forward. This project chose two areas as examples of the types of measures around which a court could capture data for comparative purposes. Those areas relate to personnel and case flow management.

Defining the scope.

A potential pitfall for any court endeavoring to take on an e-filing solution is that stakeholders could enter the process without fully understanding what is necessary to achieve project objectives. Perhaps worse would be if various stakeholders have different understandings of what the project is intended to be, and what it is intended to deliver. Determining what is required for a project should be the initial focus of project initiates. Defining scope and how project resources will be allocated will help define what must be done. This will enable project stewards with the ability to more effectively allocate tasks and associated resources, as well as establish project expectations. How best to address defining project scope can be found in the tenants of project governance and project management protocols. These protocols are not unique to courts, or e-filing projects, however the best resource for courts is within protocols detailed by those who understand the dynamics of court operations. (National Center for State Courts, 2012) Will there be a steering committee, or task force assembled before an e-filing initiative? If so who should participate? Is a request for information (RFI) needed to help identify available vendor offerings? If so who should draft the RFI? What project management tools will be employed? By engaging stakeholders in the planning process at the outset, and doing so around sound project management

protocols, confusion should be minimized and misperceptions around what the objectives of an e-filing initiative are can be limited.

Risk assessment.

Understanding risk is important before taking on a project such as e-filing. Evaluating the experiences of others will help minimize any risk e-filing may represent. Over time as more courts have engaged in e-filing initiatives the pool of knowledge and experience has expanded, thereby providing resources to help mitigate risks so long as a court is committed to examining outcomes from other jurisdictions. (McMillan, Walker, & Webster, 1998) There are no particularly unique risks associated with e-filing, but it also is not exempt from them. Some areas to consider where e-filing could present some risk of adverse impact are; how it could affect court staff; funding; vendor performance; or the departure of key project participants. (McMillan, Walker, & Webster, 1998)

Assessing risks should be viewed as a proactive step that is taken in order to develop plans to minimize the possibility of risk related occurrences, or to counter the impact should they happen. By conducting a risk assessment those responsible for a project can; identify the potential risks, qualify the potential impact, determine the likelihood of it occurring, create watch list triggers that can alert project leadership if a particular risk has manifested, and set protocols to manage the risks. (acqnotes.com) Once a risk management plan is formulated it should be appropriately disseminated to those tasked with its execution if required.

Project governance.

It may seem intuitive that a court that is a high performance court (Ostrom & Hanson, 2010) will naturally be able to engage in a large scale project, and utilize its standard decision making model to ensure that the project will be successful and sustainable. However many large projects carry with them competing operational demands, requirements for objective asset allocation, and inherent characteristics of project ownership that reside outside normal operations. Therefore it is important on any initiative, where various stakeholders contribute significant capital, personnel, and/or assets, that there be a formalized decision making framework. (Wikipedia) Defining who makes decisions regarding timelines, resource allocation, personnel commitments, as well as setting priorities between normal operational obligations and project requirements is essential. Project governance pertains to a decision model that should reside outside an organizations traditional decision tree, but also has within its structure the authority to balance requirements between normal operations and project demands. This will allow for adaptable project management, and affords an opportunity for infusing good communication where active listening and responsiveness to stakeholders can be achieved. (Joint Technology Committee, 2013)

Change management.

During the implementation of e-filing it will be necessary to effectively apply change management procedures. “Change management is a systematic approach to dealing with

change, both from the perspective of an organization and on the individual level. A somewhat ambiguous term, change management has at least three different aspects, including: adapting to change, controlling change, and effecting change.” (Rouse, 2014)

At any point during a project initiative, an end user or stakeholder may ask for a technology or process change that could affect the scope of a project. In many cases the requesting party may not know what larger implications might be involved if their request is executed. Also, the person to whom the request is being made might not know themselves what impact the change will have. Often it may appear simple to make the change, and it may not have any apparent consequence. However there is always a possibility that functional changes can have major project impact, sometimes at a catastrophic level. Such informal or unplanned changes could take a project off its timelines, or result in project scope creep, where the project balloons well beyond its original budget and/or schedule. Not managing change effectively within a project is a frequently noted reason for project failures. (Murray, 2014)

A formalized change management process provides the mechanism for conducting adequate review of the potential benefits or barriers a proposed project change may represent. What makes a change process workable is, if the appropriate stakeholders are involved who have the necessary tools to evaluate the proposed change, and the authority to make a decision whether the change is approved or not. Elizabeth Harrin, in the article “Five tips for managing project change requests”, offers the following:

- 1. A request to make a change to the project is received**

You want the person suggesting the change to be as specific as possible and to put their request in writing. If they have any supporting materials, such as quotes for additional IT equipment or estimates from developers that might help the analysis, ask for those too.

2. Update the change log

The change log in its simplest form is a document where changes and activities to assess changes are written down. Make a note of this latest request.

3. Assess the priority of the change request

Give the "change request" a priority. Is it critical, important or nice to have? This provides a sense of urgency for planning the impact analysis. Be guided by the person who raised the request but use your own common sense. Have clearly defined categories so one person's "urgent" is not equivalent to someone else's "nice to have".

4. Assess the change

As a team, look at the change request. It is helpful to assess all changes against the same criteria. The purpose of the assessment is to decide whether to approve or reject the change. You should also consider the impact of the change if it is not done. Sometimes not doing something, such as applying a software patch, can have more of an impact than doing something.

5. Decide the course of action: approve or reject the change request

Make the decision, and communicate the outcome to the relevant stakeholders and those affected by the change. Update the change log with the outcome and rationale behind it. If the change is approved, amend all the appropriate project documents. (Harrin, 2014)

“Finally, once you have completed all the steps of a change management process, you will need to delegate the tasks to the right IT resource to get the change made. This could be to developers, testers, architects or anyone else who is impacted by the work. It's best to explain the rationale for the change at the same time instead of just dishing out the tasks. People tend to work more effectively if they know why they are doing something, so take the

time to set the new work in context and explain the benefits of the change on the IT solution overall.” (Harrin, 2014)

Vendor information.

Once decision makers, after consulting with stakeholders, have determined they will pursue e-filing, it will be necessary to identify what vendor offerings are available that could help a court achieve its goals. Even if a court has decided to develop an in-house e-filing solution, they may need to commission consultants to do so. At the FCMC, as in many jurisdictions, the preferred method(s) for soliciting information from vendors is to use either a Request for Information (RFI), a Request for Proposal (RFP), a Request for Quote (RFQ), or any combination thereof. Humboldt State University (Humboldt State University) provides the following descriptions of each:

- A **Request for Information (RFI)** is used when you think you know what you want but need more information from the vendors. It will typically be followed by an RFQ or RFP.
- A **Request for Quote (RFQ)** is commonly used when you know what you want but need information on how vendors would meet your requirements and/or how much it will cost.
- A **Request for Proposal (RFP)** is used when you know you have a problem but don't know how you want to solve it. This is the most formal of the “Request for” processes and has strict procurement rules for content, timeline and vendor responses.

Templates and examples of e-filing RFPs can be found online, such as Washington’s King County Department of Judicial Administration’s RFP. (King County Department of Judicial Administration) Formalizing information request formats will ensure all potential vendors are responding to a consistent set of criteria.

Vendor selection.

Once vendor offerings are identified, a decision must be made on which represents the best option. Appointing a selection committee for this purpose is a method that can ensure the process is viewed as transparent and objective. The role of the committee is to reach a consensus decision by using “unbiased scoring based on logical evaluation criteria, and analysis and discussion of proposals received.” (Guth, 2013)

Stephen Guth recommends a committee size, of no less than 3 members and no more than 5, to ensure logistical requirements such as scheduling meetings are manageable. He notes that committee members should; have in-depth subject matter knowledge; have a stake in a positive outcome; be a decision maker empowered to act without approval; and have the necessary time to commit to the selection process. “The role of a Selection Committee member is to materially contribute to the competitive bidding process and to perform an unbiased, objective evaluation of vendor proposals.” (Guth, 2013) Placing vendor selection in the hands of a committee of this sort should create a sense of confidence in the process by interested parties.

Staff Readiness

Court culture.

“E-filing is not an end in-and-of-itself. It is simply a means to an end. Addressing the culture and business processes of all aspects of court operations is the most important issue to be addressed.” (Joint Technology Committee, 2013)

A court's culture is set by court leaders, system users, vendors, and external stakeholders. (Peay, 1997, p. 2) This discussion on culture will focus on court leaders, but it is implicit that this consideration applies to all of the above.

The central question is; what is the level of acceptance for change within a court, especially among primary stakeholders such as judges? Court leaders sometimes are resistant to change because of uncertainty about outcomes, a lack of understanding for its purpose, or limited knowledge about how to operate within the changed environment. Perhaps the only thing more challenging than changing an old habit, is facilitating the change in mindset that must precede it.

The University of Wisconsin-Milwaukee provides the following insights on why decision makers are resistant to change, and conversely what makes them more receptive to it:

People resist change:

- When the reason for the change is unclear. Ambiguity--whether it is about costs, equipment, jobs--can trigger negative reactions among users.
- When the proposed users have not been consulted about the change, and it is offered to them as an accomplished fact. People like to know what's going on, especially if their jobs may be affected. Informed workers tend to have higher levels of job satisfaction than uninformed workers.
- When the change threatens to modify established patterns of working relationships between people.
- When communication about the change--timetables, personnel, monies, etc.--has not been sufficient.
- When the benefits and rewards for making the change are not seen as adequate for the trouble involved.
- When the change threatens jobs, power or status in an organization.

(An unwilling user can always make an idea fail, no matter how good it is.)

Decision makers will be more responsive to change:

- If the information presented coincides with their current values, beliefs, and attitudes:
- If they perceive that the change will benefit them more than it will cost them:
- If the innovation requires marginal rather than major changes in their views or lives:
- If they have a demonstrated need for the innovation: and
- If the innovation is introduced gradually so that people can adjust to the resulting change. (The University of Wisconsin-Milwaukee , n.d.)

While there have always been decision makers and gatekeepers within court leadership who are looking towards progressive change, there have also always been those court leaders whose comfort levels rest firmly on stacks of paper. Some years ago those who were proponents of maintaining paper processes may have been the majority, however it seems that over time their numbers are diminishing. For example, in the whitepaper “E-filing in State Appellate Courts: An Updated Appraisal (Schanker & Gudas, 2010, p. 6) the authors indicate that appellate judges are becoming more receptive to e-filing because of the positive experiences and benefits that some of their colleagues have enjoyed. Also more receptivity has evolved because the judges are observing how technology is interwoven into both the personal and professional lives of court stakeholders in ways that benefit them. The experiences of others, in this instance, seem to have provided persuasive insights that helped move opinions. This encourages a belief that such observations, especially if accompanied by evidence-based information, can move even the most ardent paper centered court cultures away from their position.

To know how best to communicate about e-filing it is important to understand the culture of a court, and if necessary how to move that culture in a positive direction for an e-filing project to be sustainable. Evidence-based communication can be effective for this purpose; “It

features a willingness to put aside belief and conventional wisdom – the dangerous half-truths that many embrace – and replace them with an unrelenting commitment to gather the necessary facts to make more informed and intelligent decisions.” (Pfeffer & Sutton, 2006)

In the “High Performance Court Framework” published by The National Center for State Courts (NCSC), it states that “Court culture is the way judges and managers believe work currently gets done, and the way they would like to see it get done in the future. Court culture acts as a filter between principles and practices.” (Ostrom & Hanson, 2010)

Staff training.

As previously discussed, stakeholders including court personnel can be resistant to change when they are not fully aware of how to operate in the context of the change, or are unaware of how it impacts their personal universe. Effective training can help mitigate this concern.

Line staff training.

E-filing will have the most immediate effect on court personnel and their business processes. Without providing them with a good understanding of the system purposes, along with the required skill sets and tools to operate within the new process environment, they will struggle. Consequently the entire implementation will be at significant risk. “It makes little sense to invest thousands or millions of dollars in new system and fail to provide adequate instruction to baseline system users.” (McMillan, Walker, & Webster, 1998)

One of the National Association for Court Management’s (NACM) core competencies is Education, Training, and Development. It highlights that for training to be effective and meet

the challenge of a changed environment, it must be; continuous and creative; inclusive; accessible and tailored; well managed; and evaluated. (National Association for Court Management, 2003)

Project and court leaders will be responsible for ensuring that a training initiative is planned and executed. They should want to create a culture of learning that will result in creating e-filing experts across the spectrum of employees involved in the effort. A structured program for all court personnel involved in e-filing could incorporate components which will engage different learning styles, and should increase the program's effectiveness. As an example a plan could include methods for classroom training, quick reference materials, online learning tutorials, and video presentations, as well as testing for staff to assess proficiency. It should be targeted based on the audience and type of user. (Prochniewski, 2014)

First it will be necessary to define the essential competencies required for personnel to become proficient in e-filing procedures. Some courts task a full or part time training program coordinator for this purpose. This role can also be responsible for managing the overall training program. (Prochniewski, 2014)

A highly skilled staff will not only be positioned to perform e-filing processes expertly, they will also be better prepared to serve in support roles for end users, who will need assistance once the e-filing portal is opened. Effective staff training will ultimately be necessary if the project is to be sustainable, and a court is to realize positive benefit.

Judge training.

For electronic filing to be viable, judges must understand and support the concept.

“Getting judges comfortable will [sic] using electronic records will be the only way to see the full benefits of e-filing. To do otherwise will only increase costs and increase staff workload.” (Joint Technology Committee, 2013)

Judges must be proficient in e-filing procedures that intersect with their very prominent role in judicial functions. However, judges are unlikely to be able to participate directly in a training program customized for clerk and court line staff. Their schedules and specific training needs will vary from most other court personnel. Their interaction with case documents and information is different, in that they are making judicial determinations which carry the force of law. Considering that; for judges to feel comfortable with e-filing, they must have high confidence that any action they take is proper. A training program to help achieve this end can be planned in the same manner as for line staff, but should be customized for judges’ specific needs.

