

**Court E-Payments:
External Service Providers, In-House Solutions and Beyond**

Institute for Court Management
ICM Fellows Program
2012-2013 Court Project Phase
May 2013

Pete Hernandez
Case Processing Manager, Criminal Operations
Superior Court of California, County of Orange

Acknowledgments

I would first like to thank Alan Carlson, Chief Executive Officer; Teresa Risi, Chief Operations Officer; Mark Dubeau, Chief Financial Officer; Snorri Ogata, Chief Technology Officer; and Cherie Garofalo, Director of Criminal Operations with Orange County Superior Court for their continuous support in affording me this opportunity to pursue my educational goals.

I would also like to thank my advisor Dan Straub who kept me above water and provided much needed support and guidance.

Finally, I would like thank Karen and Peter for their support and for cheering unconditionally from the sidelines no matter how grumpy I became.

Table of Contents

Acknowledgments	1
List of Tables.....	3
List of Figures.....	3
List of Charts	4
ABSTRACT	5
I. INTRODUCTION	8
II. LITERATURE REVIEW	11
Court Payments.....	11
E-Payments	14
E-Payments Today	15
Future of E-Payments	16
Cloud Computing.....	19
III. METHODS	25
Finance Department Survey.....	25
Developing an In-House E-Payment Solution.....	26
Statewide E-Payment Technology Survey	27
IV. FINDINGS	30
Multiple Vendors.....	30
Establishing and In-House Solution.....	33
Statewide E-Payment Technology Survey	37
V. CONCLUSIONS AND RECOMMENDATIONS	53
Appendices	58
Appendix A – California Assembly Bill No. 2073	59
Appendix B – Statewide E-Payment Technology Survey	63
References	66

List of Tables

Table 1 – Finance Department Survey Questions	25
Table 2 – Statewide E-Payment Technology Survey Questions	28
Table 3 – Multiple Vendors Online Service Providers	30

List of Figures

Figure 1 – Six Steps to Establishing an In-House Solution	33
---	----

List of Charts

Statewide E-Payment Technology Survey Response Charts

Responses to Question 2	37
Responses to Question 3	38
Responses to Question 4	39
Responses to Question 5	40
Responses to Question 6	41
Responses to Question 7	42
Responses to Question 8	43
Responses to Question 9	44
Responses to Question 10	45
Responses to Question 11	46
Responses to Question 12	48
Responses to Question 13	50
Responses to Question 14	50

ABSTRACT

This research set out to measure and assess the impact electronic payments will have on not only the operational aspects of the courts, but the public as well. It evaluates the use of electronic payments in the Orange County Superior Court and discusses the possibilities for the future.

Orange County Superior Court currently contracts with seven external vendors who provide e-payment services. There are another eight vendors in the process of contracting with the court to provide e-payment services. The local Finance Department processes the daily payment reconciliations for each of the vendors, as well as all payment reconciliation processes currently in place outside of e-payments.

Three data collection methods were employed. First, was a local in-house survey/questionnaire that was completed by the Finance Department of the Orange County Superior Court. The second was an interview that provided an overview of the process for creating an “in-house” e-payment solution. The third was a statewide survey sent to Superior Court Technology Department Heads throughout California.

The findings show that contracting with multiple vendors for e-payment/e-service solutions has created a challenge for the Finance Department’s back-end reconciliation process. The increased workload due to mandatory e-filing in Orange County has also increased the errors committed by staff processing the e-filed documents.

The findings also show that there are inconsistencies with convenience fees charged by the vendors for services provided. There appears to be inconsistency within the web pages of the e-file vendors, several do not show an affiliation with the Orange County Superior Court, which could potentially create confusion with court customers.

Finally, the results of the statewide survey showed that while most of the courts offered Web and IVR payments, few offered mobile solutions (5 of the 22 responding courts) and none offered any type of e-wallet payments. Many of the respondents felt that the courts could conduct general court business via mobile applications. They understand that the future of payments is no longer based on cash, checks or even credit cards. Our mobile devices are now considered our e-wallets.

However, 22.7% of the respondents stated that they were not implementing additional alternative electronic payment models and 13.6% stated they would not consider these models at all. The remaining 63.6% of the respondents stated that they would be implementing alternative electronic payment models within the next several years.

Unfortunately, only 54% of the respondents felt that the courts could not be left behind when it comes to cloud computing, which is the enabler of the future mobile solutions. The remaining 46% were either neutral or disagreed; feeling that cloud computing had no place in the courts.

Recommendations included:

- Reengineering the daily reconciliation process. Teams comprised of the court's Technology Department, Finance Department and Civil Operations Department could benefit by coming together to discuss in detail the flow of their work and its challenges. As a result of this reengineering, the Technology Department should develop a process that provides the tools needed by the Finance Department.
- Due to the complexity of the back-end daily reconciliation completed by the Finance Department, the court should centralize the e-filing process with dedicated and well trained staff. The centralization of this process should remain in effect until a more viable reconciliation process is available.
- The court should consider developing an in-house e-service solution. By doing so, the court would resolve the daily reconciliation bottleneck issue since all revenues would have one stream, one report and one reconciliation process. It would also establish consistency for court users by offering a court controlled e-service that could potentially have minimal or no charge to the customer.
- Courts must start looking ahead at mobile e-wallet solutions and cloud computing. These are already safely in use in other sectors, e.g., banks and other financial institutions. They are likely to be demanded by future court users.

INTRODUCTION

Electronic payments or “e-payments” are not new to the court system. In the early years of e-payments, the courts had their technological limitations and the public demand for remote services was minimal. The e-payment processes in place were generally for traffic citations and limited to “clean” cases only. In other words, e-payments were offered for straight payments on first time fines and traffic school payments only. Generally speaking, among the courts that had electronic case management systems, there was no way to automate an interface for the e-payments to be processed directly into the case management system. From the customer’s perspective, the convenience of online payments appeared to be easy and time saving. However, the back-end processing inside the court was completely manual. The vendor typically sent a daily report to the court that listed paid fines from the previous day. Court staff would then enter the individual payments manually in the case management system.

Currently, Orange County Superior Court contracts with multiple vendors in order to provide these complex “e-services”. Each vendor may require court customers to establish login accounts in order to use their service. The vendor may also charge a convenience fee that is paid by the customer in order to use their service. For the purpose of this paper, the customer side of business is referred to as the “front-end”.

Also, for the purpose of this paper, the court side of business is referred to as the “back-end”. The vendors systems are programmed to interface directly to the court case

management system. The interface includes acceptance of payments, upload/download of filing documents, producing payment receipts and file stamping documents. However, there is still one component of the back-end that requires manual processing, the reconciliation of the funds that is completed on a daily basis by court staff.

E-payments received by the court are initiated by the customer using a vendor website. The vendor will consult with the court case management system to determine the amount due. The customer will provide the vendor with their credit card or checking/savings account number for payment authorization via an acquirer (the bank or financial institution that processes credit and or debit card payments for a merchant). Once the payment is approved by the acquirer, the vendor will interface the payment directly to the court case management system via a virtual cashier. Funds received by the vendor will settle to the court's bank account daily.

On a daily basis, court staff manually reconciles the previous e-payment transaction for each of the vendors separately. The reconciliation process requires court staff to match the vendors previous day transaction totals, against the case management system totals and then against the bank settled totals. This back-end process is completed for each of the multiple vendors.

This paper documents the process involved in the back-end including an outline of the multiple vendor processes. This paper also discusses possible "in-house" court e-payment options, and documents the benefits and challenges to both. This paper reviews the types of e-payment technology being offered now and possibly in the near

future. Finally, the paper suggests ways to improve efficiencies at the front-end and back-end of court e-services, ultimately increasing overall access to justice.

LITERATURE REVIEW

The literature review was performed with the intent of procuring a broad history and perspective of understanding the concept of electronic payment processes, including the challenges of multiple e-payment vendors vs. in-house vendors and the future of e-payments. Although there was very little research material analyzing the use of multiple e-payment vendors vs. an in-house e-payment solution, e-payments in general and the future of e-payments are widely discussed in the private sector. Consequently, the private sector research material in conjunction with the court provided surveys shaped the foundation for the focus of this paper.

Court Payments

With the advent of larger fines/fees and time payment plans, paying a court fine or fee has become somewhat cumbersome. There have traditionally been two options, pay by mail or pay in-person at the local courthouse.

Paying by mail was not so bad, assuming you actually received your courtesy mailer and instructions. Then it was just a matter of timing and waiting. Did they receive my payment? When will I get my traffic school information in the mail? My check cleared two weeks ago, but I have not heard anything from the court. These are thoughts we have all had at one time or another.

Then there was the option of driving in-person to the courthouse to pay. Though this was the most secure way of paying, it was also the most time consuming.

Considerations had to be made regarding courthouse clerk's office hours, distance to the courthouse, transportation, cost of transportation (including parking) and the biggest inconvenience, taking time off from work. Though not convenient, the benefit of making a payment in person was the direct contact with court staff. One could walk away with a receipt and all pertinent information needed for traffic school or a future court date. Of course, the consequence of not paying a court fine was the risk of having a warrant issued for your arrest. However, the threat of a warrant would soon phase out.

The first substantive analysis of delinquent fines, fees and forfeitures was written by Karen Wick in 1988 for *The Justice System Journal* (Wick, 1988). In her analysis, Wick found that the decrease in revenue in the State of Washington was as a result the Washington State Legislature decriminalizing all minor traffic offenses in 1980. Later she implicated new court rules that made collecting outstanding fines much more difficult by removing the arrest warrant as a sanction for defendants who fail to pay, or even appear. In her analysis, statistical data indicates that 85 percent of the minor traffic tickets filed in 1979, just before decriminalization, were paid without an appearance (i.e., bail was forfeited). In 1986, however, only 60 percent were paid without an appearance.

Laura Klaversma wrote an article entitled "Courts and Collections" published in *Future Trends in State Courts*, 2008 (Klaversma, 2008). In this article, Klaversma writes that a tension has existed between courts and other branches of government over the level of responsibility and involvement courts should have in collecting the fines and fees they assess. She further states that this tension has increased as governments

have faced more and more financial constraints and public scrutiny over the past several years.

In the experience of the Orange County Superior Court, the statements Klaversma wrote are accurate. Though the court attempts to have a well-rounded working relationship with local governments and justice partners, working relationships can be compromised when it comes time to balance the books. The accuracy of the revenue received from the fines and fees collected is equally important to all parties affected. Whether it is the local agencies, the county or the state, the amount collected is on everyone's radar.

In recent years, court fines and fees have become more expensive and difficult to pay. Lawmakers in the State Legislature appear to see traffic tickets as a source of revenue during tough economic times, and add fees that are used to fund state services.

Klaversma further explains in her article that several state judiciaries have made strides to improve collections within their states by creating and implementing statewide initiatives. Externally imposed legislation has at times been the impetus for initiating a particular program. She also explains that at other times, state judiciaries have created and sponsored legislation that could provide a better framework by which courts could change processes or develop programs to improve collections (Klaversma, 2008, para.8).

Up until the early 1990's most of the courts did not accept credit cards. The only forms of payment accepted by the courts were cash and checks. In the mid 1990's courts began to accept credit cards. There was much to consider with accepting credit cards. Some areas of concern were the placement of credit card terminals (which required phone lines), merchant fees to pay and possible chargebacks. Of course these items were all formalities all of which were eventually worked through.

E-Payments

In the late 1990's, courts developed their first "e-payment" process. Orange County Superior Court contracted with an e-payment vendor who would ultimately serve as the online processor for traffic ticket payments. Court customers now had the ability to make an internet payment to pay their traffic tickets. This was revolutionary in Orange County. Though this was the first sign of automation that would soon pave the way for a new digital era, there was still one problem, it was not fully automated. The court would upload citation data on a nightly basis to the vendors' servers. However, the communication was only one way. Court staff was still required to manually process the payments based on reports supplied by the vendor every morning.