As with most adult learners, judges may want to have some control over when and where their learning takes place. Some form of a self-driven e-filing learning option could be integrated into a larger more structured plan. (Prochniewski, 2014) Judges may find this approach, as well as judge only instruction sessions, more appealing than participating in general staff training. Some judges may be reluctant to show their skill levels in general sessions if they are not technologically proficient.

Technical Readiness

Technology infrastructure.

In addition to gaining an understanding of the implementation processes, and a sense of staff project readiness, it will be important to assess the existing technology infrastructure for the court and clerk. This will provide a sense of whether there is a stable project launch platform before an e-filing initiative is begun.

Most courts with an in-house IT department have very capable members on that team who understand how to integrate systems, deploy software applications, network hardware, manage a database, and interface with external systems. However, unless they have directly been involved in an e-filing initiative there are likely many aspects of such an effort with which they are unfamiliar. Therefore it is vital for them to become aware of the resources that are available to them which address various considerations relating to these technology questions.

In Ohio for example, the Supreme Court of Ohio (SCO) in 2008 published the “Authentication Standards for the Use of Electronic Signature in Electronic Documents” where it identifies five (5) methods for authenticating electronic signatures in Ohio. (Gates, Nuzum, Byers, & Bessey, 2008) While signatures in a paper environment are generally viewed as having been achieved by putting pen to paper, in an electronic environment this is not possible. This serves as an example of how a resource document can help a technology specialist optimize project development time. Knowing of resource documents such as this

would help avoid spending countless hours working to define and resolve technology questions where the answers might already be available.

There are tools available for conducting a court technology infrastructure assessment that have been developed by experts and specialists in the area. Tyler Technologies, an e-courts service provider, designed an “E-Court Maturity Model”, which essentially is a matrix that cross- references different stages or levels of technology development with various stakeholders in the court system, to help determine where they are in terms of technology processes. The levels of development range from a strictly “manual” paper-driven operation, to an “advanced electronic” status where automation and digital records are fully integrated. A court could also use the “eCourts Maturity Model” (Roper & Basto, 2012) which not only addresses where a court is in relation to e-filing, but also how advanced they want their e-filing solution to be. It discusses the characteristics of four (4) e-filing technology levels, and highlights varying advantages and disadvantages of each.

Another tool is a survey entitled “How “E” Will We Be?”. (Straub, 2014) This survey consists of 25 questions, each asking if a particular technology or asset is already in place, and if not in place the likelihood of it occurring. It also asks if a technology element or concept is likely to be integrated into a court’s systems, then within what timeframe will it occur.

A thorough technology infrastructure assessment would help determine some of the categories where resources could be sought by a court’s technology specialist to help in determining what e-filing related technology questions should be asked, as well as what answers are needed. Some of the areas could relate to system security, registration protocols,

workflow, e-filing architecture, or document and data management. (McMillan & Edwards & Webster 1998) Of particular consideration around technology infrastructure is security.

Security.

As time and cost saving technologies continue to advance, so too does the opportunity for illegal or disruptive conduct. Examples are plentiful where banks, retailers, web based companies, and government agencies are victims of devastating cyber-attacks. (McGregor, 2014) Whether it is for purposes of information or identity theft, or just simply to create a chaotic disruption of service, there are security breach specialists, or hackers prepared to take full advantage where they can identify weaknesses in security protocols. Along with external threats, there is also the potential for internal security breaches. It should be noted that security concerns are also present in paper processes, and that one of the intended benefits of e-filing is enhanced court records security. (McMillan, Walker, & Webster, 1998, p. 17)

E-filing promises to provide great benefit in that it can offer efficiencies with regard to moving and storing the record electronically. To ensure these benefits are realized, the security of the system must be prioritized. “Internal and external security of the entire network is an absolute necessity with or without e-filing but when allowing e-filing and exchanging data with justice partners and others such as social services, the processing of the data and documents coming into the network from the EFSP (Electronic Filing Service Provider) requires special attention.” (Joint Technology Committee, 2013, p. 8)

“A Guidebook for Electronic Court Filing” (McMillan & Walker & Webster, 1998) discusses certain infrastructure security features that should be considered when adopting an

e-filing system. An “electronic in-basket” for example would allow e-filing parties to submit their documents without them also having access to the courts internal network. The use of firewalls and transaction logging systems are also discussed. System security should also consider internal procedures such as user access permissions and authentication measures to guard against unauthorized access, and the removal or alteration of official records.

Ernie Friesen lists fifth among the eight purposes of courts the responsibility to “Make a formal record of legal status”. (Friesen, 2014) From this we garner that the court and clerk of court have a shared responsibility to take the most stringent precautions possible to ensure the security and integrity of the record. Once a formal record is made it must be kept as prescribed by laws governing records retention. A secure e-filing system is necessary for this purpose. Additionally, if users and stakeholders have confidence that well planned security measures are in place, it is more likely they will use an e-filing system, and become ambassadors in support of it.

Potential Barriers to Overcome

Research suggests that in most instances the reasons that some court leaders are reluctant to pursue e-filing come under three main categories. They are budgetary concerns, human resource considerations, and technological barriers.

While there is strong support for e-filing, many courts have not taken advantage of such an initiative. Three of the most common reasons for not yet implementing e-filing are (1) concern over budgets, (2) staffing requirements, and (3) technology limitations. Any **viable** e-filing solution must address these issues in order to be successful. (The National Judicial College, p. 3)

These barriers could create reluctance to pursue e-filing, and could also limit the success of e-filing, once a court has decided on pursuing it as a goal. (National Center for State Courts, 2012, pp. R1-10) The NACM “information technology management” competency curriculum guidelines highlight many of the necessary skillsets that would be needed to address the three challenge areas noted above. They include the knowledge of the importance and nature of court records; the ability to collaborate to obtain sufficient technology funding; the ability to assess resource requirements including those relating to personnel, and the knowledge of both the capacities and limitations of information technology. (NACM, 2003)

Though technology is noted as a primary consideration, project failures are most often not attributable to the technologies themselves, but rather are seen as failures in process or practice during project planning and/or implementation. (Towns, 2013) The technologies available for a successful e-filing initiative are proven, and that proof can best be viewed through the experiences of jurisdictions with sustained solutions, and their strong belief in the concept. “Courts that have already implemented e-filing strongly believe that the use of e-filing will increase.” (The National Judicial College)

There is no doubt that there are innumerable technology factors and variables relating to e-filing. Many of them are noted in Appendix I. Since, as noted, technology typically does not cause project failures, the remainder of this section will focus on other barriers to e-filing viability such as funding, inadequate local rules, and accommodating self-represented litigants.

Funding.

Evaluating the funding dynamic of a court is imperative for understanding what is possible in terms of integrating and/or upgrading technologies and processes. For this project the funding dynamic is twofold and pertains first to estimating what funding is needed for an e-filing project, and secondly, having a strategy for obtaining those budget resources.

In “A Guidebook for Electronic Court Filing” (McMillan, Walker, & Webster, 1998, p. 169) we are provided with an e-filing budget planning worksheet that could be used as a budgeting tool. The worksheet is designed as a guide for considering a number of variables which may be included in determining e-filing project costs. It is not intended as a finite worksheet, but should be seen as a “starting point” for budget planning. Once there is a project cost estimate a court can make a decision on what e-filing solutions might be practical for their purposes.

There are e-filing solutions for example that offer an opportunity to pass the cost of the initiative along to the filing parties without requiring a front end capital outlay of taxpayer dollars. Mainly this is achieved by charging a fee to the e-filing system users. This could be in the form of a convenience fee on each transaction, a subscription fee, or perhaps an increase in the court’s standard filing fees. There are reasons some courts will choose not to take the fee- based approach. Counted among them is the concern around access to justice in that some users may not be positioned financially to take advantage of such a system. There are courts that address this by providing exemptions to certain users, and also by offering an option for

others to petition the court for a waiver of user fees if they might find this to be a barrier.

(Joint Technology Committee, 2013)

Additionally there may be resistance from attorneys and others to a fee per transaction approach in that they might see this as adding excessive cost to the process. With any fee-based solution it will be important to understand the spectrum of cost/benefit impact for each type of end user in order to make the case for the value of the system from their perspective.

(Clark County District Court) If the decision is to employ a fee based solution, it is necessary to determine how the fees will be collected. Some jurisdictions may collect the fees themselves, while others may use a third party vendor for processing. The choice made here is important in that it involves ensuring transactions are secure, accurate, and timely in their processing. “In fact, addressing wrongly collected fees is always time consuming and frustrating for both the clerks and the financial people, so avoiding fee collection errors is important.” (Joint Technology Committee, 2013, p. 4)

Because of these and other factors some courts might elect to pursue either a completely taxpayer funded model where there is no cost to the system users, or a hybrid approach where taxpayer dollars fund much of the front-end capital outlay, and a fee structure is used to sustain the system into the future. (Joint Technology Committee, 2013, p. 3) With that in mind the following applies to those who have chosen to include a taxpayer-funded component in their approach.

There are various paths that can be taken to reach an electronic document filing solution. A court could achieve e-filing by working with an electronic filing service provider

(EFSP), they could purchase licensing to use an existing e-filing product, or they could build their own e-filing solution. (Joint Technology Committee, 2013, p. 3) Which course a jurisdiction chooses will likely depend partly on factors such as the state of their technology infrastructure, or what expertise is available to them, particularly in-house. However the factor most likely to influence their decision will be what funding might be available for technology project purposes.

When considering the question of funding for an e-filing project it should not only be from a perspective of what is affordable, but also from the view that e-filing can have a positive impact on fiscal health and operational effectiveness. The ability for a court to convey to a funding authority the message that providing funds for e-filing should be viewed as an investment rather than an unrecoverable capital expenditure will be key to securing the necessary budget support.

In “Funding Justice: Strategies and Messages for Restoring Court Funding” (National Center for State Courts, 2012) we find a structured approach that can be used not only for securing general funds regardless of economic cycles, but can also be tailored for the purpose of securing funds for electronic filing. It includes strategies that are suggested as being effective for communicating about funding to both the public as well as budget policymakers. It reminds us that positive budget outcomes require knowing the process, building relationships, making reasonable requests, and delivering a well-designed message.

Local Rules.

As with any initiative where participants in a process, program, or operation have a shared interest in working in a functional and productive manner, everyone must understand what rules apply. There are a number of reasons to establish rules for e-filing, such as to authorize electronic filing service, or to clearly specify the procedural mechanics. (Olson, Edwards, & Monty, 2003, p. 5) The rules for example will help define what is considered electronic filing for a particular jurisdiction. Would an e-mailed document be considered e-filed? If not defined in the rules, attorneys and/or self-represented litigants might assume this to be so. There will likely be a need for a rule to define when a document has been filed with the court. The Supreme Court of Ohio (SCO) for example published a new rule for its recently launched e-filing program which established that “documents received after 5 p.m. Eastern Standard Time will not be considered for filing until the next business day.” (The Supreme Court of Ohio, 2015) This and other similar rules must be considered by any jurisdiction based on its unique circumstance. For example, the FCMC Clerk being a 24-hour operation, may view the timing for when a document is considered filed differently than the SCO. The Clerk could ask the Court to adopt a later cutoff for same-day filing if it believes those documents can be processed in a timely manner based on the availability of personnel.

One of the more important rule considerations is whether to make e-filing mandatory. This is a vital question in that without a mandatory requirement there is a likelihood that a court could have, after implementing e-filing, dual systems to manage; both the electronic and

paper systems. While dual systems management will be necessary when e-filing begins, extending parallel operations beyond a reasonable period of time will offset the efficiencies promised by the technology. “A mixed system may be less efficient than a paper one. Only when the bulk of the materials received by the court are in digital form will the courts realize the full benefits of the technology.” (McMillan, Walker, & Webster, 1998)

The Supreme Court of Ohio (SCO) in its “Standards for Electronic Filing Processes” states the following:

Court rules may mandate use of an electronic filing process if the court provides a free electronic filing process or a mechanism for waiving electronic filing fees in appropriate circumstances, the court allows for exceptions needed to ensure access to justice for indigent, disabled or self-represented litigants, the court provides adequate advance notice of the mandatory participation requirement, and the court (or its representative) provides training for filers in the use of the electronic filing process. (The Supreme Court of Ohio, 2006)

There are myriad aspects of e-filing that should be considered when a court is evaluating what rules should be implemented, including standards for document format, the nature of links within documents, acceptance of filing payments, the use of unique identifiers, failure of electronic processes, consideration of the special needs of e-filers, and scores of other points of note. (The Supreme Court of Ohio, 2006) Prior to launching an e-filing initiative, each court must be prepared to anticipate and adopt rules that provide clarity for users and stakeholders, to help minimize confusion. One group in particular that must be considered is self-represented litigants. Rules to address whether they will be allowed to e-file, and how they will e-file, will need the attention of a court.

Self-Represented Litigants (SRLs).

Failing to provide an e-filing option for SRLs results in clerk staff spending significant time scanning documents into a document management system. Since one in four households do not use the internet, and some SRLs will be more comfortable filing paper than navigating a web portal, some in-courthouse scanning for SRLs will always be necessary. (File & Ryan, 2014) However that requirement could increase four-fold if SRLs are barred from e-filing. E-filing is intended as a means for getting documents into a court's document management system, and the documents associated data into the case management system, with minimal manual intervention. Scanning large volumes of documents runs counter to that purpose.