These solutions were usually developed without much, if any, detailed analysis of their costs and impact on existing court processes. In a paper written in 2005 for the Conference of State Court Administrators ("Emergence of E-Everything", 2005, p.5), the authors write:

Whether electronic access initiatives are funded through existing budgets, legislative appropriation or grant funding, it is critical that courts ensure accountability by

developing detailed economic analyses for any new project. By presenting sound projections of costs and benefits, including new efficiencies and labor savings, courts are more likely to persuade the legislative branch and other grantors of the value of electronic access initiatives and ensure continued funding.

This is a perfect example of how court organizations tend to focus on the front-end (public side) of the judicial system and lose track of the back-end challenges (costs and benefits).

In the same article, the authors write about how courts have contracted with private vendors which charge users for electronic access to the courts. They note that this approach raises various concerns such as entrusting confidential information and security to external organizations and being able to monitor the quality of services provided. Court administrators must also ensure that waiver provisions exist for the indigent so that the virtual courthouse is equally accessible to all users.

E-Payments Today

Fast forward to 2013 and we find that technology has greatly improved. One no longer needs to be at home or a library to access the internet. We can access the internet from mobile laptop computers, tablet computers, smart phones and even televisions. As a court, the ability to provide increased remote access to justice now has endless possibilities.

Orange County Superior Court has made many technological improvements when it comes to case management systems. Of the two main systems that run parallel, the court now has the ability to program and create direct interfaces with external vendors who process the e-payment services. The court offers its customers the ability to make traffic and criminal payments over the phone or via the web. E-payments are no longer limited to credit cards. Customers can now make e-payments by using a checking or savings account. Customers can also submit new filings (e-filing) or court documents and pay the associated fees via the internet. Though not associated with e-payments, Orange County offers the ability for court customers to request an online extension on traffic citations, as well as the ability to reserve a court date. Customers can also purchase copies of court documents via the web in PDF format without having to leave the comfort of their home or office.

Future of E-Payments

A Forbes Magazine article reports that consumers are transitioning from paying with credit cards and cash to using whatever is easiest and most convenient for them. Furthermore, mobile payments are destined to be a key component of the evolving “digital wallet,” and investors need to be aware of this emerging market (Ciaccia, 2012, para. 4).

According to data from Ernst & Young (Ernest & Young, 2011), mobile payments are expected to be big business, with the market reaching a massive \$245 billion by 2014. The shift is coming rapidly, as payment methods are moving away from credit

cards, debit cards and cash to smartphones, tablets and other mobile devices (Ciacia, 2012, para. 5).

Historically, courts often fall behind the times when it comes to implementing payment solutions in comparison to the private sector. Amazon revolutionized the industry with online shopping. Starting in 1995 by selling books online, Amazon has become one of the largest online retailers in the world, selling everything from tubas and golf carts to dishwashers and diapers. Yet, there are many courts that have only recently started accepting credit cards at their payment windows, much less offering online solutions to pay fines or fees.

Bill Siwicki, Managing Editor of Mobile Commerce states that 65% of mobile and finance experts say that mobile devices represent the “future of money” by the year 2020 (Siwicki, 2013). Assuming that Siwicki’s statement holds true, if the historical approach taken by courts to technology is repeated, the courts will plan for the first roll-out of some sort of mobile payment solution by the year 2030. Courts need to be more proactive than that.

Those who believe mobile payments soon will go mainstream in the United States point out that consumers in many parts of the world are already paying with their mobile phones, and that money has largely been digitized in the modern economy. Mobile payments build on this ongoing digitization, but with an additional layer of security and convenience for consumers (Siwicki, 2013).

So, what is a Digital Wallet? Steve Schultz of the Huff Post Money describes the digital wallet as being no different from the leather wallet. He states that it's simply a case in which to store valuable stuff. Typically, it stores things related to money -- payment cards and cash. Other must-have items include identification, health care information, loyalty cards, photos, receipts, shopping lists, and checkbooks (Schultz, 2012, para. 3). However, he feels that the leather wallet has gotten smaller the last couple of years as people are moving to digital wallets without really noticing. He gives the example of how he used to store photos in his wallet. Now, he has dozens of photos on his smartphone that he can thumb through instead (Schultz, 2012, para. 4).

Though we all can relate to how valuable our smartphones have become, it is important that we look at a few of the new and future “Digital Wallet” trends and compare how courts could benefit from them. Three examples of “digital wallets” that are available now include:

1. Passbook (Apple iOS 6)
2. Google Wallet (Google)
3. Isis (AT&T and Verizon)

Passbook

Passbook was designed by Apple and is an application in the iOS 6 operating system that allows users to store coupons, boarding passes, event tickets, store cards, 'generic' cards and other forms of mobile payment. The application was released with iOS 6 in September of 2012.

Google Wallet

Google Wallet is a mobile payment system developed by Google that allows its users to store debit cards, credit cards, loyalty cards, and gift cards among other things, as well as redeem sales promotions on their mobile phone. Google Wallet uses near field communication (NFC) to make secure payments fast and convenient by simply tapping the phone on any PayPass-enabled terminal at checkout. The application was released in the United States in September of 2011.

Isis

Similar to Google Wallet, Isis Mobile Wallet is a mobile app that uses NFC technology to let one pay for purchases with just a tap of the smartphone. The Wallet holds credit, debit, and loyalty cards while organizing offers, deals, and promotions. The app was introduced in October of 2012.

All of these innovations depend entirely on the development and widespread use of “cloud computing”. Without it, the computing power, speed and flexibility needed by the users of mobile devices would not be possible.

Cloud Computing

A complete understanding of this is still emerging, but one expert describes it this way: “...a modern data center resource, built from low-cost components, managed as a whole, activated by end users on the network, and delivering automated results without either party knowing much about the other’s systems.” (Babcock, p.7) The developing consensus seems to be that this is not just another fad, but is the future of computing.

Cloud computing then, can simply be said to be the delivery of on-demand computing resources—everything from applications to data centers—over the Internet and on a pay-for-use basis. As such, it is the necessary platform for the increased use of mobile devices.

There are three types of Cloud Computing:

The Public Cloud



Public clouds are owned and operated by companies that use them to offer rapid access to affordable computing resources to other organizations or individuals. With public cloud services, users don't need to purchase hardware, software or supporting infrastructure, which is owned and managed by providers.

The Private Cloud



A private cloud is owned and operated by a single company that controls the way virtualized resources and automated services are customized and used by various lines of business and constituent groups. Private clouds exist to take advantage of many of

cloud's efficiencies, while providing more control of resources and steering clear of multi-tenancy.

The Hybrid Cloud



A hybrid cloud uses a private cloud foundation combined with the strategic use of public cloud services. The reality is a private cloud can't exist in isolation from the rest of a company's IT resources and the public cloud. Most companies with private clouds will evolve to manage workloads across data centers, private clouds and public clouds—thereby creating hybrid clouds

In his book entitled *Management Strategies for the Cloud Revaluation*, Charles Babcock states that the cloud is a set of major productivity gains in computing, each of which is a multiplier of standard computer power in its own right. These multipliers are converging in this new style of data center, combined with a new empowerment of the end user. He further explains that the cloud can host sophisticated software that has incorporated business rules, professional knowledge, and even specialized knowledge, such as a complex chemical process, and can use them to build a sophisticated product or service. And at the same time, the software can be activated and manipulated by a remote end user employing a home PC or an even simpler computing device. No longer does the customer have to go to the store to have an encounter with a knowledgeable floor salesperson (Babcock, p. 187).

The thought of the customer no longer having to go to the store to have an encounter with a knowledgeable floor sales person is right along the path of what courts are trying to accomplish these days. With the continuous reduction in state funding for courts, we need to look at additional ways to implement technological solutions that can provide increased customer service at a minimal cost without losing the integrity surrounding the confidentiality and security that comes with court business. Security and confidentiality is a challenge that Law Enforcement Agencies are also faced with.

The website of The International Association of Chiefs of Police (IACP) announced results of an IACP/SafeGov/Ponemon Institute survey of IACP member agencies. The survey examined how local and state law enforcement officials view the potential of cloud computing in the law enforcement environment and their plans for the future. A total of 272 agencies responded to the survey, and nearly three-quarters (71 percent) of the respondents were the chief executives of their agencies (International Association of Chiefs of Police [IACP] 2013, para. 1).

Over half (54 percent) of the agency respondents indicated that they had implemented or were planning or considering implementing cloud-based solutions in the next two years. While cloud email is currently the most popular law enforcement cloud application (17 percent), many agencies are considering adopting a much wider range of cloud applications within the next two years, including Criminal Justice Information Services (CJIS) access (51 percent), cloud storage (50 percent), records management, crime reporting, and mapping and analysis (each at 47 percent). Of those agencies

who indicated they were not adopting cloud computing, their primary concerns were that their current applications are not being offered as cloud-based solutions (54 percent), and that cloud-based services do not provide sufficient security for law enforcement systems and data (44 percent) (IACP 2013, para. 2) .

The IACP has now released "Guiding Principles on Cloud Computing in Law Enforcement". Developed in collaboration with key law enforcement subject matter experts from around the nation as well as experts from SafeGov.org, the principles establish clear and concise parameters and a path forward for the exploration of cloud-based computing solutions and services by law enforcement (IACP 2013, para. 6).

As recently as January 31, 2013 the IACP held a nationwide symposium in Washington DC entitled "Leveraging the Cloud for Law Enforcement" to discuss these principles. The IACP principles focus on addressing some of the most tangible benefits that cloud computing offers, including cost savings, rapid deployment of critical resources, off-site storage and disaster recovery as well as meeting dynamic operational needs, while maintaining the security of systems and the proper use of data.

Key principles include:

- FBI CJIS Security Policy Compliance – Services provided by a cloud service provider must comply with the requirements of the CJIS Security Policy.
- Data Ownership - Law enforcement agencies should ensure that they retain ownership of all data.

- Impermissibility of Data Mining - Law enforcement agencies should ensure that the cloud service provider does not mine or otherwise process or analyze data for any purpose not explicitly authorized by the law enforcement agency.
- Confidentiality – The cloud service provider should ensure the confidentiality of law enforcement data it maintains on behalf of a law enforcement agency.

Like the IACP, courts must strive to do something similar and develop their own guiding principles on cloud computing. Though the courts must evolve, public trust and confidence must always be the guiding factor.

METHODS

As previously stated, the purpose of this project is to evaluate the use of electronic payments in the Orange County Superior Court. This research set out to measure and assess the impact electronic payments will have on the operational aspects of the court, as well as the public, now and in the foreseeable future.

There were three methods of research employed to evaluate court e-payments and the future of e-payments:

Finance Department Survey: A local survey was completed by the Finance Department within the Orange County Superior Court regarding the current multiple vendor e-payment process. The goal of the survey was to identify the current practices used when conducting business with multiple e-payment vendors. It was also the intent to capture possible challenges within their practices as a result of overseeing payment received via multiple vendors.

Finance Department Survey	
Question	Purpose
1. What type of service does each vendor provide (IE: Web, IVR, E-filing...).	To obtain the different type of services offered by each vendor contracted by the court.
2. Does this vendor require customers to create an account directly on their website in order to perform the service they provide on behalf of the court?	To explore the requirements needed for court customers to obtain services offered by each vendor.