Some of the methods that could be used to accommodate SRLs include dynamic guided interview forms, described as similar to tax preparation software; providing access terminals at clerks' offices; self-help centers in law libraries or other strategic locations; and offering walk up clerk assisted filing stations in clerk's offices. (Joint Technology Committee, 2013)

Providing SRLs with the option to e-file via a web portal should help minimize the necessity for in-house scanning. This does carry with it certain considerations, such as the need to create SRL online identities, creating viable instructions, as well as offering follow-on support to assist them, and respond quickly to their questions. (Joint Technology Committee, 2013) To optimize this option and to encourage its use, SRLs will require education on how e-filing works, as well as how it benefits them in ways such as saving time, travel and parking costs, and the ability to e-file 24 hours a day.

If e-filing is made available to SRLs a court must determine if it will be voluntary for them, or mandatory. This question pertains to access to justice. If e-filing were to be made mandatory with no other options for SRLs who may not have the resources to participate, then a barrier to access has been created, which runs counter to the principle of equal justice under law. “Few e-filing systems currently allow self-represented individuals to e-file. Those that do allow it do not require it.” (Joint Technology Committee, 2013)

One of the basic objectives of e-filing is to eliminate paper, as well as the associated costs and inefficiencies that paper processes create. Providing SRLs with e-filing options could help achieve the goal of a court becoming paperless. “Self-Represented Litigants must ultimately be accommodated.” (Joint Technology Committee, 2013)

Adherence to Judicial Principles.

To minimize the possibility that a given technology solution might adversely affect judicial access, The Supreme Court of Washington State took the preemptive step in 2004 of establishing “Access to Justice Technology Principles” (The Supreme Court of Washington, 2004) These principles were developed by the state’s “Access to Justice Board”. In its order adopting the principles the Supreme Court of Washington states that the board was established to respond to the “unmet legal needs of low- and moderate-income people and others who suffer disparate access barriers or are otherwise vulnerable, and the need for leadership and effective coordination of civil equal justice efforts” (The Supreme Court of Washington, 2004, p. 1) The first of the adopted principles, “Requirement of Access to Justice” states in part; “Introduction of technology or changes in the use of technology must not reduce access

or participation and, whenever possible, shall advance such access and participation.” (The Supreme Court of Washington, 2004, p. 10)

The example of Washington State reminds us that the decision to integrate technologies such as e-filing must be assessed not only with business processes in mind, but also the fundamental purposes of the judiciary. The viability of any court technology solution depends on whether the stewards of the judicial system ensure that practicality does not diverge from principle.

Those in pursuit of technology solutions within the judicial system should be mindful of how the technology may affect the courts’ ability to administer justice. If a technology creates internal process efficiencies, but at the same time builds barriers for segments of the community, it may not be viable unless those barriers are immediately and appropriately remedied. If in our adversarial justice system a technology is perceived as providing an inherent advantage to one side over the other, then trust and confidence in the system is likely at risk. It should be a goal of any court implementing a new technology to be mindful of judicial principles. This is to ensure that it will be perceived as a court that maintains “trust and confidence in the integrity of the institution.” (Sherman, 2001) It will be important once an e-filing solution is implemented that it is continuously monitored and evaluated to determine whether justice is better served, or whether in some way justice unintentionally is impeded. Even if a technology is only perceived to create questions of fairness, it will have contrasted itself with the second of the ‘purposes of courts’, which is to “Appear to do justice in individual cases”. (Friesen, 2014)

Methods

Research for this project was conducted using the review of literature produced by experts and other researchers, interviews of those experienced in implementing e-filing solutions, and surveys of Franklin County Municipal Court and Clerk technology and line staff. Throughout this document when the term “court” is used it will be intended to refer to the Court and Clerk of Court collectively. The literature review involves an assessment of other research methods, data samples, conclusions, and recommendations as they relate to e-filing. The methods described herein were used to research these primary project questions:

1. What implementation methodologies should be used to ensure the viability of e-filing?
2. Is the FCMC staff ready to participate in an electronic filing implementation?
3. What is the readiness level of the technology infrastructure at the Franklin County Municipal Court?
4. What are potential barriers to implementing a viable e-filing solution?

Effective E-filing Implementation Methodologies

Assessing effective e-filing implementation processes involved a series of interviews, as well as the literature review. The interviews were conducted with the Hamilton County Court, the Montgomery County Common Pleas Court, the Franklin County Common Pleas Court, the Rocky River Municipal Court, and the Lake County Common Pleas Court. These interviews were pre-arranged and conducted in person when possible, or by telephone

otherwise. The questions were provided to the interviewee a minimum of two weeks in advance. The interview participants were either the project lead for the initiative within the respective courts, or the project's most senior authority. The interview questionnaire consists of fifteen (15) questions as follows:

1. How did you estimate the cost of e-filing for you court?
2. What funding model did your court use to cover the costs of E-filing?
3. How would you describe your courts level of readiness preceding your e-filing project, and how did you make that determination?
4. What was your vendor selection process?
5. What were the most significant barriers that had to be overcome before implementing an e-filing solution?
6. What were the most significant barriers that had to be overcome during implementation of your e-filing solution?
7. What were the most significant challenges that you encountered after implementation of your e-filing solution?
8. Is e-filing mandatory or optional for users; and why did you make that decision?
9. Did e-filing measurably improve effectiveness and productivity?
10. What benefits did you anticipate e-filing would provide?
11. What benefits did you actually realize?
12. What critical technology challenges did you encounter?
13. What were your solutions to these challenges?
14. How did you educate your staff and users?
15. What would you do differently if you could?

The information gained from the interview responses was used to identify what these court representatives felt were the most important considerations for the FCMC to consider in its own e-filing project, as well as how they had addressed these items. They were asked to respond to questions based on their jurisdiction's experiences with e-filing. The interviews were planned for the months of September and October of 2014 in order to avoid conflicting with peak summer vacation schedules and busy holiday schedules. Two interviews had to be

rescheduled outside this window due to mutual operational conflicts, but they were rescheduled and successfully completed in mid-November.

The literature review ran concurrently with the interviews and interview preparation process, and continued after the interviews were complete. Since this project's focus was on viable court e-filing solutions, it began with the review of articles, reports, web based resources, and educational materials by court professionals where e-filing was the primary subject matter. As the interviews proceeded, further literature was referenced by interview respondents. Additional literature resources related to project implementation methodologies, personnel training, and technology projects.

To establish baseline measures for comparing with post-implementation metrics, two areas were analyzed. First, the number of staff currently assigned to data entry of new case filings was documented. This was done by conducting a basic FCMC Clerk of Court staff assignment review. There are three departments with data entry responsibilities. Within those departments are a total of 48 deputy clerks who participate in new case data entry. Of the 48, 21 full time employees are assigned to full-time data entry. Of those, seven are assigned to the Civil Department. These seven positions were chosen as the baseline personnel resource measure, because the Civil Department has been identified as the first area where e-filing will be implemented. They represent 15 percent of the total data entry group, and 33 percent of the FTE group.

To verify the effect that e-filing will have on the allocation of data entry personnel resources, the number of positions performing this function will be measured six months and one year after e-filing implementation. The new case data entry function was chosen because it represents the most direct correlation to a primary purpose of an e-filing solution, which is to facilitate the acceptance of new case filings and their subsequent entry into a case management system. The second baseline assessment was of case flow metrics, using the National Center for State Courts CourTools performance measures of “Clearance Rate”, “Time to Disposition”, and “Active Pending Caseload”. (National Center for State Courts) There are numerous other measures that could be used by a court for this purpose, but staff resources and CourTools case flow measures were chosen because they relate to two of the most vital benefits of e-filing for a court: the cases they manage and the people that manage them.

Staff Readiness

To evaluate the level of readiness for an e-filing solution by the FCMC staff, the following survey was adapted and expanded from the ICM Project paper “Taming The Paper Tiger” by Sonya Kraski. (Kraski, Taming The Paper Tiger", 2010, p. 26)

1. Are you familiar with the concept of electronic filing (e-filing)?
2. Are you familiar with the intended benefits an e-filing solution could provide?
3. Since the Supreme Court of Ohio permits local rules requiring documents to be filed electronically, should E-filing be mandatory for attorneys once implemented?
4. Should E-filing for pro-se or self-represented litigants be optional?

5. Do you believe you would prefer working with electronic files more so than paper files?
6. Have you ever personally filed documents electronically for your own purposes outside of work?
7. Do you believe documents electronically filed should be considered original documents and therefore the official record of the court?
8. Do you generally prefer printing a document to read it rather than reading it on a computer screen?
9. Do you believe that e-filing will create disadvantages for those who are not comfortable with technology?
10. Do you believe implementing e-filing and providing training for users will result in a court system better able to administer individual justice in individual cases?

The information gained from the employee survey was used to determine their levels of comfort with e-filing and to ascertain where training and familiarization efforts could be targeted to address any gaps in staff knowledge and understanding.

These survey questions were provided to staff as a part of an ongoing in-house general training initiative in which all Deputy Clerks must participate. There were 29 full-time employees in the target survey group. Of that number four were unavailable due to extended disability. Twenty-five surveys were distributed to the available employees. Of that number 24 surveys were returned, a 96 percent response rate. The survey not returned belonged to the one group member who had participated in an e-filing effort in another jurisdiction who already is considered a champion for e-filing. (Survey results can be found in Appendix E)

Technical Readiness

A technology readiness assessment was taken by the Franklin County Municipal Court and Clerk technology staff to help determine the level of technology infrastructure currently in

place. There are nine technology staff members who were surveyed consisting of the Director of Information Technology, the Deputy Director of Information Technology, the Network Systems Administrator, the Database Administrator, the Case Management System Specialist, the Webmaster, and three IT technicians.

Three primary tools were employed in the technology assessment. Tyler Technologies' "E-Court Maturity Model" matrix to cross reference the courts technology development progress, the "eCourts Maturity Model" (Roper & Basto, 2012) which not only addresses where a court is in relation to e-filing, but also how advanced they want an e-filing solution to be, and a survey entitled "How "E" Will We Be?" (Straub, 2014) to determine what technologies are in place, or will be in place at a future date. These tools were provided to the nine technology specialists with a two-week return window. They were instructed to individually complete the survey and then, based on their responses, to use the maturity model to determine where they believed the court's current technology development fell on the matrix. Of the nine surveys and maturity models distributed, all were returned within two weeks for 100 percent participation (The results of the technology survey component can be found in Appendix F).

Potential Barriers to Implementation

Barriers to e-filing implementation were identified using the same interview and literature methods as used for identifying effective implementation processes. As barriers were

identified during the interviews, additional literature was reviewed to ascertain more information on implementation processes that could counter the barriers.

Findings

E-filing is an effective process that impacts all stakeholders in the court system and when successfully implemented will have a positive impact on all of a court's justice partners. To ensure that success, it must be developed using proven project methods; a court's staff must understand the principles and purpose of e-filing; sufficient technology infrastructure must be in place; plans to overcome potential barriers are required; and a court should understand its present case flow efficiencies in order to evaluate e-filing's effectiveness.

The findings for this project are organized to relate to its primary research questions. Every finding is related to a research questions as numbered 1 thru 4, and will have an added sequential number identifier attached to the question number. For example the first and second findings relating to research question number one will be numbered 1.1 and 1.2 respectively. This pattern will apply through all findings, as well as through the conclusions and recommendations. For example the first conclusion and subsequent recommendation for finding 1.1 will be numbered conclusion 1.1.1 and recommendation 1.1.1.1 respectively. With these considerations this project has made the following findings.

Effective E-filing Methodologies

1.1: E-filing results in appreciable positive benefits for stakeholders if implemented using effective project implementation methodologies.

All courts as well as the vendor that were interviewed reported numerous positive benefits achieved by their e-filing solutions, including:

1. Reduction of staffing through attrition,
2. The ability to re-task those normally handling paper documents and files to other assignments based on operational priorities,
3. Significant reduction in imaging/scanning requirements,
4. Simultaneous case record access for multiple stakeholders such as judges, litigants, attorneys, clerk and court personnel,
5. The ability to effect electronic service of orders and notices,
6. Automated docketing of initial complaints and pleadings,
7. Ability for judges to more easily review proposed orders and either accept, reject, or modify them,
8. Ability for judges to expedite signing sessions with electronic signatures,
9. Provides judges with the ability to personally better manage their case load,
10. Ability for attorneys and others to file 24 hours a day,
11. Helps reduce attorney courier expenditures,
12. Reduced storage space requirements and associated costs,
13. Allows self-represented litigants and attorneys the ability to avoid travel costs such as for fuel, parking and,
14. Can reduce the need for parties to take time away from work or their offices to file with the court.

To achieve e-filing benefits, implementation methodologies such as eGovernance, and effective change control are required. These implementation methodologies also must be coordinated and managed effectively to ensure that they are moving the project toward planned outcomes.

1.2 Balancing the management of operational demands and project demands will be necessary to effectively execute e-filing.

Interviewed courts' implementation experiences align with what project management professionals have expressed as a common occurrence with major project initiatives. They pointed out that in court operations each day, documents are filed, in-court proceedings go on, phone calls must be answered, reports need to be generated, and other operational demands and projects require the attention of court personnel. Their observations highlight that an e-filing implementation process must be planned for and achieved with the understanding that none of these activities will cease. Finding the appropriate balance to operate effectively while successfully implementing e-filing was a challenge of note.

1.3 Organizations that capture pre-project metrics to compare against post-implementation results can better evaluate the effectiveness of a project.

Literature research showed that project effectiveness assessments that are limited to post-implementation measurements, without having pre-implementation data to compare them to, can create an incomplete picture of the impact the project has on outcomes. Once project goals are established, it must be determined how the goals can be measured, and when the measurements are to occur.