3. Does this vendor charge a convenience fee? How much?	To explore the differences in cost required for court customers to obtain services by each vendor.
4. Does Accounting process an individual daily reconciliation for this vendor?	To gauge the level of effort required to complete a financial reconciliation of revenues received by each vendor.
5. Does Accounting complete an individual bank deposit order for this vendor?	To gauge the level of effort required to complete a financial reconciliation of revenues received by each vendor.
6. How many software applications or web service sites do you visit to perform this reconciliation (IE: Vision, SAP, V3, Web...)?	To gauge the level of effort required to complete a financial reconciliation of revenues received by each vendor.
7. On a daily basis, how much time is spent by the Accounting staff processing the daily reconciliations for each vendor?	To gauge the level of effort required to complete a financial reconciliation of revenues received by each vendor.
7. What do you find most challenging about having multiple e-payment vendors as it pertains to your “back office” Accounting duties?	To gauge the level of effort required to complete a financial reconciliation of revenues received by each vendor.

Table 1 – Finance Department Survey Questions

Developing an In-House e-Payment Solution: A structured interview was conducted with a technology professional in the Orange County Superior Court that discussed the process for creating an “in-house” e-payment solution. This professional has experience in developing in-house e-payment solutions and has done so for a non-profit organization in Orange County and is also part of the e-payment team for the Orange County Superior Court.

The fundamental question posed was, “*What does it take to develop an in-house e-payment solution?*”

The purpose of this question was not that the readers of this paper develop an in-house e-payment solution based on his comments; it was merely to provide a high-level overview of the steps required in doing so. There is greater detail that is not outlined here including, the direct interface to the court case management system and the back-end banking set-up.

Statewide E-Payment Technology Survey: A statewide survey was developed, tested and sent to the 58 Superior Court Technology Department heads throughout California, of which, 22 (38%) responded. The goal of this survey conducted through Survey Monkey was to identify and gain an understanding of possible future trends for remote e-payment services.

To ensure the data integrity of the document, a draft survey was prepared and sent to two court executives for the purpose of pre-test and review analysis.

Statewide E-Payment Technology Survey	
Question	Purpose
1. Court Jurisdiction.	To obtain the location of the court responding to the survey.
2. Size of Court (County Population).	To obtain the size of the court responding (by county population).

<p>3. Which remote payment solutions does your court currently offer?</p>	<p>To explore which of the remote payment services are courts currently offering court customers.</p>
<p>4. Does your court offer a mobile web version of your internet site?</p>	<p>To ascertain how many courts are already offering a mobile web version of their court public internet site.</p>
<p>5. Is your court considering alternative electronic payment models that may be leveraged instead of courthouse walk-up windows or mail?</p>	<p>To explore under current budget constraints, which electronic payment models courts are considering instead of traditional courthouse payment windows.</p>
<p>6. Are your court customers requesting the ability to make mobile app payments (i.e. Android or Apple iOS)?</p>	<p>To gauge public demand for mobile app solutions so that they can make their court payments via their mobile device.</p>
<p>7. Could the court transition walk-in customers to mobile app solutions (i.e. Android or Apple iOS)?</p>	<p>To ascertain the Technology Departments position on transitioning from payment windows to mobile app payments.</p>
<p>8. Are you concerned about compliance and security issues with the future trends of e-payment options as they relate to the court?</p>	<p>To ascertain the Technology Departments concerns over security issues as they relate to e-payment solutions within the courts.</p>
<p>9. Is your current online payment solution (vendor or in-house) built to support the latest technology features and functionality?</p>	<p>To explore how well prepared the courts are with today's technology as it relates to electronic payment solutions.</p>
<p>10. Which future e-wallet alternative is most likely to gain traction within the courts?</p>	<p>To explore how well prepared the courts are for future trends in electronic payments.</p>
<p>11. If a court were to devise processes to accommodate the electronic wallet or other smartphone driven payment options, what might they look like? Would we be able to eliminate some existing processes and/or FTEs? How complicated would the technology be that the court would have to install?</p>	<p>This open ended question gauges the thoughts of the Superior Court Technology Departments as it relates to future electronic payments, impact on court budgets directly related to FTE cost savings and the complexity for courts to implement such solutions.</p>

<p>12. Are there other functional areas of court operations that might eventually benefit from smartphone technology, e.g., filing, document distribution?</p>	<p>The question explores what other areas of the court can benefit by having electronic payment smartphone apps.</p>
<p>13. Cloud computing is transforming business at a rapid pace. Courts cannot afford to be left behind. How would you rate this statement?</p>	<p>To ascertain the Technology Departments position on cloud computing within the courts by comparison with the private sector.</p>
<p>14. What are your thoughts of cloud computing in a court environment?</p>	<p>This open ended question gauges the general thoughts of the Superior Court Technology Departments as it pertains to cloud computing in a court environment.</p>

Table 2 – Statewide E-Payment Technology Survey Questions

FINDINGS

Multiple Vendors

At the time of writing this paper, Orange County Superior Court contracts with multiple vendors in order to provide online services. It is important to discuss the reasons why Orange County Superior Court contracts with multiple e-payment vendors, most of whom are Electronic File Service Providers (EFSP). Effective January 1, 2013, pursuant to amendments to California Code of Civil Procedure section 1010.6 and Orange County Superior Court Rule 352, all documents filed in limited, unlimited, and complex civil actions **must be filed electronically** unless the Court rules otherwise. This rule was adopted due to the recent passage of legislation in (AB 2073) that authorizes mandatory electronic filing pilot project in the Superior Court of Orange County only.

California Code of Civil Procedure section 1010.6 also requires that the court and the parties shall have access either to more than one electronic filing service provider capable of electronically filing documents with the court.

Table 3 below identifies the vendor (by number), the type of online service they provide and the revenue path to the court.

Online Vendor Service Providers		
Vendor	Service Provided	How the Court Receives Its Revenue
Vendor #1	Civil/Small Claims Efiling	Court Issued Merchant Accounts
Vendor #2	Civil Efiling	Direct ACH (from Vendor to Court)
Vendor #3	Civil Efiling	Court Issued Merchant Accounts
Vendor #4	Civil Efiling	Direct ACH (from Vendor to Court)

Vendor #5	Civil Efiling	Direct ACH (from Vendor to Court)
Vendor #6	Civil Efiling	Direct ACH (from Vendor to Court)
Vendor #7a	Traffic/Criminal Payments (IVR/Web)	Court Issued Merchant Accounts
Vendor #7b	Family Law Online Copy Requests	Court Issued Merchant Accounts
Vendor #7c	Civil Online Copy Requests	Court Issued Merchant Accounts

Table 3 – Multiple Vendors Online Service Providers

Multiple Vendors Finding #1 – At the time of writing this paper, Orange County Superior Court contracts with seven vendors. There are another eight vendors in the process of being awarded contracts for e-file/e-payment services. That will bring the total e-payment vendors contracted by Orange County Superior Court to 15. One vendor (#7 in Table 3) was awarded three contracts since they provide payment services for three different online e-payment services. Each vendor contract is negotiated separately and requires renegotiation during different times throughout the year.

Multiple Vendors Finding #2 – Upon awarding a contract to the vendor, the Court Technology Department in conjunction with various court operational teams work with the vendor to provide support during the programing and testing phases of the e-service project. Orange County Superior Court employs dedicated technology teams that oversee the implementation of e-services.

Multiple Vendors Finding #3 – As a result of Orange County Superior Court offering services through multiple providers, court customers are redirected from the court website to a proprietary vendor website. Customers are then required (specifically for e-

file services) to create an online account at the vendors website. Also, depending on the vendor and service provided, there may be a convenience fee that ranges from \$0.90 to \$14.95. Example: To e-file, the convenience fee ranges \$4.95 to \$14.95.

Multiple Vendors Finding #4 - Though these vendors provide services that have allowed the court to implement much needed cost saving practices on the front-end (i.e., shorter public lines, need for fewer open public windows, faster processing of payments and documents), it has also created an accounting bottleneck on the back-end. For each of the revenue streams listed in Table 3, there are separate paths as to how the money paid is identified, reconciled and deposited into the court bank accounts.

When asked about the challenges they face during the reconciliation of monies for multiple vendors, the Finance Department stated that the process for e-filing vendors is still a work in progress. They noted that the mandatory e-filing law that went into effect on January 1, 2013 in Orange County has created a significant increase in the number of daily transactions. Prior to mandatory e-filing, the e-filing process was overseen by an operational e-filing team whose only job was to process civil e-filing. Having dedicated operational staff manage the civil e-filing process in a centralized location kept reconciling issues to a minimum.

Now, with mandatory e-file, civil department clerks at all court locations process e-filing. As a result, the Finance Department has seen an increased number of reconciliation issues due to processing errors. An analysis is being made to determine ways to automate/streamline this process, which currently takes approximately 8-16 total hours per daily reconciliation.

Multiple Vendors Finding #5 – Using the civil e-file pages of the court public website, the court customer has the option to pick from four of the seven vendors for this service. Upon clicking on each tab, they are redirected to the vendor’s website. Two of the four sites display the court logo as confirmation that the customer is still doing business with Orange County Superior Court. However, the other two websites are generic and give no indication of their affiliation with the court.

Establishing an In-House Solution

Finding #1 - The technology and approach for developing an in-house solution is already reasonably well settled, involving the following six steps as shown in Figure 1.

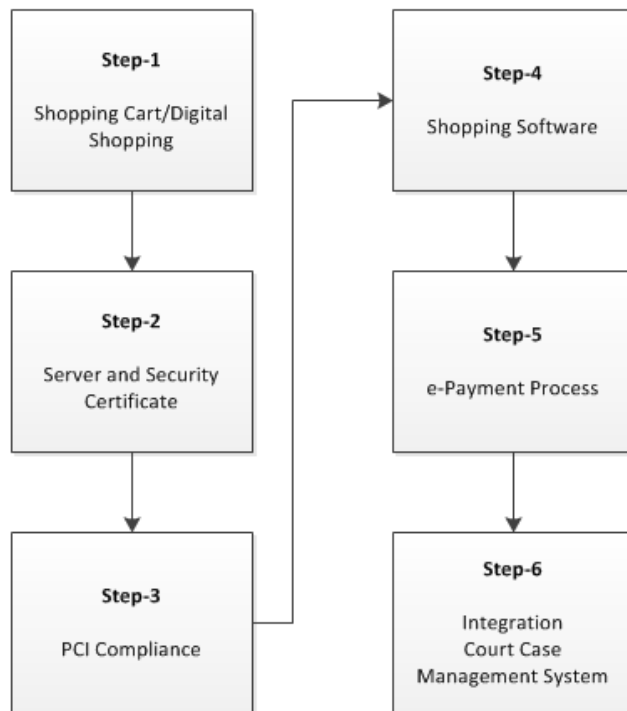


Figure 1 – Six Steps to Establishing an In-House Solution

The elements described in Figure 1 can be described as follows:

Shopping Cart/Digital Store

Typically, one can create or purchase a software product called a “shopping cart application” or a “digital store” to present products and services via the web. This can be installed on a physical server you purchase, configure and install, or it can be a “virtual” server you pay for via a third party company. The same server can be used for processing payment transactions and for presenting products and services if one has a small number of transactions, or one can use multiple servers for larger volumes of transactions. There are companies that can provide all of these products together, so all one needs to do are pay a monthly fee, and add the products to the website.

Server and Security Certificate

In setting up a digital store, the first thing that needs to be done is to set up a server and install a security certificate on it. A certificate uses encryption to make it difficult for intruders to intercept confidential information. Secure Socket Layer (SSL) technology is used to encrypt the data. One can apply for an SSL certificate online from companies like GoDaddy.com or Symantec.

After installing an SSL certificate, the site needs to be registered with a digital authentication service. A digital certificate validates that the site receiving the customers' information is the correct one. It assures customers that the site is legitimate and that their information is encrypted.

PCI Compliance

The site must be PCI compliant. The PCI (Payment Card Industry) Security Standards Council offers robust and comprehensive standards and supporting materials to enhance payment card data security. These materials include a framework of specifications, tools, measurements and support resources to help organizations ensure the safe handling of cardholder information at every step. The keystone is the PCI Data Security Standard (PCI DSS), which provides an actionable framework for developing a robust payment card data security process -- including prevention, detection and appropriate reaction to security incidents.