Staff Readiness

2.1: FCMC staff are not fully ready for e-filing and will require training on e-filing competencies to enhance their ability to provide timely and effective user support.

Survey responses show that 50 percent of the staff prefers printing documents rather than reviewing them on computer screens. Additionally up to 38 percent responded that they are unfamiliar with the concept or intended benefits of e-filing. Sixty-three percent have

never filed a document for their own personal purposes. Interestingly a large majority (83 percent vs. 17 percent) responded that they felt e-filing would improve the court's ability to administer justice. This training will enhance the staff's ability to effectively manage end user support functions, such as for elevated phone traffic, which increased by as much as 40 percent in some courts interviewed for this project.

2.2: Courts should begin imaging documents before they start e-filing to help familiarize court staff with electronic documents.

The vendor, based on their experiences in jurisdictions implementing e-filing, stated that the acceptance of working with electronic documents is not universal. E-filing requires moving away from paper documents to the practice of reviewing and routing documents electronically. For the purpose of helping staff members become more accustomed to working with electronic documents, the vendor indicated that imaging can prove very helpful. Additionally if a thorough imaging effort is undertaken before implementing e-filing, the court can avoid a two-front effort of both accepting electronic documents while also dedicating staff to scanning efforts. They indicated that those who advance their imaging efforts before launching e-filing also see less impact of dual paper and electronic systems.

2.3: After e-filing implementation, some courts' judges have viewed e-filing as a solution that benefited the clerk, filing parties, and other stakeholders, but that it did not in any meaningful way improve work for them in their courtrooms or in chambers.

Judges shared that while they could view electronic documents or apply electronic signatures, they still had to rely on more conventional means for research, reviewing their case related notes, or communicating information and instructions not intended to be a part of

case record. While most judges saw the overall benefit of e-filing to the judicial process, they were not energized around its impact on the bench.

Technical Readiness

3.1: The FCMC technology infrastructure supports some electronic records processing, but most processes continue to be paper based.

The IT staff of the Clerk of Court also provides support for the Municipal Court and is positioned with a view of the infrastructure for both. They were provided the ‘How “E” Will We Be’ survey and generally had consistent answers with regard to whether a particular eCourt concept could be achieved. There was 100 percent agreement on items they felt were already in place, but only two where opinions varied on if they would be achieved. The answers provided when reconciled against the Maturity Model lands the court on the “Some Electric” square of the grid.

3.2: The Franklin County Municipal Clerk of Court began imaging in 2006 and has scanned more than 50 million documents.

As storage space options had been exhausted, the incoming Clerk, Lori Tyack, launched an aggressive initiative to begin scanning all documents and records. This is an ongoing effort which initially began with all cases still within records retention requirements. At this time documents and records can be viewed by court and clerk staff with credentials to do so via a document management system. This aligns with the vendor suggestion that courts should begin imaging before implementing e-filing. There remain, however, some deputy clerks who will likely be involved in e-filing that do not have appropriate credentials to view images.

Potential Barriers to Be Overcome

4.1: Court culture change can be a significant implementation barrier.

When discussing a court's readiness to accept the change that comes with e-filing there was consensus among interviewees that there has been a significant shift towards receptivity to the concept. Even so, court change culture still was viewed as a consideration that required attention. Those with a more progressive culture felt it was still necessary to broaden the understanding of what e-filing would mean to the court. As an example they reported that some judges viewed it as a system that would only benefit the clerk and not the bench. Those who found more resistance notably expressed that because courts base many judicial determinations on legal precedent the same mindset manifests itself in relation to court operations, in that judges are looking backwards to see what has worked before. This they said helps create resistance to changing anything that is perceived historically to have provided adequate results.

4.2: Concerns over budget and funding are perceived as barriers by many courts.

Uncertainty around the affordability of an electronic filing system has proven to be one of the more daunting considerations when courts are evaluating if e-filing may be right for their operation. Many jurisdictions understand that e-filing may involve the acquisition of software applications, the expansion of a court's technology infrastructure, expending annual support and maintenance dollars, as well as other project related costs. Some view these expenses as prohibitive and therefore choose not to pursue electronic filing.

This may be because some courts are unaware that over time solutions have been designed that present a variety of options that could meet most courts budgetary circumstances. There are options such as licensing and support models, in-house build models, third party electronic filing service provider (EFSP) models, and fee-for-service models, to name a few. Which model best fits a particular jurisdiction will depend largely on that courts fiscal position.

4.3: Following implementation, many courts experience a significant increase in the volume of callers needing assistance with e-filing.

Interview responses revealed that in spite of extensive pre-launch training there was a significant increase in the requirement for telephone support. The callers were e-filers who either had questions about the process, needed resolution to problems they encountered, or just felt more comfortable having someone on the phone with them in case they encountered difficulty. They indicated that Clerk staff resources had to be allocated to facilitate a much more robust customer support / technical support effort than they had anticipated. Primarily the callers were attorneys who had a lack of confidence that they were e-filing properly. Even though each interview participant had developed an online user's guide, they said there was a reluctance by end users to review the guide, and that they preferred calling instead. Notably they indicated that this trend has continued even in those courts that have accepted e-filings for several years. Each indicated that the overall efficiency benefits from e-filing far exceeded the need for additional e-filing phone support.

4.4: Operating long-term in an environment with both paper and electronic documents negates many positive effects of e-filing.

According to interview responses regarding mandatory e-filing, there was consensus that this must absolutely be a requirement for attorneys. All experienced that when given the option to file paper, many filing parties would default to that option because they were more comfortable with that approach. They stated that operating a dual system where both paper and electronic documents had to be managed would offset most if not all of the intended benefits of e-filing. One of the main inefficiencies pertains to excessive printing requirements associated with managing paper, requiring the dedication of personnel resources for that effort, while also managing an e-filing solution. Effectively this eliminates at least some portion of the anticipated benefit of reduced staffing through attrition. Each jurisdiction initially made it optional for attorneys, but established a future date when it would become mandatory. Dual systems management they described as actually resulting in more work at the outset of their e-filing efforts, but that this was factored into their planning until e-filing became mandatory. They stated that only after making e-filing mandatory for attorneys did they experience the anticipated benefits for the court, clerk, and the attorneys.

4.5: Many Self Represented Litigants will not have the necessary technology resources and/or computer based skillsets required by an e-filing system.

According to a survey published by the U.S. Census, as many as one out of four households in the United States are not connected to the internet. Some who are connected may not have had the experience of working with web based interactive services. These considerations represent a fundamental challenge for courts as they move toward establishing electronic records work processes. Questions on how access barriers can be addressed must

be a priority if concepts such as e-filing are to be successful. It is important to consider that if most documents are electronically filed, then the time efficiencies created would better position clerks to serve in a support role for self-represented litigants who may need to bring paper in for filing.

Conclusions and Recommendations

Research for this project shows that the debate over whether e-filing can offer significant benefits such as cost savings, improved efficiencies, enhanced access and more is settled. It has shown that viability of an e-filing system requires a court to ensure that they use proper project methodologies, that its staff is properly trained and educated on e-filing, that their technology systems are sufficiently structured, and that they prepare to overcome potential barriers.

Effective E-filing Implementation

Conclusion 1.1.1: Defining how an e-filing project will be managed is inextricably linked to a viable outcome.

Effective project execution will ensure stakeholder engagement, nominal communication, and task alignment. Some of the benefits are that it:

- Provides strategic direction, management controls and accountability
- Provides assurances to elected officials about project decision making and management
- Gives structured roles to stakeholders
- Results in an audit trail of key decisions

This will engender confidence from e-filing stakeholders that the FCMC is approaching the initiative methodically and thoughtfully with an absolute focus on making certain that it succeeds. With this approach the FCMC can create results that will help it continue to build a reputation in both the judicial and general community as a court that cares to do what is necessary for the system to work best for the citizenry.

Recommendation 1.1.1.1: Use a proven eGovernance Model for an e-filing project.

Effective eGovernance will ensure everyone involved in the initiative has a prescribed role, and understands how their role should relate to and interact with other persons or groups, making it possible for continuity of effort to be achieved. E-governance can be described as the process intended to provide effective project oversight, communication, control, and accountability. It establishes lines of authority, and its structure presides over the project management effort. Project management pertains more to the actual methods, tools, and applied skillsets used in the implementation of a project and is intended to be used to achieve the outcomes as directed by the eGovernance authority. The term eGovernance is adapted from basic word governance, to distinguish it as a technology related governance effort.

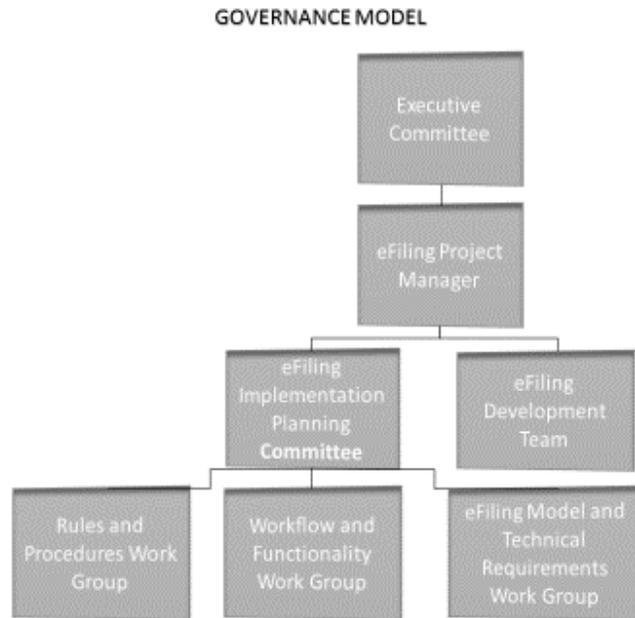
Recommendation 1.1.1.2: The e-governance model should include an executive committee, a project manager, an e-filing Implementation Planning Committee, an E-filing Development Committee, a Rules and Procedures Workgroup, a Workflow and Functionality Workgroup, and an E-Filing Model and Technical Requirements Workgroup.

The Executive Committee will be the presiding authority for the project and is responsible for setting policy and serves as a collective decision-making body. It should consist of the court's Administrative Judge, Clerk of Court, Technology Committee Chairperson, the Court Administrator, and the Chief Deputy Clerk.

The Project Manager reports to the Executive Committee and provides leadership for all other committees and subcommittees. This position coordinates all project elements, facilitates effective communication and is responsible for ensuring all committees and participants stay on task.

The e-filing Implementation Planning Committee will recommend the scope and goals of the e-filing initiative as well as the e-filing business model for the court. It should include representatives from the court, clerk of court, and the local bar. The Implementation Planning Committee should also have three subcommittees that report to it consisting of a Rules and Procedures workgroup, a Workflow and Functionality workgroup, and an e-Filing Model and Technical Requirements work group. These subcommittees should consist of both court and clerk experts in these respective areas of responsibility.

The Development Committee will be responsible for the e-filing system design, and developing procedures manuals, training programs, as well as creating plans for assessing the effectiveness of the initiative. It should include members from the court and clerk, and should also include Implementation Planning committee members to ensure continuity of effort between the two first-tier committees.



Conclusion 1.1.2: E-filing project management requires a significant time commitment by someone with knowledge and expertise in project implementation.

No one person can implement an electronic filing solution on their own. However one well-qualified person can bring an organized structure to the effort. There is an enormous number of variables and tasks which are to be considered and performed. It will involve several stakeholders with different backgrounds, experiences, and perspectives who will be required to effectively communicate, collaborate and cooperate. Creating an environment where this occurs is essential if an e-filing initiative is to meet its intended purpose and prove sustainable. A project manager can reconcile competing operational and project priorities to ensure there is resolution when they conflict.

Recommendation 1.1.2.1: Appoint an e-filing Project Manager.

For e-filing to succeed FCMC must assign a full-time project manager. The size of the court and the clerk's office, the large volume of workflow processes, and the many stakeholders who must engage in the process demand that someone be focused on the execution of e-filing implementation plans. This person must carry the necessary authority to provide direction to all subordinate project committees and persons who are tasked with project participation. They should carry the necessary characteristics, knowledge, skills, and abilities necessary for effective project management (Sample Position Description found in Appendix B).

Recommendation 1.1.2.2: Recruit externally to find a qualified project manager.

There are two options for selecting a project manager. One is to look internally to see if there exists in the organization someone with the skillsets to serve in that capacity. Even if the expertise is there it must be determined if that person can be drawn away from their primary role or if he or she could serve in a dual capacity. If not, then an external search will be required.

Based on the significant daily operational responsibilities of those within the court and clerk's office who possess project management skillsets, they would be unable to effectively manage a project with the scope of an e-filing initiative while also functioning within their primary role. Therefore an external recruitment effort is needed to either backfill the position of an internal expert who could be promoted to the project manager role, or to fill the position by an external expert.

Conclusion 1.1.3: During project execution new information and issues will likely arise that require changes to the implementation plan.

With various internal and external stakeholders who might view some of the operational aspects of e-filing differently, the possibility for competing process change requests will be present throughout the implementation. Improperly managed change requests can have unintended consequences, such as project delays, or even project termination. An informal approach to managing these requests creates an environment where project cost and scope creep could occur. Conversely, if change requests resulting from new issues or information are subject to formalized due diligence, then both time and cost variables are less likely to be adversely affected by unanticipated outcomes.

Recommendation 1.1.3.1: Employ a formal change control process.

A formal change control process should be based on the following:

Guidelines for Those Proposing Changes that Impact the Electronic Filing Project

The guidelines below are designed to ensure good change controls and the best use of Court and Clerk’s office resources. They also ensure that change control mechanisms are in place so that all projects and suggested changes to the e-filing initiative are thoroughly vetted by all impacted parties and stakeholders.

1. Before proposing a change discuss with appropriate process experts to ask questions or gather information prior to the submitting a project change proposal.
2. Subsequently a brief written proposal of the proposed change (with *suggested* timeline) is prepared and submitted to the Project Manager.

The Project Manager will:

1. Review the proposal.
2. Set priorities based on project vs operational demands and needs.
3. Pull together internal stakeholders.
4. Create a Change Process (complete with estimated timelines for the project).
5. Invite external and impacted stakeholders to the table to discuss implementation of the proposed change.
6. Subsequently make a recommendation to the Executive Committee to accept or reject the proposed change.

7. Advise the submitting party whether the change is accepted.
8. If approved make necessary task assignments to appropriate project participants or committees to effect the change.

It is the intent of this protocol to assess change requests in a timely manner as available resources will allow. This will create a culture of change control and minimize the possibility that project and operational demands will be impacted negatively by proposed changes. The Project Manager reserves the authority to prioritize changes. Adherence to the above guidelines by all stakeholders will ensure best practices and outcomes occur when changes are requested.

Conclusion 1.2.1: To ensure E-filing viability, effective project management methods should be employed.

Project management requires that project related tasks are outlined, schedules are maintained, logistics are coordinated, assignments are allocated, and also that there is tracking of many other project related factors. For a court these efforts must be done while sustaining normal operational integrity, and while maintaining the pace required by daily work and caseloads. While e-mails, notepads, memos, and the like can be used as a part of project efforts, they will not provide the centralized means for those involved in an e-filing initiative to optimize the coordination of their project related work, while also continuing to manage their normal operational responsibilities.

Recommendation 1.2.1.1: Use project management tools to help plan, organize, and communicate around an e-filing effort.

There is a need for a structured approach to be taken in projects where there are a variety of components, participants, resources, and competing priorities. Therefore it is recommended that project management tools be integrated into any e-filing project to help maintain organization and accountability. Tools such as milestone checklists can help in assessing whether a project is on schedule; Gantt charts can show project participants where

there is interdependence of a set of activities; or flow charts can provide a picture of event sequencing and illustrate variable outcomes depending on choices made at a given point in the sequence.

These are a few of the tools that should be used for planning and implementation of e-filing. Additionally there are software applications that could be used for project management purposes. Costs for such software can range from no-cost for open source applications to thousands of dollars.

Conclusion 1.3.1: Pre-implementation data measurements that relate to e-filing project goals must be captured for comparison against post-implementation outcomes.

E-filing viability will be dependent not only on the how it is planned for and viewed leading up to its execution, but also on how it is perceived to have affected things such as business processes, personnel efficiencies, and case management. Perceptions and beliefs will be formed by all stakeholders on how the project has impacted those things they believe to be most important. Those perceptions may be accurate in some instances, where in others they may not be. Data can be used to show the reality of how the project is performing, and remove any guess work. For the data to be useful, it should, whenever possible, provide a before and after comparison.

Recommendation 1.3.1.1: Capture pre-implementation data on the number of staff allocated to important file processing functions that e-filing could impact.

This information should include the total staff dedicated to a particular function, the percentage of those staff who perform the function as a part of their overall job functions, as well as the percentage of staff who perform the job as their exclusive job assignment. By

assessing the personnel resources performing a particular job, the effect of e-filing in workload distribution can be more effectively evaluated.

Recommendation 1.3.1.2: Capture pre-implementation data on case flow efficiencies.

Case flow efficiency data can best be obtained by use of the National Center for State Courts' CourTools performance measures. They provide a programmed methodology to gather, display, and analyze information on a number of court related concerns, such as "Clearance Rate", "Time to Disposition", and "Age of Active Pending Caseload". While the purpose of evaluating these measures in the context of an e-filing project is for establishing baseline comparative data, they also will also provide a court with a sense of its present case processing reality.

Recommendation 1.3.1.3: Set a post-implementation schedule to take data measurements again for comparative purposes.

A schedule to reassess the measures discussed above should be six and twelve months after e-filing implementation. This will help both in determining the effect e-filing has had in these areas, and in establishing if the effects are trending in a positive or negative direction, to allow adjustments to processes, if necessary.

Staff Readiness

Conclusion 2.1.1: FCMC staff's understanding and comfort level of e-filing is good, but must be improved.

When surveyed most staff (83 percent) expressed that e-filing represented an effort they felt would result in a positive impact on the justice system. However, the survey also showed that half of the respondents are more comfortable working with a paper document than with one in electronic form. End-user confidence in whether an e-filing solution is effective will be dramatically affected by the front-line staff of the court. It will be their enthusiasm or lack thereof that will set the tone for the experience, and the impact could be a net negative, if left to chance.

Recommendation 2.1.1.1: A pre-implementation e-filing familiarization initiative should be employed.

Providing the opportunity for court staff to interact with other court employees who have already experienced the positive benefits of e-filing should help to diminish any reluctance or apprehension they may have. This could be achieved through teleconferences, webinars, site visits, or online videos. The familiarization effort should be a component of a larger education and training initiative. Webinars can be facilitated through one of a number of online applications that permit visual access to desktop computers at the expert's location and can be presented in classroom settings by way of screen projection. The sessions would be interactive via telephone conferencing that also could be captured for future viewing.

Recommendation 2.1.1.2: Assign a training program coordinator over the training familiarization effort.

The coordinator will perform training needs analysis and interact with staff to determine their comfort levels and base knowledge about e-filing. This will help to identify gaps between basic staff awareness of e-filing and their knowledge of what e-filing means for all stakeholders.

Once familiarization objectives that address awareness gaps are defined the coordinator will schedule classes, and arrange for audio visual equipment to capture original content conveyed by experienced e-filing professionals. The audio/visual files can then be uploaded where they can be viewed as needed by groups or individuals.

This position also will be responsible for coordinating with other jurisdictions to arrange e-filing site visits. During these visits staff members will be exposed to those who work in the same capacity and are proponents of e-filing. The coordinator also will extend invitations to external experts who would assist the FCMC as visiting instructors. Where distance and time preclude site visits, the coordinator will work to arrange web interactions (webinars) with successful e-filing practitioners.

The coordinator also will collect and distribute source materials, such as procedures manuals, guidebooks, and videos about e-filing and how it enhances judicial proceedings. As employees have more opportunities to review these materials, interact with experts, and see real-time examples of e-filing efficiencies, any reservations they may have about the process should be greatly reduced.

Conclusion 2.1.2: E-filing parties will require long term user support that involves rapid response when they need assistance, or they will not view e-filing as beneficial.

All jurisdictions interviewed for this project experienced a significant increase in calls by those seeking support and assistance with e-filing. Although they provided extensive training and posted a variety of online information resources, they reported that end users of all kinds chose to call first when they had questions or encountered issues. Some courts

interviewed for this project indicated phone traffic increased by as much as 40 percent after e-filing implementation.

Recommendation 2.1.2.1: Dedicate 40 percent more telephone staff to support e-filing during high volume calling hours.

These team members must have arms reach access to all information relating to end user procedures, troubleshooting guides, frequently asked questions, and resource contacts. The objective is to address each call with maximum effectiveness and ensure the callers concerns are expeditiously managed to their satisfaction. A secondary goal is to address the calls in a manner that reduces the likelihood of repeat calls for similar concerns.

Conclusion 2.2.1: Working with imaged documents should help enhance staff levels of comfort in an electronic environment.

E-filing is a technology solution that fundamentally alters how court personnel interact with court records. It is necessary for e-filing viability that those charged with processing these records are comfortable doing so. Some who have become accustomed to working with paper may not find working with electronic documents as natural. It is important to provide those personnel with the opportunity to become more comfortable with e-documents before implementing e-filing, if possible. In the case of the staff of the FCMC Clerk and Court, that opportunity is available because a large cache of imaged documents can be made available to all staff who will be working with electronically filed documents.

Recommendation 2.2.1.1: Publish a memo advising staff to use imaged documents first, before retrieving paper documents.

While most FCMC staff who will be engaged in the e-filing effort already have access to view images, some expressed that they prefer printing a document for review, rather than viewing it on a screen. Once e-filing is initiated this will be especially impractical in view of the volume of electronic documents. A memo encouraging the use of images prior to its arrival should outline the efficiency deficits associated with paper, and that e-filing represents a remedy for those challenges. It should also highlight how e-filing can have positive impact on judicial procedures, and that the volume of documents once e-filing is launched will not allow for the printing of each one. Therefore, working with imaged documents now will minimize any awkwardness that could be experienced with electronic documents, especially given the scale that e-filing presents.

Conclusion 2.3.1: Familiarizing judges with e-filing's positive implications for their work processes will be necessary to achieve viability.

E-filing is intended to impact the functions of the court in ways that its stakeholders find have improved their interactions with information, documents, and other records. Without the support of judges whose courtrooms will be affected by e-filing, many of its benefits may not be realized. If judges are not aware of its intended positive impacts on their work product, that support may not be forthcoming.

Recommendation 2.3.1.1: Arrange site visits for key judges to have the opportunity to interact with and observe other judges who successfully work with an e-filing system.

While it may be useful to present documentation of positive e-filing qualities to judges, the most effective means of conveying its benefits is to give them an up close view of

how it works for and benefits other judges. This will be an opportunity for them to communicate with someone who best understands how they work and interact with case records, and can correlate where electronic documents enhance processes over paper documents. Further, they can see in real situations within courtrooms and chambers how effective electronic documents can be in saving time and impacting efficiency.

Technical Readiness

Conclusion 3.1.1: Judges must have proper tools for working with electronic documents to eliminate the need for paper.

Many jurisdictions reported that some judges were of the opinion that e-filing was a benefit for the clerk of court, but had minimal in any benefit for the way they conduct business from the bench. This is supported by the JTC Resource Bulletin “Making the Case for Judicial Tools” which states; “Despite monumental success in automating case management processes for court clerks, court systems fall short in meeting the case processing, judicial decision making, and management needs specific to trial court judges on the bench and in chambers.”

When preparing for court proceedings, judges often rely on information that may not be considered a part of the case record. A stand-alone document management system provides some bench functionality, but generally does not offer a complete interactive environment from a judge’s perspective.

Recommendation 3.1.1.1: Procure a judicial bench tool to be integrated with the court’s case management and document management systems concurrently with e-filing implementation.

For e-filing to be viable it is important that judges see immediate and appreciable benefits of working with electronic documents. A judicial tool will create an environment for this to be achieved. A bench tool offers judges the ability to electronically make and review notes, view associated case communications, access legal resources or other information that is not included in a case docket. It can be configured as a judge's private electronic workspace.

Conclusion 3.2.1: Interacting with imaged documents before e-filing execution can help staff be more comfortable once it is launched.

The vendor interviewed for this project responded that many court employees are not initially comfortable working with electronic documents when e-filing is implemented. They further stated that employees who have had the opportunity to work with imaged documents prior to e-filing implementation are far more at ease with the concept.

Recommendation 3.2.1.1: Provide permission to access imaged documents to all appropriate staff.

While many FCMC clerk and court personnel have access to view images, there are some who still only have access to paper records. This may be a result of outdated document security precautions relating to the potential of mishandling imaged documents. Now however, with the understanding that electronic documents access can be tracked more easily than with paper documents, there should be no security risks that would preclude staff access to view and work with images. There may also have been concerns about whether adequate software licensing was in place to accommodate full staff access, but that is no longer an issue.

Potential Barriers

Conclusion 4.1.1: Change can create a level of discomfort within an organization that is not well informed on the purpose of the change.

A court's internal stakeholders may view e-filing in different ways, depending on their roles and understanding of the purpose of the effort. Some may be more reluctant than others to embrace the fundamental changes that are inherent in e-filing. To fully accept the changes in work practices and functions will require that everyone have an understanding of the merits of making the shift from paper to electronic documents. Otherwise they may conduct their work processes in ways that conflict with the e-filing purposes. For example judges, deputy clerks, or others who are resistant to the technology shift may insist that electronic files be converted to paper for their work purposes. This is counterproductive, and diminishes the intended outcomes of the e-filing initiative. It also negates any anticipated return on e-filing investments.

Recommendation 4.1.1.1: Conduct an aggressive communication program before the introduction of e-filing.

This should be done in a manner that considers what are perceived to be a court's values and attitudes concerning change, so that e-filing benefits are communicated in a way that reflects the same. It should show that shifting to e-filing can provide more benefits than challenges, and it should reflect that e-filing can be achieved while remaining consistent with judicial principles. The communication effort should also be done in a manner that assures the stakeholders that their voices will be heard in the process.

Conclusion 4.2.1: Courts considering e-filing must have a good understanding of their fiscal status before they seek funding.

There is not one electronic filing solution that fits every court's budget situation, but there may be at least one solution that could accommodate the needs of any court. To determine what solutions might be fiscally appropriate, a court must first understand cost considerations as they pertain to its circumstances. Assumptions should not be made that e-filing is beyond reach due to cost, but rather court leaders should take a methodical approach to assess what might be affordable. Only then can they take a well-informed approach to assessing the e-filing funding options that might meet their needs.

One important consideration that must be factored into budget assessments is the concept of return on investment. As e-filing is intended to provide greater personnel efficiencies and other cost savings on items such as paper, file folders, storage space, and file racks; those moneys can be repurposed to help fund the e-filing initiative. A view of e-filing as an investment, rather than an expenditure, aligns more closely with outcomes that have followed successful implementations in other locations.

Recommendation 4.2.1.1: Use a budget planning worksheet to project e-filing costs.