Shopping Software

There is a need to build or buy shopping software that allows a customer to choose products from the site and add them to a virtual shopping cart. When customers are ready to complete their orders, they click on a "checkout" link where they enter their credit card information.

Set Up E-Payment Process

A system to process credit card payments and an internet merchant account with a bank are needed. Credit card payment processing services are available through online companies such as PayPal, Authorize.net and VeriSign. They provide software that validates the customer's credit card information over a secure server.

Integration with Court Case Management System

Developing an interface with the court case management system will fully automate the in-house solution payment process. The interface can be programmed to provide real time integration which allows court payments to be processed into the court case management system directly.

Statewide E-Payment Technology Survey

As noted above, this survey generated responses from 22 of California 58 Superior Courts, a rate of 38%. And responses were given for all 14 questions asked.

The first question was to identify the respondents by location (county) and is not discussed in this section for reasons of promised confidentiality.

Size of Court (County Population):

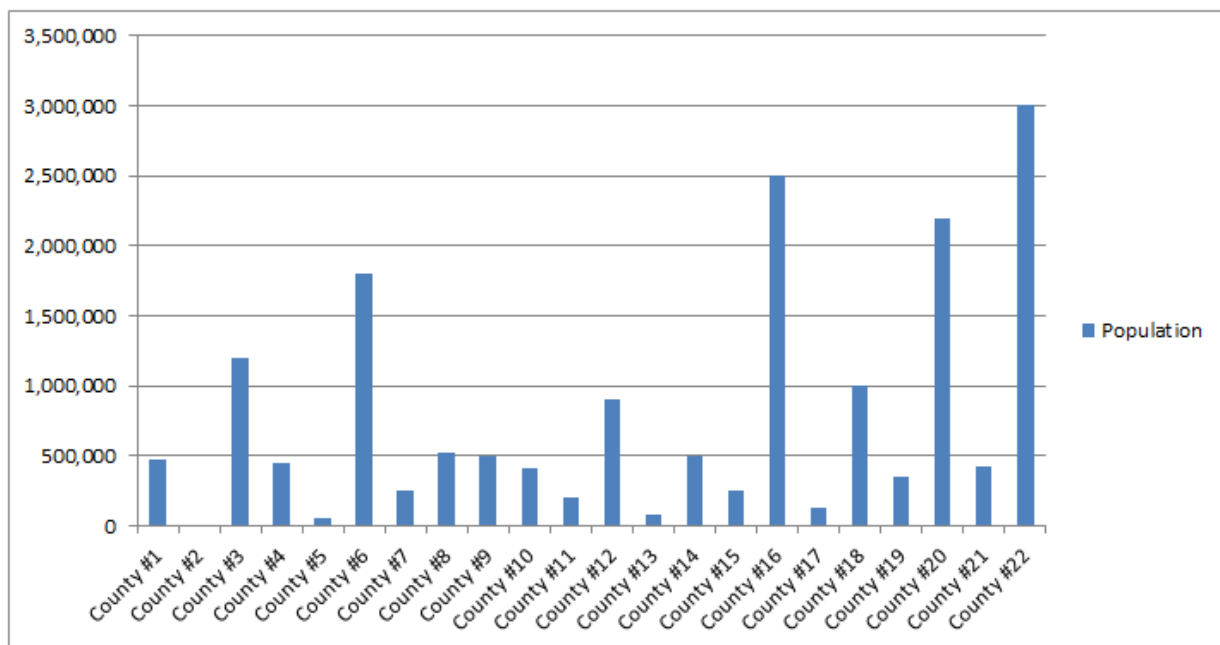


Chart 1 – Statewide E-Payment Technology Survey – Responses to Question 2

Statewide Survey – Finding 1: The results from this question show that the respondents surveyed range from smaller courts (county population of 3,250) to larger courts (county population of 3 million).

Which remote payment solutions does your court currently offer?

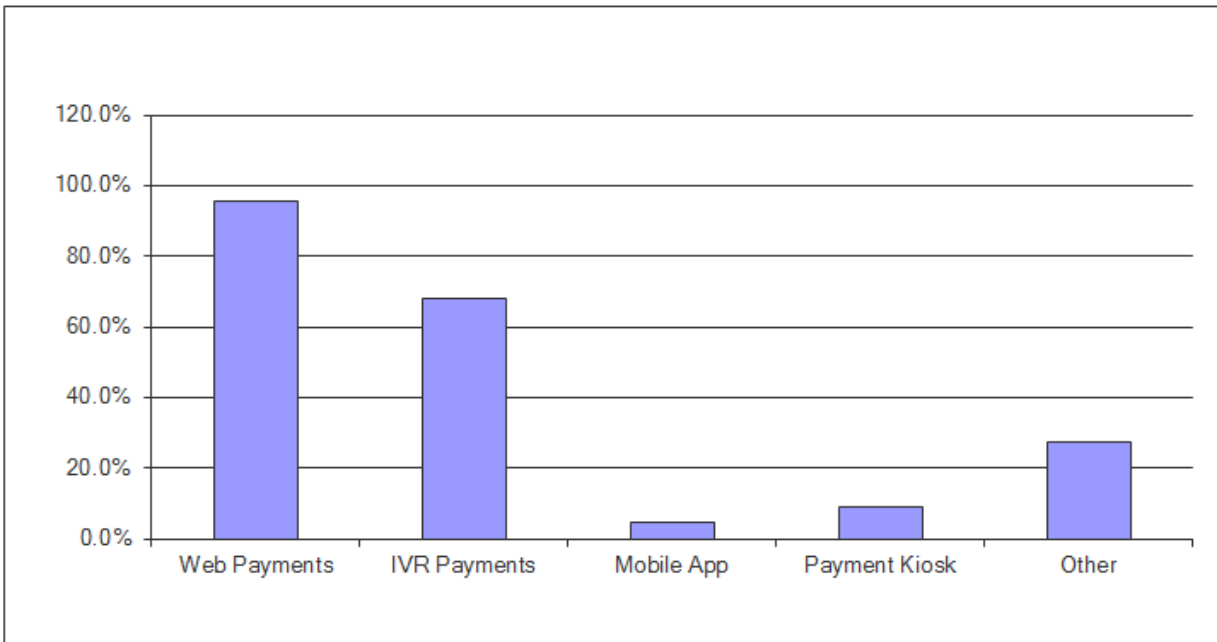


Chart 2 – Statewide E-Payment Technology Survey – Responses to Question 3

Statewide Survey – Finding 2: The survey showed that 95.5% of the courts already offer payment options via the web and 68.2% of the courts already offer payment options via a telephone IVR system. Two courts have implemented payment kiosks, one court has implemented a mobile app and one court responded that they currently do not offer any type of remote payment solutions.

This survey question also offered an answer of “other” for remote services being offered. Some of the answers were: Mail, Remote Cash Payments (Western Union) and manual credit card payments by calling the clerk’s office directly.

Does your court offer a mobile web version of your internet site?

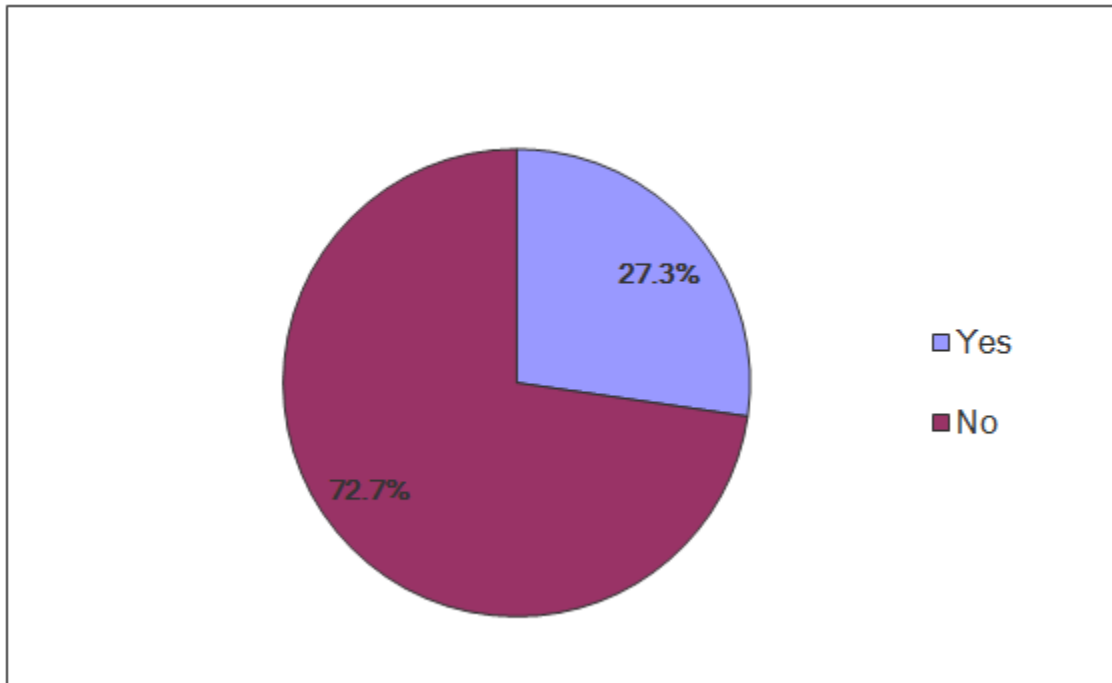


Chart 3 – Statewide E-Payment Technology Survey – Responses to Question 4

Statewide Survey – Finding 3: Respondents to this survey question were asked if they offered a mobile web version of their court internet site. The survey resulted in 72.7% of the courts not having mobile web versions of the court internet sites and only 27.3% did.

There were five courts that did offer a mobile web version of their internet site. Of the five courts, four were smaller counties (between 200,000 and 500,000 population) and only one court from a larger county (2.2 million population) offering a mobile web version of their internet site.

Is your court considering alternative electronic payment models that may be leveraged instead of courthouse walk-up windows or mail?

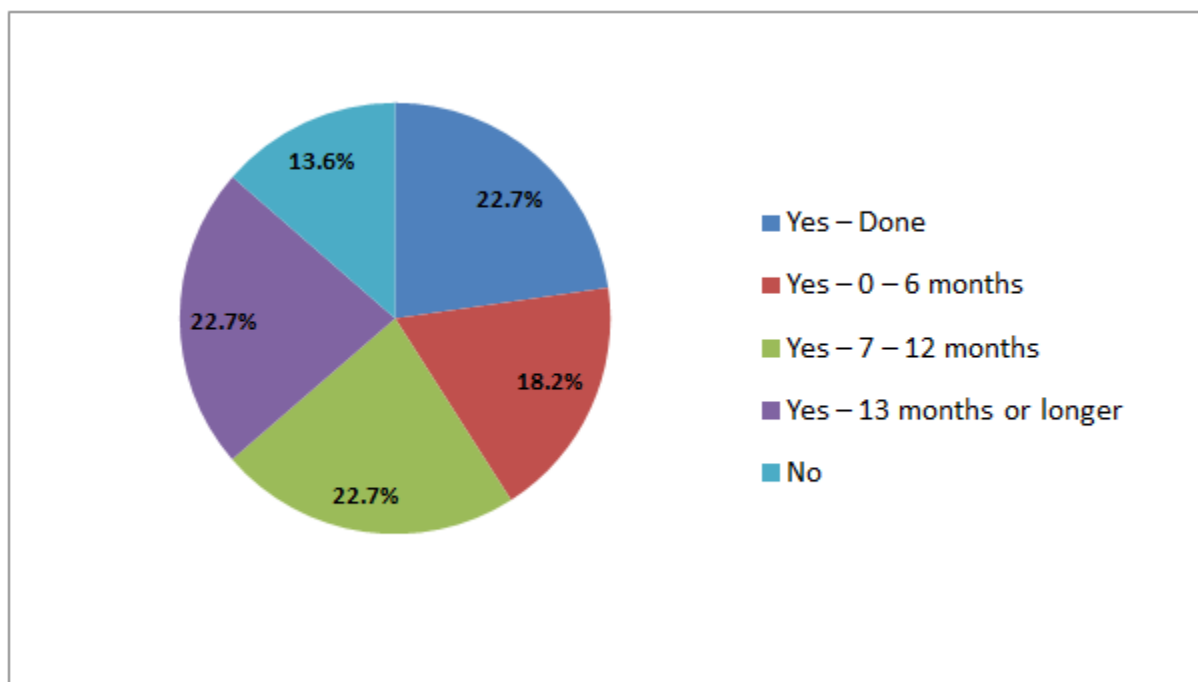


Chart 4 – Statewide E-Payment Technology Survey – Responses to Question 5

Statewide Survey – Finding 4: Respondents to this survey question were asked if their court is considering an alternative electronic payment model that may be used in lieu of a traditional courthouse payment window or mail payments. The survey resulted in 27.7% of the courts stating that they have already done so; 18.2% stated that they will within six months; 22.7 stated that they will within 7 – 12 months and 13.6% stated that they will, however, not for another year.

The courts that have already implemented or were planning to implement were asked to specify the kind alternative electronic payment solution they had chosen. Some of the answers were: IVR, Online (Web) Payments, Kiosks and Fiserv.

***Are your court customers requesting the ability to make mobile app payments
(IE: Android or Apple iOS)?***

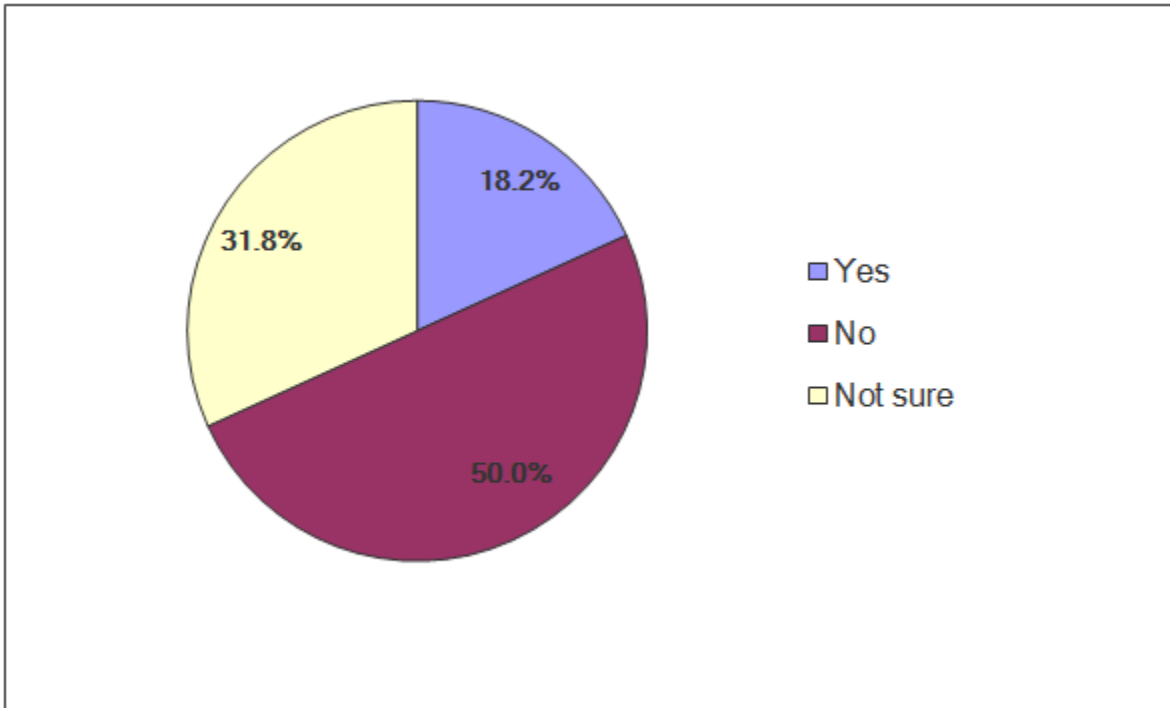


Chart 5 – Statewide E-Payment Technology Survey – Responses to Question 6

Statewide Survey – Finding 5: Respondents to this survey question were asked if their court customers were requesting the ability to make mobile app payments via their mobile devices (Android or Apple iOS smartphones or tablets). The survey resulted in 18.2% of the courts stating that they have had this request, while 50% stated they have not and 31.8% stating that they did not know.

There were four courts in which court customers requested the ability to make mobile app payments. Of these, three were from larger counties (1 million or more population) and only one from a smaller county (350,000 population).

Could the court transition walk-in customers to mobile app solutions (Android or Apple iOS)?

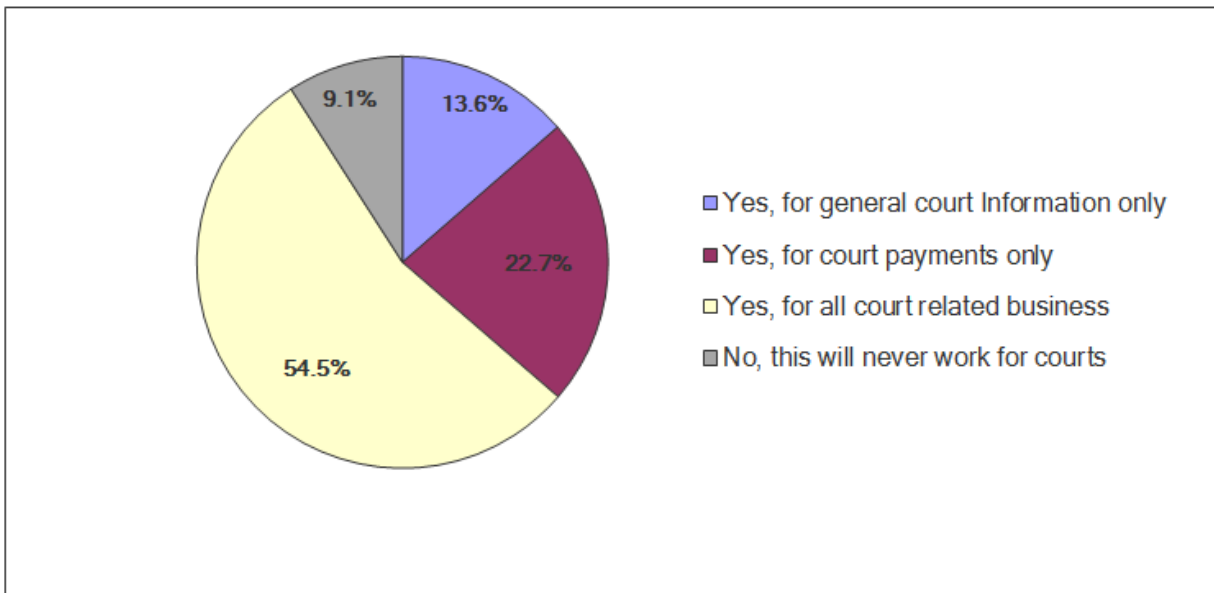


Chart 6 – Statewide E-Payment Technology Survey – Responses to Question 7

Statewide Survey – Finding 6: Respondents to this survey question were asked if they felt that the court could transition walk-in customers to use mobile app solutions via their Android or Apple iOS smartphone or tablet. The majority of the respondents (54.5%) felt that the court could in fact transition walk-in court customers to use mobile app solutions directly from their smartphones or other mobile devices. While 22.7% felt they could, for payments only and 13.5% felt that only general court information could be transitioned to a mobile app solution. Two courts (9.1%) felt that courts could not do this.

Are you concerned about compliance and security issues with the future trends of e-payment options as they relate to the court?

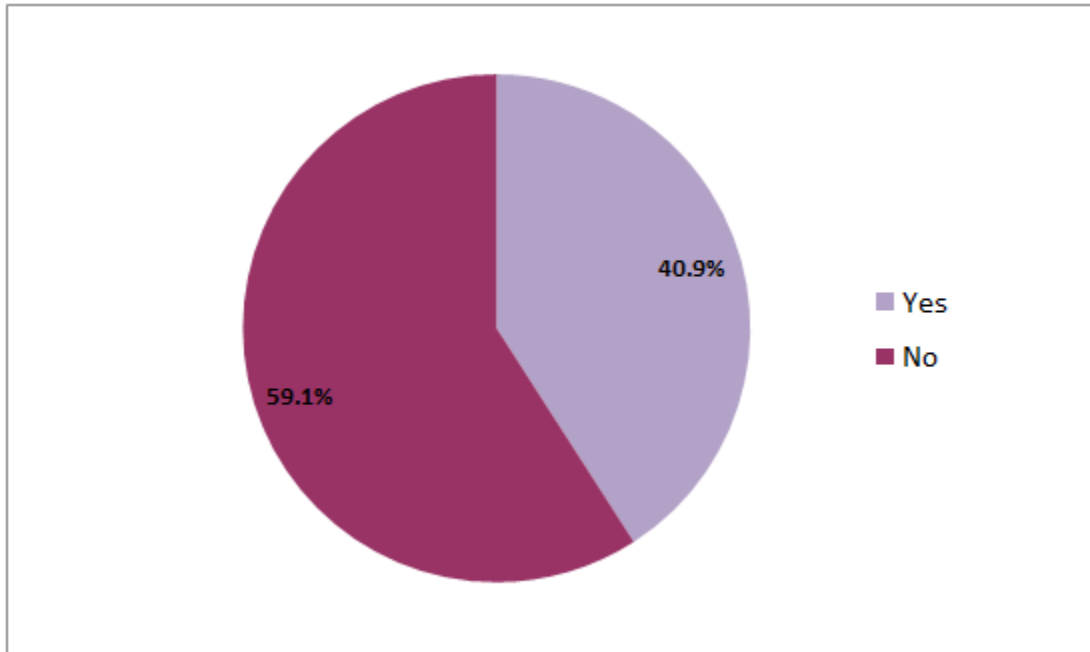


Chart 7 – Statewide E-Payment Technology Survey – Responses to Question 8

Statewide Survey – Finding 7: Respondents to this survey question were asked if their court was concerned about compliance and security issues with future trends of e-payment options. The results to this survey question were almost equal. Nine (40.9%) of the courts are concerned about compliance and security issues with the future trends of e-payment options, while 13 courts (51.9%) are not.

Is your current online payment solution (vendor or in-house) built to support the latest technology features and functionality?