A budget planning worksheet can help a court take a structured approach to determining what impact a given e-filing solutions might have. Armed with this information, it will be better positioned to know if it can allocate funding if available, or seek funding, if necessary. Some of the categories that may be considered relate to equipment, services, software, facilities, support and maintenance, salary and benefits, and utilities. Balanced against the cost considerations should be positive budget impacts that will be forthcoming

from a viable system. Greater effectiveness in judicial processes should provide returns over a comparatively brief timeframe that will take a court past a break-even point to a net positive investment result.

Conclusion 4.3.1: Aggressively training and educating end users will be necessary for e-filing viability.

Even though e-filing has been available in some form for over 20 years, it remains a very new concept when compared to the centuries old process of submitting court documents on paper. Many have never had occasion to file documents electronically. While this is rapidly changing, court interview responses show there remains a large segment of society, including attorneys, who require in-depth education and training before they will be comfortable with an e-filing system.

Recommendation 4.3.1.1: Design an extensive training/education program for e-filing end users.

This program must first identify the basic competencies necessary for an e-filing party to successfully participate in the system on an ongoing basis. Defining the target audience will also be necessary, because attorneys may have different learning styles than self-represented litigants and other users. The plan should be designed to accommodate different learning approaches. User guides should help those who learn best by reading instructions, classroom instructions should be offered to those who learn best in interactive environments, video tutorials should be made available online for those who are visual learners. As with the staff training program, the project's training program coordinator must manage and document this program to ensure its effectiveness.

Conclusion 4.4.1: A voluntary e-filing option for attorneys puts system sustainability at risk.

Many of the intended benefits of e-filing, such as cost savings, process efficiency, and more effective case flow management are at risk and are unlikely to materialize if attorneys are still permitted to file paper. A dual paper and electronic system will place a greater burden on the court system, rather than enhancing its effectiveness.

Recommendation 4.4.1.1: Set a relatively near term date certain for e-filing to be mandatory.

The FCMC should set a six-month target date after implementation for e-filing to be mandatory for attorneys. This should provide adequate time to ensure that the e-filing solution is refined and operating at an optimal level of effectiveness. It gives attorneys adequate opportunity to take advantage of available training provided by the court and clerk. Additionally, it offers time to communicate the mandatory date to the legal community and permits them time to prepare and adjust as needed. Once a date is finalized, there must be an aggressive campaign to communicate it to all affected stakeholders. Mandatory e-filing is necessary to realize the intended elimination of work effort related to managing paper.

Conclusion 4.4.2: The court must resolve to transition away from paper files as swiftly as possible, once e-filing is effectively operating.

All cost savings, process enhancements, and any other benefits of e-filing require that paper be removed from court processes. This is also necessary to avoid operating both in electronic and paper environments simultaneously where inefficiencies will be inherent.

Recommendation 4.4.2.1: Set a defined timetable to become a paperless court.

If files are received electronically but subsequently printed out for work purposes, then a court will have created a self-imposed outcome that not only negates any benefits of e-filing, but also imposes an added burden to the judicial system. This would effectively create dual paper and electronic systems that will constantly be competing for personnel resources, and will impose added requirements for retaining hardware that might otherwise be eliminated. Additionally there will likely be high levels of frustration for the personnel who must operate within both environments. It is understood that there will be a transitional period in which both paper and electronic documents will coexist, but it should be viewed as a short-term, temporary condition leading to a paperless platform.

Conclusion 4.5.1: Because e-filing requires technology access, more computer literacy, and is more complicated than filing paper, some self-represented litigants may find it to be a challenge.

E-filing can be viewed as a major step in the process of moving toward being a paperless court. This objective, however, must take into consideration that some pro se litigants will never be able to take advantage of an online e-filing portal because they do not have the requisite resources or skill sets to navigate the system. While it may seem that we are all interconnected by personal computers, smart phones, or portable tablets, this is not the case. A census survey of American households in 2013 showed that 74.4 percent of households reported internet use. While this represents a large majority of households, it also means that 25.6 percent of homes did not report internet use. If as many as one in four homes are not able to access e-filing via the internet, then accommodation for those potential litigants must be a part of any e-filing plan.

Recommendation 4.5.1.1: Provide Clerk-assisted walk up filing stations at the Clerk's office, equipped with scanners.

Clerk staff will receive the SRL filings, scan the documents, and could either return the paper to the SLR, or shred it once the scanned filing has been properly verified as accepted into the electronic document system. This approach has been used successfully in a number of jurisdictions, including the paperless Utah state court system. With this approach, all parties' case filings will be subject to the same case flow mechanisms and timely processing. This should eliminate any access barriers self-represented litigants could encounter, and further instill confidence that an e-filing solution will serve all citizens within the community served by the court.

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Appendices

Appendix A: E-filing Courts Interview Responses

	Rocky River Municipal Court	Franklin County Common Pleas	Montgomery County	Lake County	Vendor
1. How did you estimate the cost of e-filing for you court?	Conducted time motion study - Performed cost benefit analysis.	Cost benefit analysis	Conducted cost benefit analysis	Interviewee was not involved in cost estimation.	N/A
2. What funding model did your court use to cover the costs of E-filing?	Licensing option.	Budget requests through funding authority.	Licensing option.	Raised filing fees to cover cost of system.	N/A - Usually offers a licensing option and in 2015 will also offer a Fee for service option to courts.
3. How would you describe your courts level of readiness preceding your e-filing project?	System Being overwhelmed by paper created environment of positive acceptance.	Some level of reluctance that evolved to acceptance through aggressive communication.	Key decision makers were receptive and championed the effort.	The Bench & Clerk are the champions. Currently going through rules review.	Recommends that courts begin imaging documents prior to e-filing. Also that they establish Local rules prior to implementing

4. What was your vendor selection process?	Elected to use CMS vendor who packaged e-filing with public access & eServices and who had interface designed specifically for their CMS.	RFP	RFI then RFP	RFP	N/A
5. What was the most significant barrier that had to be overcome before implementing an e-filing solution?	Procuring Equipment & Licensing.	Workflow mapping	Reluctance Within Court Culture	Determining how best to fund the effort.	Observes that educating judicial staff / judges about benefits of e-filing is most challenging.
6. What was the most significant barrier that had to be overcome during implementation of your e-filing solution?	Building Docket Code Tables	Various changes implemented during process.	Balancing operational demands vs. project demands.	Initially the product did not permit a fully integrated solution. Vendor ultimately addressed this concern.	Training attorneys and providing self-represented litigants with e-filing options.
7. What was the most significant challenge that you encountered after implementation of your e-filing solution?	Educating End Users.	Managing increased volume of callers with e-filing questions.	Managing increased volume of callers with e-filing questions.	Anticipating user support as the most significant opportunity once launched.	Managing increased volume of callers with e-filing questions. Also dual electronic and paper systems need to be managed.

8. Is e-filing mandatory or optional for users; and why did you make that decision?	Beginning January 1st, 2015 - To ensure the benefits of e-filing will be realized.	Yes - But varies depending on user category, court and case type.	Yes - To avoid dual Systems & to Realize full potential of e-filing.	Yes for attorneys at a future date. Optional for pro-se/SRLs.	Observes that most courts set mandatory E-filing at date certain after a pre-determined optional timeframe.
9. Did e-filing appreciably improve effectiveness and productivity?	Yes.	Yes.	Yes. Overall Workflow time savings or 25%.	Still evaluating.	Observes some marginal decrease in data entry, but mostly sees the benefit in reduced scanning and much faster workflow.
10. What benefits did you anticipate e-filing would provide?	By diminishing workload could reduce staff through attrition.	Staff reduction and improved workflow efficiencies	That it would appreciably reduce staff through attrition.	Cost savings over time and greater efficiency.	N/A
11. What benefits did you actually realize?	Same as 10.	Savings through staff attrition. Significantly reduced data entry. More timely access to records.	Through automated docketing, e-service, less scanning, reduced storage needs. Staff reduction.	Still evaluating.	N/A
12. What critical technology challenges did you encounter?	PDF compatibility for uses.	None noted	None of note.	None	Managing a 24 hour accessible hardware network and how that can impact backup

					cycles and financial post sets.
13. What were your solutions to these Challenges?	Educated users on where to acquire software.	N/A	N/A	N/A	N/A
14. How did you educate the staff and users?	E-filing user's Guide	CLE classes for attorneys; online tutorials, staff classroom training YouTube channel.	Attorney training through bar. Educated staff with videos, class tutorials, hard copy and online user's guides.	CLE training for attorneys. Classroom training for staff.	Observes mostly in-house class training.
15. What would you do differently if you could?	Start sooner to realize benefits sooner.	Procure and integrate a judicial tool for judges.	Mandate that filed documents be submitted as PDF/A vs. PDF.	Too early in the process to know at this time.	Received feedback that many wish they had made e-filing mandatory sooner. Also that they should have started imaging before e-filing.



Appendix B: E-Filing Project Manager Position Description

Example

(Adapted from the Alaska Court System PD 2011)

Class Specification

PROJECT MANAGER, E-FILING

Salary Range:

Definition:

The Project Manager provides management and oversight for the design, development, and implementation of the FCMC's electronic case filing (e-filing) project. This is a multi-year project to develop a project plan and transition the FCMC from paper to electronic case files. The incumbent will serve as the liaison between the Clerk of Court, the Executive Committee, Project Teams, and stakeholders. The position is responsible for the coordination of project components such as communication, research, planning, procurement, design, development, testing, training, and implementation.

Distinguishing Characteristics:

The Project Manager is a single-position job class. This is an administrative job with substantial authority to provide all necessary direction to reporting committees and project participants.

The Project Manager works under the general direction of the Chief Deputy Clerk. The incumbent works independently; performance is measured by total results. The methods of performing assignments are the responsibility of the employee so long as they are within established policies and procedures. Work is periodically reviewed to measure overall results and assure conformance with policy and procedure.

The Project Manager exercises full supervisory authority and responsibility for assigned staff.

The Project Manager is responsible for management and coordination of the court's e-filing project. The incumbent is required to make critical decisions and recommendations regarding a major technology project for the court's judicial system.

The Project Manager performs duties that require a high degree of independent judgment to evaluate options, make recommendations, prioritize work, manage personnel, and take necessary action to quickly resolve complex problems.

Examples of Duties:

Serve as liaison between the Clerk of Court, Executive Committee, Project Teams, and stakeholders.

Coordinate the development and implementation of the court's e-filing project and other special projects as they arise.

Develop and implement communication plans for internal and external stakeholders.

Present proposals, recommendations, and options to the Executive Committee.

Develop and update project plans and schedules for approval by the Executive Committee. Develop timelines and milestones for each project activity; monitor progress and revise plans as necessary. Document decisions, maintain project files and schedules. Document lessons learned at the completion of major project milestones. Prepare reports and correspondence.

Establish specialized project teams to work on specific aspects of the project.

Facilitate meetings and represent the Executive Committee at meetings with external stakeholders (Departments of Law, Public Safety, Corrections, Public Defender Agency, Local Bar Association, and the general public).

Participate in system requirement sessions and gather project requirements from stakeholders and the project team. Define and document the business needs and system requirements of internal and external stakeholders.

Analyze e-filing systems used by federal and state court. Identify and analyze commercial applications which may meet the court's business needs. Participate in the evaluation of potential systems.

Identify problems and issues and refer to appropriate project teams, stakeholders, or subject matter experts for recommendation or resolution.

Recommend procurement/customization of commercial applications or development of in-house applications.

Write or contribute to procurement documents and processes to obtain applications and professional services necessary to implement the components of the project. Define the scope of work; develop the Request for Proposals (RFP) as necessary; participate in the vendor selection process; and assist in the negotiation of terms and conditions for procurement contracts.

Work with clerk, court and vendor project leaders to define project scope, risks, assumptions, constraints and goals.

Oversee software development. Develop rigorous testing protocols.

Monitor the work performed by vendors, contractors, court employees, agency staff, and consultants.

Assess training requirements and oversee the communication of new business processes to internal and external stakeholders. Review materials developed by training teams. Assist in development of specific plans to inform and train management and end users.

Direct the development of clerk and court operating and working procedures and standards.

Provide post-implementation support.

Assist in the development of the project budget, grant applications, legislative budget requests.

Participate in the selection, supervision, and evaluation of employees assigned to the project.

Knowledge, Skills, Abilities:

The Project Manager requires knowledge of:

- The legal system.
- The principles, practices, and techniques of project management.
- Current computer technology and trends, including information management, communications, and data administration.

The Project Manager requires skill in order to:

- Communicate effectively to diverse stakeholders.
- Facilitate resolution in difficult and controversial situations.
- Meet project deadlines and deliverables.
- Oversee technical personnel responsible for the design, development, and implementation of complex software applications.

The Project Manager requires the ability to:

- Lead and manage statewide technology projects.
- Communicate complex concepts in straightforward language.
- Establish and maintain cooperative working relationships.
- Analyze options and recommend solutions to the Project Team.
- Comprehend complex written material; interpret and apply rules, regulations, and instructions; evaluate suggestions and priorities.
- Communicate effectively orally and in writing; and work effectively within a team context.
- Supervise the activities of subordinate staff, contractors, and vendors.
- Review and assess the suitability of systems being considered by the clerk and court.

Minimum Qualifications:

Substantial knowledge of the American legal system.

AND

Substantial discretion and responsibility for the successful completion of a complex project that included defining the project parameters, coordinating the effort of multiple work teams, and the project's timely implementation.

OR

Three years of professional experience developing, planning, coordinating, and implementing a program, project, organization, or major components of a program that included administrative authority over budget, staff, vendors, contractors, and operations.

OR

Three years of data processing management experience that included supervision of professional staff and responsibility for design, development and implementation of systems, and administration of contracts.

Preferred Qualifications:

Professional experience managing technology and information technology projects is preferred.

Note: The incumbent serves “at-will” to the appointing authority.