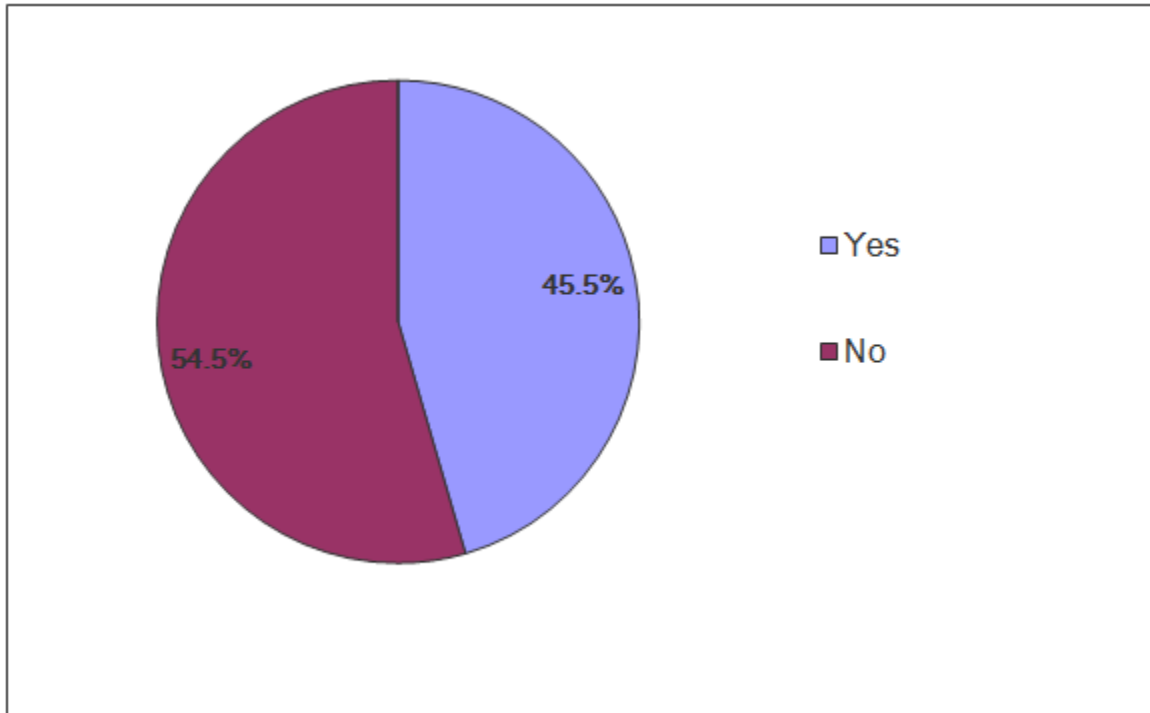


Chart 8 – Statewide E-Payment Technology Survey – Responses to Question 9

Statewide Survey – Finding 8: Respondents to this survey question were asked if their current online payment solution was built to support the latest technology features and functionality. Some 45.5% of the courts felt that their online payment solution is built to support the latest technology features and functionality, while 54.5% felt that they were not.

Which future e-wallet alternative is most likely to gain traction within the courts?

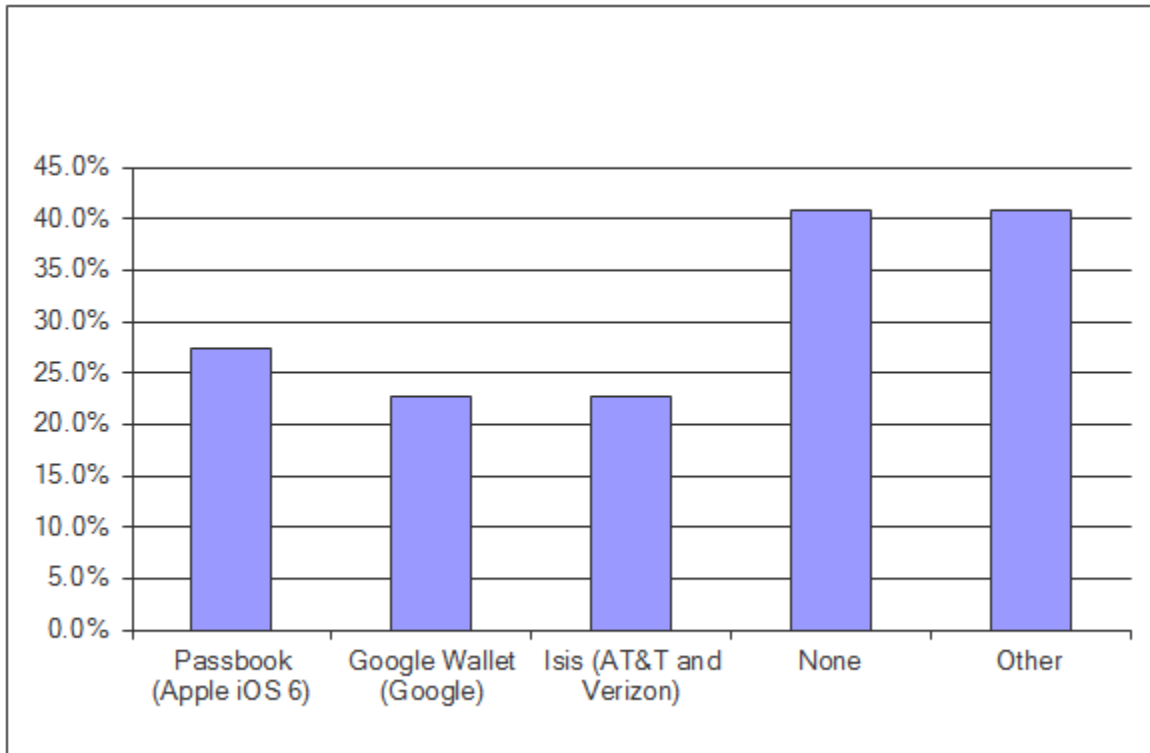


Chart 9 – Statewide E-Payment Technology Survey – Responses to Question 10

Statewide Survey – Finding 9: Respondents to this survey question were asked which future e-wallet alternative is most likely to gain traction within the courts. The results indicate that while many courts were able to choose one of the three suggested e-wallet solutions listed in the answers, most others felt unsure or simply had no idea as to what the future holds for the future of e-wallets in the court.

If a court were to devise processes to accommodate the electronic wallet or other smartphone driven payment options, what might they look like? Would we be able to eliminate some existing processes and/or FTEs? How complicated would the technology be that the court would have to install? (Open-Ended Question)

FTE's would not be reduced because reconciliation for CMS would still need to occur, even if integrated with the CMS.
Because we are now at a minimum FTE staffing level, it would help free up clerk time, not reduce staffing. A direct portal into the County's fines/fees holding account and web reporting access would suffice.
Potentially in counties where technology use, and web presence is the norm. In smaller more rural counties, I believe the adoption rate would be much more limited
This is not currently something our court can do. We will probably follow on the coattails of a larger court when they have worked out the kinks.
Technology required straightforward but not trivial. Will not eliminate effort or streamline processes until e-wallet becomes pervasive; it is not yet.
All things considered the public and audience needs to drive the technology solutions. Every region is obviously going to differ based on demographics
I can foresee not the elimination of FTE's, but rather reassignment to other duties.
Staff still needs to manually verify/reconcile the payments brought in by the e-payment option. You may offset "counter clerk" staff with "accounting/audit" staff.
Either set up an account for payments through RRD and use the e-wallet for payments at the window to make the transaction much quicker or use the e-wallet at a kiosk or on the web to eliminate having to come to the court - reducing staff time.
Without integration into the CMS, there would be no way to reduce staffing - just as much work would be required to accept one of these payments as it would a traditional IVR or web-based payment.
Electronic filing would probably have a larger impact for my Court right now. But, electronic payment is right behind it. Depending on end user acceptance, I imagine that my court could see a minimum of 1 FTE savings. For Humboldt, the technology would need to be purchased and data connectors written (contracted work).

Heavy question. However, from an initial thought, I don't foresee ewallet transactions being too much more complicated than standard electronic payments. Courts should press their payment vendors and engines to support/work with E-wallet providers. Similar to PayPal - thousands of companies are now supporting PayPal as a payment option.

I think a 3rd party provider would leverage the existing application and make them e wallet compatible. I do not think this will save FTEs

Entirely dependent upon adoption rate. We would link to case management so daily overhead would be limited to balancing and problem resolution.

Based on IVR and IWR experience, it should reduce the labor to process. FTEs are usually not 'reduced' but 'reallocated' to other tasks.

Pay my fines and fees with a single click. Instead of typing in credit card info the payment capability will already exist on the phone and it will be a simple click (think 1 click buying on Amazon).

Chart 10 – Statewide E-Payment Technology Survey – Responses to Question 11

Statewide Survey – Finding 10: Chart 10 above contains answers from respondents based on the above open-ended question. Most saw little or no impact on staffing and focused on the technological implications of doing this. There was a wide range of opinion about whether this would be easy or not.

Are there other functional areas of court operations that might eventually benefit from smartphone technology, e.g., filing, document distribution? (Open-Ended Question)

Warrants could be an area in which smart phone technology could apply.
efiling/document submission.
All
Unsure
Yes, I can see E-filing and document distribution as being a possibility.
Notifications, document retrieval and view, traffic infraction processing, information distribution.
Other case related tasks: Change DTP/DTA, Request Court Trial. Remote trials via video for infractions and low risk minor offenses
With smartphone/tablet progression, laptops are being phased out. I can see mobile filing in most Courts in the next 4-5 years.
Yes! e-filing, jury, document distribution, etc.
I believe that in the future filers could file with the court using their smartphones or tablets. The technology simple needs to be adaptable to mobility.
Smartphones are a tremendous convenience, but not ideal for filing/reading court documents. Future developments should revolve around simple but frequent tasks such as checking juror status, making payments, checking calendars, reading brief rulings, getting directions & parking instructions.
Access to Attorney Portal for case management/updates and e-filing submittals and status.
Juror check-in
Requesting a Court date, Juror check-in etc
Jury duty.
Translation.

Hearings - replace CourtCall.
Juror Status and Juror questionnaire. Hearing scheduling, Case activity alerts.
Electronic filing, filing status updates, calendaring, and electronic document distribution.
Jury, SMS notifications for case status change, FTA, FTP, etc.
Filing and remote court appearance.
Noticing, jury check in
E delivery of service, reminders, many of the functions..
Self Help services, sharing of information, case alerts.

Chart 11 – Statewide E-Payment Technology Survey – Responses to Question 12

Statewide Survey – Finding 11: Chart 10 above contains several answers from respondents based on the above open-ended question. Almost all respondents saw multiple potential applications for mobile devices in court operations. Only one was unsure.

Cloud computing is transforming business at a rapid pace. Courts cannot afford to be left behind. How would you rate this statement?

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
36%	18%	28%	18%	0

Chart 12 – Statewide E-Payment Technology Survey – Responses to Question 13

Statewide Survey – Finding 12: Respondents to this survey question were asked how would they rate the following statement: “Cloud computing is transforming business at a rapid pace. Courts cannot afford to be left behind.” Results indicated that 36% (8 courts) strongly agreed, 18% (4 courts) agreed, 28% (6 courts) were neutral and 18% (4 courts) disagreed.

What are your thoughts of cloud computing in a court environment? (Open-Ended Question)

Clouding computing has its place in any organization. Depending upon the type of data the business is in will determine whether cloud computing is applicable for that business.
As long as security issues are resolved, we would definitely support cloud commuting vs. regional tech centers.
All for it Office 365 and Exchange
I have real concerns with the management of cloud systems. They include, the separation of data, user access control, data security, security around required court interfaces, and how secure is the data being transferred from court to cloud. I do believe the cloud computing has its benefits but there are certainly some very real risk as well.
It could be useful in a smaller court environment.

Cloud computing is just the latest buzzword to describe the natural evolution of computing environments. It provides some new functionality that can be utilized in some situations but it doesn't mean everything needs to move to that model.

Over time it may become more prevalent but for now it's more important to adopt it where it makes sense rather than moving everything blindly to that model.

It is very complicated with regards to security and confidentiality. There are also infrastructure considerations. It completely changes the way court systems have historically operated. I support the efforts, but the personnel and financial resourcing for these efforts would currently be very impacting to my court.

I'm all for it. Our Court is currently running our e-mail environment via cloud.

There are several major risks in moving applications to the cloud such as 1) Security -- Privacy and Confidentiality 2) Data Governance, 3) Regulatory compliance, 4) Recovery, 5) Investigative support and 6) Long-term viability.

I agree that an internal cloud would/could be advisable. An externally hosted cloud solution maybe not.