Appendix C: Cost Benefit Analysis

E-File&Serve

Cost-Benefit Analysis

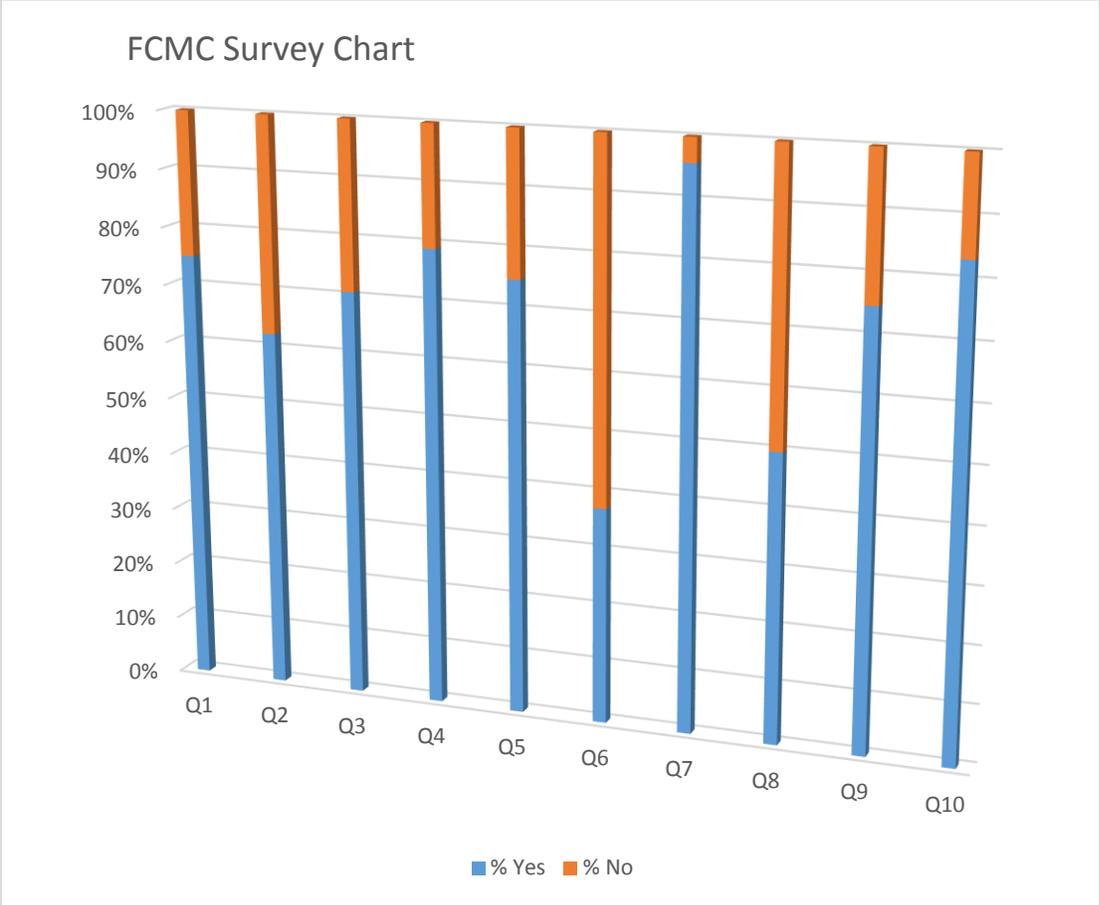
The illustration below outlines the filing and service of one 15-page document on one opposing attorney and is based upon either U.S. Mail, FedEx or Legal Runner Service. When the process and cost of electronic filing and electronic serving is compared to the traditional process and costs of filing and serving, the convenience and savings are undeniable!

Number of pages per filing		15
Estimated trip time to the Courthouse (hours)		1
Number of Parties to be served		1
Number of Mailings		1
Traditional Process Costs		
Cost of Copy (\$.15 per page x 15 pages)		\$2.25
Trip Cost for Personnel (\$10/hr x 1 hour + \$1 parking fee)		\$11
Traditional Process Totals		
Cost of Copy (\$.15 per page x 15 pages)		\$2.25
US Postage Cost		\$.83
FedEx Cost		\$12
Legal Runner Service Cost		\$20
Total Cost (US Postage)		\$16.33
Total Cost (FedEx)		\$27.50
Total Cost (Legal Runner Service)		\$35.50
Electronic Process Costs		
E-File Cost		\$6
E-Serve Cost		\$4
Total Cost (Electronic)		\$10
Total Savings		
Total Savings (US Postage)		\$6.33
Total Savings (FedEx)		\$17.50
Total Savings (Legal Service)		\$25.50

Appendix D: FCMC Staff Survey Results

	Yes	No	Question Identifier	% Yes	% No
1. Are you familiar with the concept of electronic filing (e-filing)?	18	6	Q1	75%	25%
2. I am familiar with the intended benefits an e-filing solution could provide?	15	9	Q2	63%	38%
3. Since the Supreme Court of Ohio permits local rules requiring documents to be filed electronically, E-filing should be mandatory for attorneys once implemented?	17	7	Q3	71%	29%
4. E-filing for pro-se or self-represented litigants should be optional?	19	5	Q4	79%	21%
5. Do you believe you would prefer working with electronic files more so than paper files?	18	6	Q5	75%	25%
6. Have you ever personally filed documents electronically for your own purposes outside of work?	9	15	Q6	38%	63%

7. Do you believe documents electronically filed should be considered original documents and therefore the official record of the court?	23	1	Q7	96%	4%
8. Do you generally prefer printing a document to read it rather than reading it on a computer screen?	12	12	Q8	50%	50%
9. Do you believe that e-filing will create disadvantages for those who are not comfortable with technology?	18	6	Q9	75%	25%
10. Do you believe implementing e-filing and providing training for users will result in a court system better able to administer individual justice in individual cases?	20	4	Q10	83%	17%
25 surveys disbursed					
24 Responses					
96% Response Rate					



Appendix E: How “E” IT Survey

How “E” Will We Be?
Daniel H. Straub, Ph.D.
2014

The following list was adapted from NEXT-GEN: Building Blocks for a CMS & E-Filing System. 2013 Court Technology Conference by Michael Greenwood, John Brinkman, Marlene Martineau and Jim McMillan. Please consider the following twenty-five electronic Solutions and evaluate the status and/or likelihood that they will be installed in your court. Circle the most appropriate option.

- 1. e-Access Control:** Restrict access by case, case type, case participant or role, case docket entry or document.

Already in Place	Unlikely we will ever do it	Likely we will do it within a year	Likely we will do it within the next 3 5 10___years
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- 2. e-Attorney Service:** Offer attorney case management services and/or court data auto-integrated into attorney system.

Already in Place	Unlikely we will ever do it	Likely we will do it within a year	Likely we will do it within the next 3 5 10___years
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- 3. e-Calendar:** Display the court hearings and calendars to litigants and public: integrated with e-scheduling.

Already in Place	Unlikely we will ever do it	Likely we will do it within a year	Likely we will do it within the next 3 5 10___years
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- 4. e-Case Document Management. Index and Search:** Electronic storage, indexing, search and organization of case documents – preferably PDF text or PDF-image-to appropriate cases, filings, events, and statuses.

Already in Place	Unlikely we will ever do it	Likely we will do it within a year	Likely we will do it within the next 3 5 10___years
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- 5. e-Case Initiation:** Electronic process of submitting, receiving and acknowledging case filings and payments that initiate the opening of a new case in the court Case Management System (CMS): integrated with e-filing.

Already in Place	Unlikely we will ever do it	Likely we will do it within a year	Likely we will do it within the next 3 5 10___years
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- 6. e-Citations:** Electronic interface to transmit motor vehicle citation data between the court and state and local law enforcement, and storage of legal citations.

Already in Place	Unlikely we will ever do it	Likely we will do it within a year	Likely we will do it within the next 3 5 10___years
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- 7. e-Configurable Tables:** Permit each local court to configure system to conform to local practices and process.

Already in Place	Unlikely we will ever do it	Likely we will do it within a year	Likely we will do it within the next 3 5 10___years
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- 8. e-Case Processing/Management:** Electronic docketing and process from case initiation through case closing, such as automated docketing and review, event workflows, work queues, scheduling, report generation, electronic notifications and notices, payment processing, and indexing and linking of parties, docket entries and documents.

Already in Place	Unlikely we will ever do it	Likely we will do it within a year	Likely we will do it within the next 3 5 10___years
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- 9. e-Court Services:** Directory that provides miscellaneous services, information and related court services to the public (e.g. certified copies, electronic record checks, transcripts, etc.)

Already in Place	Unlikely we will ever do it	Likely we will do it within a year	Likely we will do it within the next 3 5 10___years
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- 10. e-Courtroom & Judicial Support:** Judge’s virtual desk/bench (chambers, courtroom, home, off-site) access to all resources that support the judicial officer’s decision-making process including flexible data presentation.

Already in Place	Unlikely we will ever do it	Likely we will do it within a year	Likely we will do it within the next 3 5 10___years
------------------	-----------------------------	------------------------------------	---

11. e-Data Exchanges & E-Transfer: Data to/from government agencies, other courts, and high-volume litigants.

Already in Place	Unlikely we will ever do it	Likely we will do it within a year	Likely we will do it within the next 3 5 10___years
------------------	-----------------------------	------------------------------------	---

12. E-Filing, e-Forms & e-File: Capability for attorneys, self –represented litigants, and other participants to electronically file, access documents, receive notices, forms and interact with the court through the e-portal.

Already in Place	Unlikely we will ever do it	Likely we will do it within a year	Likely we will do it within the next 3 5 10___years
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13. e-Judicial Automated Assignment & Conflict Resolution: Automatically assign and reassign judges based on random assignment and other factors to case and to automatically reduce case assignment conflicts.

Already in Place	Unlikely we will ever do it	Likely we will do it within a year	Likely we will do it within the next 3 5 10___years
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14. e-Noticing: Capability to electronically generate and distribute court notices (e-mail, text messaging, social media) to parties of case events and updates.

Already in Place	Unlikely we will ever do it	Likely we will do it within a year	Likely we will do it within the next 3 5 10___years
------------------	-----------------------------	------------------------------------	---

15. e-Payments: Electronic payment of filing fees, fines, etc., via credit/debit card, bank transfer or other third party.

Already in Place	Unlikely we will ever do it	Likely we will do it within a year	Likely we will do it within the next 3 5 10___years
------------------	-----------------------------	------------------------------------	---

16. e-Portal: Court litigants, and public access dockets, court files and related court services via the Internet.

Already in Place	Unlikely we will ever do it	Likely we will do it within a year	Likely we will do it within the next 3 5 10___years
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17. e-Public Access: Produce party-case index, public dockets, judgments, and other special reports for public use.

Already in Place	Unlikely we will ever do it	Likely we will do it within a year	Likely we will do it within the next 3 5 10___years
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18. E-Reports, e-Queried & e-Analytics: Produce other standard and ad-hoc (configurable) reports for users such as statistical, service and answer, deadline and scheduling, quality control, attorney/firm, speedy trial, etc.

Already in Place	Unlikely we will ever do it	Likely we will do it within a year	Likely we will do it within the next 3 5 10___years
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19. e-Scheduling: Attorneys and litigants on-line query and schedule court actions defined and controlled by the CMS.

Already in Place	Unlikely we will ever do it	Likely we will do it within a year	Likely we will do it within the next 3 5 10___years
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20. e-Self Help: Litigants access procedural guidance, create forms and documents via online instructions and samples.

Already in Place	Unlikely we will ever do it	Likely we will do it within a year	Likely we will do it within the next 3 5 10___years
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21. e-Signature: Allow judges, court staff, attorneys, and parties to sign court documents electronically.

Already in Place Unlikely we will ever do it Likely we will do it within a year Likely we will do it within the next 3 5 10___years

22. e-Utilities: Capabilities to allow court personnel to create, edit, modify, link, delete, verify, or track any entries.

Already in Place Unlikely we will ever do it Likely we will do it within a year Likely we will do it within the next 3 5 10___years

23. Cloud Computing: Development and use of cloud server (private or otherwise) for court data management.

Already in Place Unlikely we will ever do it Likely we will do it within a year Likely we will do it within the next 3 5 10___years

24. Mobile Devices: Preparation for and encouragement of mobile device use (smart phones, tablets) for court processes and transactions by *court users*.

Already in Place Unlikely we will ever do it Likely we will do it within a year Likely we will do it within the next 3 5 10___years

25. Mobile Devices: Preparation for and encouragement of mobile device use (smart phones, tablets) for court processes and transactions by *court staff and bench officers*.