Every court must figure out for them if the risks outweigh the benefits.

There will be great benefits to the court as long as applications are proven and perceived as increasing staff efficiencies and being secure and easy to use by the court staff.

Cloud computing makes a lot of sense for a small court like ours, reducing hardware footprint, increasing data availability, and dovetailing nicely into disaster recovery planning. Response time and latency of applications using the cloud for data need to be well examined before implementation to ensure that the application still performs satisfactorily.

Courts need to carefully evaluate which services make business sense to migrate to the Cloud.

Our court currently does not do e-filing so no use for the cloud.

Our images could go in the cloud but is it secure enough?

Case management data in the cloud, maybe if secure enough.

The cloud would be nice for backups that would save in having a SAN, backups and storage.

Very concerned about having sensitive information (emails, documents) stored in the cloud.

I assume you are not talking about a locally installed cloud environment. As such there are risks associated with access to data and the security thereof. For my court, there is only one internet link outside of Humboldt. This poses a significant risk to business process as access to cloud services could easily be severed with no failover.

Strongly agree and already implementing in regards to "private" cloud. Fresno is 95% virtualized on the server side and only deploying virtual desktop (VDI) technology going forward.

A private cloud may be a possible solution. The nature of our transaction may prohibit the public cloud.

The cost savings make a compelling case.

The cloud is a good choice for some applications. I am a bit old school and think that you are only as strong as your weakest link. Typically, communications has been the weakest link. I still do not see communications uptime at 99.999 percent.

Inevitable. Budget pressures will drive us there. In many ways the cloud is MORE secure than what we have.

Chart 13 – Statewide E-Payment Technology Survey – Responses to Question 14

Statewide Survey – Finding 13: Chart 13 above contains numerous interesting answers from respondents. Most agreed with the feasibility of cloud computing for courts. The major concern was with security. Also, external (public) vs. internal (private) clouds are an issue.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion 1a: There was a Finance Department back-end reconciliation bottleneck that was created by contracting with multiple e-payment vendors to provide front-end services.

The local Finance Department survey/questionnaire results showed that during the daily reconciliation process, the Finance Department staff is required to access two to three reports:

1. Court Case Management System reports identifying the daily transactions processed for each vendor.
2. Vendor issued reports identifying the daily transactions processed and uploaded to the court.
3. Bank deposit report for the vendors that issue a daily ACH payment for the previous days transactions.

The survey/questionnaire also showed that there are seven contracts with e-payment vendors and another eight in the upcoming months. That would bring the total to 15 e-payment vendors and possibly 45 reports to print and revenues to reconcile on a daily basis. Some of the other challenges encountered were that the court reports were found to be insufficient (lacking data), while some of the vendor reports were unable to export (either as PDF or Excel). As a result, the “daily” reconciliation would take 8-16 total hours to complete.

Recommendation 1a: The court should reengineer this process. Teams comprised of the court's Technology Department, Finance Department and Civil Operations Department would benefit by coming together to discuss in detail the flow of their work (by order of department) and discuss their challenges. By way of this meeting, the Technology Department should develop a process that provides the tools needed by the Finance Department.

Conclusion 1b: The high error rate by staff that process e-filing contributes to the back-end reconciliation issues encountered by the Finance Department.

The local Finance Department survey/questionnaire results showed that after the mandatory e-filing law went into effect on January 1, 2013 in Orange County, the court moved from having dedicated staff processing e-filing from a centralized location to civil department clerks at all court locations processing these filings. This resulted in an increased error rate and has become a contributing factor to the back-end reconciliation issues.

Recommendation 1b: Due to the complexity of the back-end daily reconciliation that is completed by the Finance Department, the court should centralize the e-file process with dedicated and well trained staff. The centralization of this process should remain in effect until a more viable reconciliation process is put in place.

Conclusion 2: Contracting with multiple e-payment/e-service providers has proven challenging on the back-end and possibly the customer front-end.

The local Finance Department survey/questionnaire results showed that contracting with multiple vendors has many challenges. Conclusions 1a and 1b above

outline the challenges encountered as a result of the back-end bottleneck within the daily reconciliation. The local Finance Department survey/questionnaire results also showed that each of the vendors charge a convenience fee that ranges from \$0.90 to \$14.95 depending on the vendor and/or service being provided. Some vendors charge a different convenience fee even though they are providing the same service. Last, the inconsistency within the web pages of the e-file vendors confirming their affiliation with Orange County Superior Court could create potential confusion with court customers.

Recommendation #2a - The court should consider developing an in-house e-service solution. Such a system should include the six step process illustrated in figure 1. By developing and maintaining an in-house solution, the court would resolve the daily reconciliation bottleneck issue as all revenues would have one stream, one report and one reconciliation process. It would also establish consistency for court users by offering a court controlled e-service that could potentially have minimal or no charge to the customer.

Recommendation #2b – If developing an in-house solution is not a viable, the court should consider requiring consistency in vendor convenience fees and web page similarities.

Conclusion #3 - The results of the statewide survey revealed that the courts in general are forward thinking as it relates to e-payments, mobile applications and cloud computing.

The results of the Statewide Survey showed that while most of the courts offered Web and IVR payments, few offered mobile solutions (5 of the 22 responding courts) and none offered any type of e-wallet payments. Many of the respondents felt that the

courts can conduct general court business via mobile applications. Altogether 63.6% of the respondents stated that they would be implementing alternative electronic payment models within the next several years. However, 22.7% stated that they were finished implementing alternative electronic payment models and 13.6% stated they would not do so at all.

Unfortunately, only 54% of the respondents felt that the courts cannot be left behind when it comes to cloud computing. The remaining 46% either remained neutral or disagreed and felt that cloud computing had no place in the courts. If the future of court payments is no longer based on cash, checks or even credit cards and our mobile devices will increasingly be considered our e-wallets, this is an unfortunate mindset.

Recommendation #3a – Individual courts must start looking ahead at mobile e-wallet solutions and cloud computing. There was reasonable support from the folks surveyed and the literature shows that not only is it a convenience for the customer; it is cost effective for the organization. If embraced by the Orange County Superior Court the court could potentially eliminate the backend operation.

Recommendation 3b - Statewide court administrative organizations such as the California Administrative Office of the Courts should study the implications for cloud computing and mobile devices for courts and issue appropriate guidelines.

The appropriate guidelines that consider issues such as:

- Security Policy Compliance
- Data Ownership
- Impermissibility of Data Mining
- Confidentiality

Conclusion #4: While e-payments and e-filing and electronic solutions as they currently exist in most courts was devised to improve access to justice, the expectations of the court user are always subject to change, therefore, even though it was beyond the scope of this paper the needs and expectations of tomorrows court users need to be identified.

Recommendation #4 - The appropriate state or national organization should survey court users to determine their level of expectation vis-a-vis the use of mobile devices for the conduct of court business. It is incumbent of the courts to learn from the experiences of these experiences.

Whether the next court e-payment service is going to be NFC or Bar Code, technology evolves at a rapid pace. Will it be Google Wallet? ISIS or Passbook? Will the payment data reside in the cloud? Will the courts new case management system be cloud based? Will the law enforcement interfaces we do business with be cloud based? It is incumbent upon the courts to anticipate the future. All of these are questions worthy of our study and proactive response.

APPENDICES

Appendix A – California Assembly Bill No. 2073



California
LEGISLATIVE INFORMATION

AB-2073 Courts: electronic filing and service of documents. (2011-2012)

Assembly Bill No. 2073

CHAPTER 320

An act to amend Section 1010.6 of the Code of Civil Procedure, relating to civil actions.

[Approved by Governor September 14, 2012. Filed Secretary of State September 14, 2012.]

LEGISLATIVE COUNSEL'S DIGEST

AB 2073, Silva. Courts: electronic filing and service of documents.

Existing law authorizes a trial court to adopt local rules permitting electronic filing and service of documents, subject to rules adopted by the Judicial Council and other specified conditions. Existing law also authorizes the court, in any action in which a party has agreed to accept electronic service, or in which the court has ordered electronic service, as specified, to electronically serve any document issued by the court that is not required to be personally served, in the same manner that parties electronically serve documents.

This bill would authorize the Orange County Superior Court, until July 1, 2014, to establish a pilot project to require parties to eligible civil actions, as specified, to electronically file and serve documents, subject to rules adopted by the Judicial Council and other specified conditions. The bill would require the Judicial Council to conduct an evaluation of any pilot project established pursuant to that provision and report to the Legislature on or before December 31, 2013, on the results of the evaluation. The bill would also require the Judicial Council to adopt uniform rules to permit mandatory electronic filing and service of documents in eligible civil actions on or before July 1, 2014. The bill would authorize a superior court to require mandatory electronic filing, as specified, upon the adoption of those uniform rules by the Judicial Council.

Vote: majority Appropriation: no Fiscal Committee: yes Local Program: no

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. Section 1010.6 of the Code of Civil Procedure is amended to read:

1010.6. (a) A document may be served electronically in an action filed with the court as provided in this section, in accordance with rules adopted pursuant to subdivision (e).

(1) For purposes of this section:

(A) "Electronic service" means service of a document, on a party or other person, by either electronic transmission or electronic notification. Electronic service may be performed directly by a party, by an agent of a party, including the party's attorney, or through an electronic filing service provider.

(B) "Electronic transmission" means the transmission of a document by electronic means to the electronic service address at or through which a party or other person has authorized electronic service.

(C) "Electronic notification" means the notification of the party or other person that a document is served by

sending an electronic message to the electronic address at or through which the party or other person has authorized electronic service, specifying the exact name of the document served, and providing a hyperlink at which the served document may be viewed and downloaded.

(2) If a document may be served by mail, express mail, overnight delivery, or facsimile transmission, electronic service of the document is authorized when a party has agreed to accept service electronically in that action.

(3) In any action in which a party has agreed to accept electronic service under paragraph (2), or in which the court has ordered electronic service under subdivision (c) or (d), the court may electronically serve any document issued by the court that is not required to be personally served in the same manner that parties electronically serve documents. The electronic service of documents by the court shall have the same legal effect as service by mail, except as provided in paragraph (4).

(4) Electronic service of a document is complete at the time of the electronic transmission of the document or at the time that the electronic notification of service of the document is sent. However, any period of notice, or any right or duty to do any act or make any response within any period or on a date certain after the service of the document, which time period or date is prescribed by statute or rule of court, shall be extended after service by electronic means by two court days, but the extension shall not apply to extend the time for filing any of the following:

(A) A notice of intention to move for new trial.

(B) A notice of intention to move to vacate judgment under Section 663a.

(C) A notice of appeal.

This extension applies in the absence of a specific exception provided by any other statute or rule of court.

(b) A trial court may adopt local rules permitting electronic filing of documents, subject to rules adopted pursuant to subdivision (e) and the following conditions:

(1) A document that is filed electronically shall have the same legal effect as an original paper document.

(2) (A) When a document to be filed requires the signature, not under penalty of perjury, of an attorney or a self-represented party, the document shall be deemed to have been signed by that attorney or self-represented party if filed electronically.

(B) When a document to be filed requires the signature, under penalty of perjury, of any person, the document shall be deemed to have been signed by that person if filed electronically and if a printed form of the document has been signed by that person prior to, or on the same day as, the date of filing. The attorney or person filing the document represents, by the act of filing, that the declarant has complied with this section. The attorney or person filing the document shall maintain the printed form of the document bearing the original signature and make it available for review and copying upon the request of the court or any party to the action or proceeding in which it is filed.

(3) Any document that is electronically filed with the court after the close of business on any day shall be deemed to have been filed on the next court day. "Close of business," as used in this paragraph, shall mean 5 p.m. or the time at which the court would not accept filing at the court's filing counter, whichever is earlier.