Already in Place Unlikely we will ever do it Likely we will do it within a year Likely we will do it within the next 3 5 10___years

Appendix F: How “E” Will We Be? Survey Results

	Already in Place	Unlikely We will do it	Likely We will do it within a year	Likely we will do it within the next 3 years	Likely we will do it within the next 5 years
1. e-Access Control: Restrict access by case, case type, case participant or role, case docket entry or document	100%				
2. e-Attorney Service: Offer attorney case management services and/or court data auto-integrated into attorney system.			66%		34%
3. e-Calendar: Display the court hearings and calendars to litigants and public: integrated with e-scheduling				100%	

4. e-Case Document Management. Index. and Search: Electronic storage, indexing, search and organization of case documents – preferably PDF text or PDF-image-to appropriate cases, filings, events, and statuses.	100%				
5. e-Case Initiation: Electronic process of submitting, receiving and acknowledging case filings and payments that initiate the opening of a new case in the court Case Management System (CMS): integrated with e-filing.		100%			
6. e-Citations: Electronic interface to transmit motor vehicle citation data between the court and state and local law enforcement, and storage of legal citations.	100% - Note Pilot Participant				
7. e-Configurable Tables: Permit each local court to configure system to conform to local practices and process.		100%			

<p>8. e-Case Processing /Management: Electronic docketing and process from case initiation through case closing, such as automated docketing and review, event workflows, work queues, scheduling, report generation, electronic notifications and notices, payment processing, and indexing and linking of parties, docket entries and documents.</p>			<p>78%</p>	<p>22%</p>	
<p>9. e-Court Services: Directory that provides miscellaneous services, information and related court services to the public (e.g. certified copies, electronic record checks, transcripts, etc.)</p>				<p>100%</p>	

10. e-Courtroom & Judicial Support: Judge’s virtual desk/bench (chambers, courtroom, home, off-site) access to all resources that support the judicial officer’s decision-making process including flexible data presentation.				56%	44%
11. e-Data Exchanges & E-Transfer: Data to/from government agencies, other courts, and high-volume litigants.	100%				
12. e-Filing, e-Forms & e-File: Capability for attorneys, self-represented litigants, and other participants to electronically file, access case documents, receive notices, forms and interact with the court through the e-portal.				78%	22%

13. e-Judicial Automated Assignment & Conflict Resolution: Automatically assign and reassign judges based on random assignment and other factors to case and to automatically reduce case assignment conflicts.	100%				
14. e-Noticing: Capability to electronically generate and distribute court notices (e-mail, text messaging, social media) to parties of case events and updates.			75%		25%
15. e-payments: Electronic payment of filing fees, fines etc., via credit/debit card, bank transfer or other third party.		100%			
16. e-Portal: Court litigants, and public access dockets, court files and related court services via the Internet.			56%	44%	

17. e-Public Access: Produce party-case index, public dockets, judgments, and other special reports for public use:	100%				
18. e-Reports, e-Queries & e-Analytics: Produce other standard and ad-hoc (configurable) reports for users such as statistical, service and answer, deadline and scheduling, quality control, attorney/firm, speedy trial, etc.		44%			56%
19. e-Scheduling: Attorneys and litigants on-line query and schedule court actions defined and controlled by the CMS.				56%	44%
20. e-Self Help: Litigants access procedural guidance, create forms and documents via online instructions and samples.		11%	66%	22%	
21. e-Signature: Allow judges, court staff, attorneys, and parties to sign court documents electronically.	22% - Note: Presently For Duty Judges only.		78%		

22. e-Utilities: Capabilities to allow court personnel to create, edit, modify, link, delete, verify, or track any entries.	100%				
23. Cloud Computing: Development and use of cloud server (private or otherwise) for court data management.		100%			
24. Mobile Devices: Preparation for and encouragement of mobile device use (smart phones, tablets) for court processes and transactions by <i>court users</i> .			22%	78%	
25. Mobile Devices: Preparation for and encouragement of mobile device use (smart phones, tablets) for court processes and transactions by <i>court staff and bench officers</i> .			78%	22%	
Note: Since no responses fell in the 10 year timeframe that column has been omitted.					

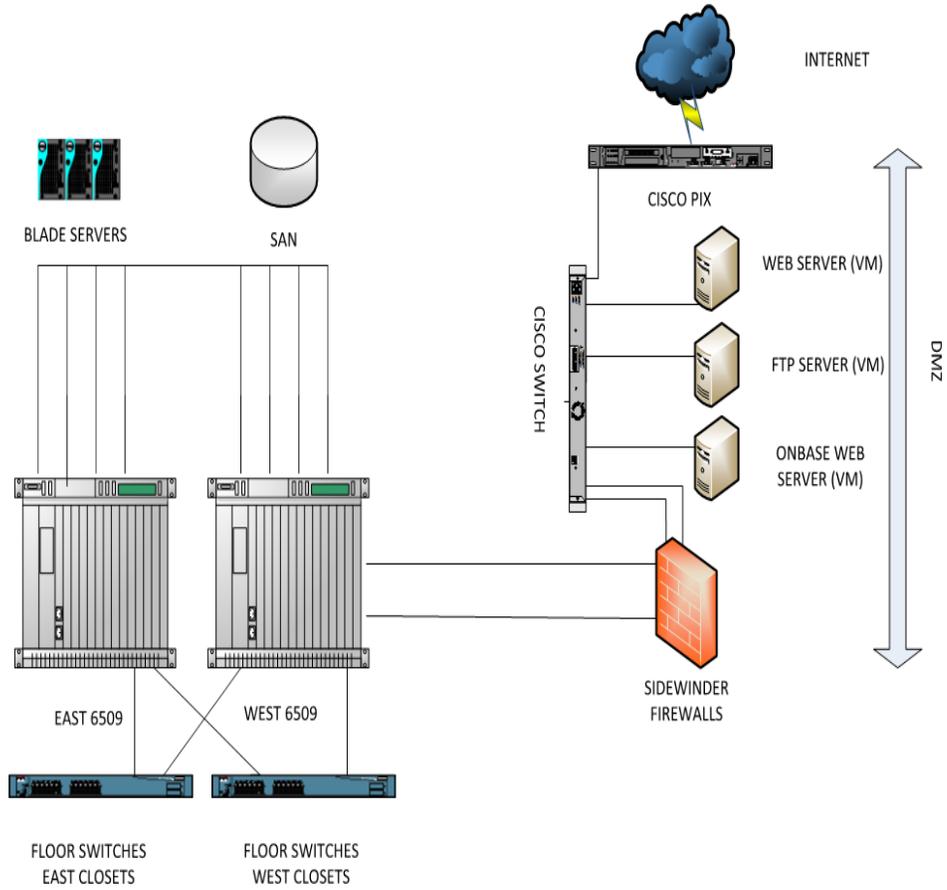
Appendix G: Tyler E-Court Maturity Model

Tyler E-Court Maturity Model - 2014 CASE TYPE _____

	Court	Operations	Citizens	Attorneys	Justice Partners
Advanced Electronic	<ul style="list-style-type: none"> Documents received and signed electronically Participants are electronically notified on court orders and actions. Automated electronic tasks exist between court and clerk. 	<ul style="list-style-type: none"> All documents in CMS are searchable PDF's. Automated electronic tasks exist between clerk and court. 	<ul style="list-style-type: none"> Self-represented litigants can complete forms and electronically file online. Electronic interaction between court and juror regarding jury services and trial cancellation. 	<ul style="list-style-type: none"> Attorneys are electronically notified on court orders and action. Automated electronic tasks exist between attorneys and the CMS. Feature-rich services function natively on mobile devices. 	<ul style="list-style-type: none"> Automated electronic tasks exist between clerk and court. Courts can view electronic case information from many jurisdictions in the region.
All Electronic	<ul style="list-style-type: none"> All files in courtroom are electronic. All data entry and forms generated in courtroom. Processes between court and clerk are electronic. 	<ul style="list-style-type: none"> Only electronic files are maintained. Appeals are generated electronically. Processes between clerk and court are electronic. 	<ul style="list-style-type: none"> Court documents can be viewed online. Jurors can submit excusal and reschedule requests online Some self-represented litigants can complete forms online. 	<ul style="list-style-type: none"> All new cases and subsequent filings are submitted electronically. Attorneys can submit proposed orders electronically. Court documents can be viewed online. 	<ul style="list-style-type: none"> All justice partners receive information from the court electronically. Justice partners can electronically retrieve appropriate case documents.
Mostly Electronic	<ul style="list-style-type: none"> Most files in courtroom are electronic. Some manual and paper processes still exist. 	<ul style="list-style-type: none"> Most cases are initiated electronically. Most subsequent filings are received electronically. E-filings are automatically updated in CMS. 	<ul style="list-style-type: none"> Citizens can lookup case information online. Jurors can complete questionnaires online. 	<ul style="list-style-type: none"> Most filings are submitted electronically. Attorneys can lookup case information online. 	<ul style="list-style-type: none"> Most justice partners receive information from the court electronically. Justice partners have appropriate elevated privileges to access secured case information.
Some Electronic	<ul style="list-style-type: none"> Some data entry and forms generated in the courtroom, but paper/manual process are still prevalent. 	<ul style="list-style-type: none"> Some documents are received electronically. All paper documents received or generated are scanned. 	<ul style="list-style-type: none"> General court information is available online. Payments can be made online and are automatically posted in the CMS. 	<ul style="list-style-type: none"> Some filings are submitted electronically. 	<ul style="list-style-type: none"> Some justice partners receive information from the court electronically.
Manual	<ul style="list-style-type: none"> Paper files in courtroom. Manual forms generated in courtroom. All signatures on paper. 	<ul style="list-style-type: none"> All cases' filings are received on paper and docketed manually All case files are maintained on paper. 	<ul style="list-style-type: none"> Copies of court records are available at the courthouse. Payments are mostly made in person by cash or check. Jury service is facilitated through paper and mail. 	<ul style="list-style-type: none"> Copies of court records are available at the courthouse. Attorneys hand-deliver or use couriers to file documents with the court. 	<ul style="list-style-type: none"> Information is provided to justice partners mostly by exchanging paper documents. Case information from other court jurisdictions must be requested manually.



Appendix H: Current FCMC Network Diagram



Appendix I: Examples of Technology Considerations

1. What document file format(s) will be acceptable via the e-filing system?

(McMillan, 2010)

- Portable Document Format (PDF) vs. Portable Document Format Archival (PDF/A)
- Proprietary vs. Standards-Based file formats
- Word-processing Application electronic document formats such as Microsoft Word, WordPerfect, Rich Text Format (RTF).
- Image Formats – Smart Documents vs. Dumb Pictures?
- Use of XML with Electronic Documents?

2. How do you guard against malicious attacks intended to overload the system, rendering it inoperative?

- For example the use of a tool called Completely Automated Public Turing Test To Tell Computers and Humans Apart (CAPTCHA) is a way to help prevent the high repetition assault on web accessible systems by external computers programmed to do so. This is one among many ways that could help safeguard an e-filing systems.

3. What in-house access and permissions are required?

- Along with concerns about external security risks there will be internal risks involving both unintended and perhaps planned actions that could corrupt the system. Defining appropriate permissions and access can help minimize the risk.
- Also will e-filing activity be tracked via Transaction Logging?

4. What registration and authentication procedures are needed?

- For example most jurisdictions require that attorneys register using their Bar Association identification code. In Ohio there is discussion around an additional verification measure that allows local jurisdictions to interface and cross check attorney bar codes against the Supreme Court of Ohio’s database during the registration process.
- 5. How much system capacity relating to both storage space and bandwidth will be needed now and into the future?**
- While e-filing is intended to operate in the digital realm it must be noted that even here the laws of physics still apply. Relatively speaking you can generally store more digital files and do so faster than you can on physical file bins, however there are still limits that must be factored into planning for e-filing.
- 6. What are other security considerations? (McMillan & Edwards & Webster 1998)**
- Electronic In-box?
 - Firewalls?
 - Secure file encryption software?
- 7. Is the IT group structured to support a 24 hour accessible e-filing system?**
- The FCMC Clerk has for decades been a 24 hour operation and is therefore already structured both with staff and infrastructure for around the clock transactions. Jurisdictions with limited hours of operation may need to examine what will be necessary for a 24 hour e-filing system to be serviced.
- 8. How will Hyperlinks be handled?**
- The Supreme Court of Ohio for example in its suggested e-filing standards states “Each filed document can have references, with links only to itself. External links are

prohibited.” It reasons that “A court clerk could not guarantee that an external document on a remote website would continue to exist in the future, nor could the clerk submit or retain that document for archiving.” (SCO, 2006)

9. How will the electronic document get into the court’s electronic document management system?

- The vendor interviewed for this project recommends that a Document Management System (DMS) workflow be created to monitor the folder where documents are stored. The DMS uses the workflow to sweep the document and attach it to the appropriate docket entry. This action occurs automatically after the filing has been accepted by the Clerk.

10. How will data describing the document get into the court case management system?

- The vendor interviewed for this project recommends the use of web services to call the case management system (CMS) application programming interfaces (APIs) to perform. With this the docket entry and docket entry text that the filer chooses and enters upon submission is used to add a docket entry to the CMS.

11. Will clerk review of the data and document be required? (initially and long-term)

- The clerk in all jurisdictions that were interviewed for this project serve to review or quality check (QC) the filings prior to accepting them into the system. E-filings are mostly checked to ensure they adhere to standards and practices as defined by local

court rules. In this way clerks are not making legal judgments but are following court directives.

12. How will notice of a filing reach other parties in the case?

- The vendor interviewed for this project proposes that a notice of E-filing can be sent out to an attorney or party on the case through an App specifically developed for that purpose where filers can register for an account to receive e-notice or by way of an email generated from within their CMS.

13. How will parties, attorneys, and the public view the case file remotely?

- The unified court system in Utah makes records and documents that are considered public available for all via the web. The burden of document redaction falls to the filing party. They also provide restricted access, for case parties only, to all information and documents that may not be considered appropriate for public consumption via their e-filing registration permissions.

14. How long after implementation will it take the court to get rid of paper case files?

- This decision varies by jurisdiction. However the consensus of courts interviewed for this project is that this must be achieved expeditiously. Otherwise the anticipated technology benefits will be at best delayed if realized at all. In fact they indicate that without reaching this objective inefficiencies and expenses could increase.

Appendix J: FCMC Data Entry Personnel Baseline Measures

Data Entry Deputy Clerks	Pre E- Filing Total	Pre E- Filing Percentage	Six Months Post E-Filing Total	Six Months Post E- Filing Percentage	One Year Post E- Filing Total	One Year Post E- Filing Percentage
FCMC Clerk	48	100%	TBD	TBD	TBD	TBD
FCMC Clerk Full Time	21	48%	TBD	TBD	TBD	TBD
FCMC Clerk Civil Department	7	15%	TBD	TBD	TBD	TBD