(4) The court receiving a document filed electronically shall issue a confirmation that the document has been received and filed. The confirmation shall serve as proof that the document has been filed.

(5) Upon electronic filing of a complaint, petition, or other document that must be served with a summons, a trial court, upon request of the party filing the action, shall issue a summons with the court seal and the case number. The court shall keep the summons in its records and may electronically transmit a copy of the summons to the requesting party. Personal service of a printed form of the electronic summons shall have the same legal effect as personal service of an original summons. If a trial court plans to electronically transmit a summons to the party filing a complaint, the court shall immediately upon receipt of the complaint notify the attorney or party that a summons will be electronically transmitted to the electronic address given by the person filing the complaint.

(6) The court shall permit a party or attorney to file an application for waiver of court fees and costs, in lieu of requiring the payment of the filing fee, as part of the process involving the electronic filing of a document. The

court shall consider and determine the application in accordance with Sections 68630 to 68641, inclusive, of the Government Code and shall not require the party or attorney to submit any documentation other than that set forth in Sections 68630 to 68641, inclusive, of the Government Code. Nothing in this section shall require the court to waive a filing fee that is not otherwise waivable.

(c) If a trial court adopts rules conforming to subdivision (b), it may provide by order that all parties to an action file and serve documents electronically in a class action, a consolidated action, or a group of actions, a coordinated action, or an action that is deemed complex under Judicial Council rules, provided that the trial court's order does not cause undue hardship or significant prejudice to any party in the action.

(d) (1) Notwithstanding subdivision (b), the Orange County Superior Court may, by local rule and until July 1, 2014, establish a pilot project to require parties to specified civil actions to electronically file and serve documents, subject to the requirements set forth in paragraphs (1), (2), (4), (5), and (6) of subdivision (b) and rules adopted pursuant to subdivision (e) and the following conditions:

(A) The court shall have the ability to maintain the official court record in electronic format for all cases where electronic filing is required.

(B) The court and the parties shall have access either to more than one electronic filing service provider capable of electronically filing documents with the court, or to electronic filing access directly through the court. Any fees charged by the court shall be for no more than the actual cost of the electronic filing and service of the documents, and shall be waived when deemed appropriate by the court, including, but not limited to, for any party who has received a fee waiver. Any fees charged by an electronic filing service provider shall be reasonable and shall be waived when deemed appropriate by the court, including, but not limited to, for any party who has received a fee waiver.

(C) The court shall have a procedure for the filing of nonelectronic documents in order to prevent the program from causing undue hardship or significant prejudice to any party in an action, including, but not limited to, unrepresented parties.

(D) A court that elects to require electronic filing pursuant to this subdivision may permit documents to be filed electronically until 12 a.m. of the day after the court date that the filing is due, and the filing shall be considered timely. However, if same day service of a document is required, the document shall be electronically filed by 5 p.m. on the court date that the filing is due. Ex parte documents shall be electronically filed on the same date and within the same time period as would be required for the filing of a hard copy of the ex parte documents at the clerk's window in the participating county. Documents filed on or after 12 a.m., or filed upon a noncourt day, will be deemed filed on the soonest court day following the filing.

(2) If a pilot project is established pursuant to paragraph (1), the Judicial Council shall conduct an evaluation of the pilot project and report to the Legislature, on or before December 31, 2013, on the results of the evaluation. The evaluation shall review, among other things, the cost of the program to participants, cost-effectiveness for the court, effect on unrepresented parties and parties with fee waivers, and ease of use for participants.

(e) The Judicial Council shall adopt uniform rules for the electronic filing and service of documents in the trial courts of the state, which shall include statewide policies on vendor contracts, privacy, and access to public records, and rules relating to the integrity of electronic service. These rules shall conform to the conditions set forth in this section, as amended from time to time.

(f) The Judicial Council shall, on or before July 1, 2014, adopt uniform rules to permit the mandatory electronic filing and service of documents for specified civil actions in the trial courts of the state, which shall be informed by any study performed pursuant to paragraph (2) of subdivision (d) and which shall include statewide policies on vendor contracts, privacy, access to public records, unrepresented parties, parties with fee waivers, hardships, reasonable exceptions to electronic filing, and rules relating to the integrity of electronic service. These rules shall conform to the conditions set forth in this section, as amended from time to time.

(g) (1) Upon the adoption of uniform rules by the Judicial Council for mandatory electronic filing and service of documents for specified civil actions in the trial courts of the state, as specified in subdivision (f), a superior court may, by local rule, require mandatory electronic filing, pursuant to paragraph (2) of this subdivision.

(2) Any superior court that elects to adopt mandatory electronic filing shall do so pursuant to the requirements and conditions set forth in this section, including, but not limited to, paragraphs (1), (2), (4), (5), and (6) of

Bill Text - AB-2073 Courts: electronic filing and service of documents.

subdivision (b) of this section, and subparagraphs (A), (B), and (C) of paragraph (1) of subdivision (d), and pursuant to the rules adopted by the Judicial Council, as specified in subdivision (f).

Appendix B – Statewide E-Payment Technology Survey

Future of Court Electronic Payments and Mobile Apps

***1. Court Jurisdiction:**

***2. Size of Court (County Population):**

***3. Which remote payment solutions does your court currently offer?**

Web Payments

IVR Payments

Mobile App

Payment Kiosk

Other (please specify):

***4. Does your court offer a mobile web version of your internet site?**

Yes

No

***5. Is your court considering alternative electronic payment models that may be leveraged instead of courthouse walk-up windows or mail?**

Yes – Done

Yes – 0 – 6 months

Yes – 7 – 12 months

Yes – 13 months or longer

No

If yes, please specify:

***6. Are your court customers requesting the ability to make mobile app payments (IE: Android or Apple iOS)?**

Yes

No

Not sure

Future of Court Electronic Payments and Mobile Apps

***7. Could the court transition walk-in customers to mobile app solutions (IE: Android or Apple iOS)?**

- Yes, for general court information only
- Yes, for court payments only
- Yes, for all court related business
- No, this will never work for courts

Please comment regarding your choice of answer above:

***8. Are you concerned about compliance and security issues with the future trends of e-payment options as they relate to the court?**

- Yes
- No

Why or Why Not? (please specify)

***9. Is your current online payment solution (vendor or in-house) built to support the latest technology features and functionality?**

- Yes
- No
- N/A – My court does not offer an online payment solution.

If Yes, please specify:

***10. Which future e-wallet alternative is most likely to gain traction within the courts?**

- Passbook (Apple iOS 6)
- Google Wallet (Google)
- Isis (AT&T and Verizon)
- None
- Other (please specify)

Future of Court Electronic Payments and Mobile Apps

*** 11. If a court were to devise processes to accommodate the electronic wallet or other smartphone driven payment options, what might they look like? Would we be able to eliminate some existing processes and/or FTEs? How complicated would the technology be that the court would have to install?**

*** 12. Are there other functional areas of court operations that might eventually benefit from smartphone technology, e.g., filing, document distribution?**

*** 13. Cloud computing is transforming business at a rapid pace. Courts cannot afford to be left behind.**

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
How would you rate this statement?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

*** 14. What are your thoughts of cloud computing in a court environment?**

REFERENCES

Babcock, Charles. "Management Strategies for the Cloud Revolution: How Cloud Computing Is Transforming Business and Why You Can't Afford to Be Left Behind" 04-16-2010. McGraw-Hill. Kindle Edition.

Camhi, Jonathan. "5 Predictions About the Future of Digital Wallets" banktech.com. Nov 30, 2012. Retrieved from <http://www.banktech.com/payments-cards/5-predictions-about-the-future-of-digital-wallets/240142954>

Caradonna, Peter & James McMillan. "New Hampshire e-Court Project: e-Court Issues and Choices, Part II". National Center for State Courts. 2011. Retrieved from <http://ncsc.contentdm.oclc.org/cdm/ref/collection/tech/id/772>

Carrington, Denee. "The Digital Wallet Wars are the Next Phase of the Payments Industry Transformation." Forbes.com. Aug. 2, 2012. (Sept. 14, 2012). Retrieved from <http://www.forbes.com/sites/forrester/2012/08/02/the-digital-wallets-wars-are-the-next-phase-of-the-payments-industry-transformation/>

Ciacia, Chris. "The Digital Wallet's Future Is Now." Forbes.com. Jun. 28, 2012. Retrieved from <http://www.forbes.com/sites/thestreet/2012/06/28/the-digital-wallets-future-is-now/>

Conference of State Court Administrators. "Position Paper on The Emergence of E-Everything" 2005. Retrieved from http://cosca.ncsc.dni.us/white_papers.html

Economist Intelligence Unit. "Government E-Payments Adoption Improves Globally According to Visa-sponsored Economist Intelligence Unit Study" Apr 24, 2012. Retrieved from <http://investor.visa.com/phoenix.zhtml?c=215693&p=irol-newsArticle&id=1686409>

Ernest & Young. "The Growth in Mobile Payments". ey.com. 2011. Retrieved from <http://www.ey.com/GL/en/Industries/Telecommunications/Opportunities-for-telcos-in-mobile-money--2011---The-growth-in-mobile-payments>

Henn, Steve. "Your New Digital Wallet: In the Cloud but Still Tethered to Fees." NPR. June 22, 2012. (Sept. 14, 2012) Retrieved from <http://www.npr.org/blogs/alltechconsidered/2012/06/22/155496245/your-new-digital-wallet-in-the-cloud-but-still-tethered-to-fees>

International Association of Chiefs of Police [IACP]. "Cloud Computing Survey Results and Guiding Principles for Law Enforcement Released" 2013. Retrieved from <http://www.theiacp.org/About/PressCenter/CloudComputing/tabid/11113/Default.aspx>

Klaversma, Laura. "Courts and Collections." In Future Trends in State Courts 2008.

Williamsburg, VA: National Center for State Courts. 2008. Retrieved from

<http://cdm16501.contentdm.oclc.org/cdm/ref/collection/financial/id/122>

McWilton, Chris. "Future of Electronic Payments" 2010. Retrieved from

https://docs.google.com/viewer?a=v&q=cache:agXqcXj2z7qJ:www.mastercard.com/us/company/en/newsroom/McWilton_Future_of_Electronic_Payments_whitepaper.pdf+the+future+of+e+payments+in+government&hl=en&gl=us&pid=bl&srcid=ADGEEShBRGdUH0RPM9JAQP4IqKcWFinmMHNvey3SZ17ZXVJjsvwJs6vGUJI8I3KLK8oZlpucWnix3ZtO-CLPKbjolAq0ZWYqooWLSpj4M52hY4imaCsA-Xk_Yjq-aGO3VsejUFYB0xw&sig=AHIEtbSfNF0DQMIR5zixfF7BYHhrWR2vNg

Myers, Eddie. "The Future of Electronic Payments" Retailingtoday.com. Apr 6, 2012.

Retrieved from

<http://retailingtoday.com/article/future-electronic-payments>

Pollitzer, Bob. "The Future of Electronic Payments" Bankersonline.com.

Retrieved from

http://www.bankersonline.com/ebanking/future_ep_081301.html

Schultz, Steve. "What is a Digital Wallet and Why Should You Care?" Huffington Post.

Aug. 29, 2012. (Sept. 14, 2012) Retrieved from

http://www.huffingtonpost.com/steve-schultz/what-is-a-digital-wallet_b_1840660.html

Siwicki, Bill. "Do mobile devices represent the future of money?" Internetretailer.com. Apr 26, 2012. Retrieved from <http://www.internetretailer.com/2012/04/26/do-mobile-devices-represent-future-money>

Siwicki, Bill. "Mobile commerce should enhance the brand and extend e-commerce, retailers say" Internetretailer.com. Jan 15, 2013. Retrieved from <https://www.internetretailer.com/2013/01/15/mobile-commerce-should-enhance-brand-and-extend-e-commerce>