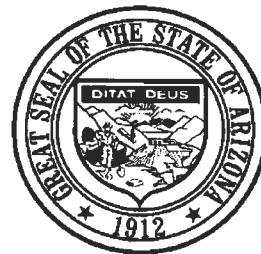
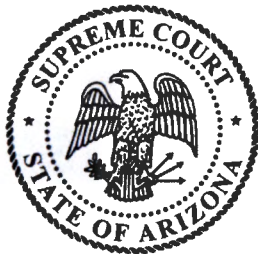


Judicial Project Investment Justification

*A Statewide Standard Document for Information Technology Projects
for the Arizona Judicial Branch*

Project Title: ***CMS Web Upgrade Project***



Version 2.0

January 1, 2011

Prepared by:

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<i>Court</i>	<i>Phoenix Municipal court</i>
<i>Date</i>	<i>November 2015</i>

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Section I. Business and Technology Assessment

<i>Court Name and Address</i>	<i>Contact Name, Phone, FAX, email</i>
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<i>Project Investment Name</i>	<i>Date</i>
CMS Web Upgrade Project	November 2015

A. Management Summary-Background

The Phoenix Municipal Court (PMC) has a proprietary, well-maintained and well-documented Court Management System (CMS). The application has been in production for over 15 years (October 1998) and has served PMC very well over many years; however, it is in need of an upgrade to match the present business needs and expectations of the court. A JAM to Panther CMS web upgrade approach offers many benefits and significant risk avoidance. Despite the need for a system upgrade, the underlying business logic and database design are sound and will be preserved in the new environment. The upgrade offers the ability to leverage our technology investment over the last 20 years by circumventing a risky database conversion and by-passing business logic re-engineering associated with system replacements and most application conversions.

B. Existing Situation and Problem, “As Is”

The PMC CMS is a highly functional, stable, fine-tuned court business application with a vast amount of customized business logic and back-end processes and it is our intent to preserve these assets the court has invested in over the last two decades and move to a more modern platform and web front end. The court also has a large number of electronic data feeds with local justice partners. PMC plans to preserve the work completed on these electronic interfaces with the City Prosecutor (CRIMES), Police (RMS), and Neighborhood Services (Tidemark), the Administrative Office of the Courts (AOC), (Fines, Fees and Restitution Enforcement (FARE), statewide Court Public Access data warehouse, and the statewide Criminal Protective Orders Repository (CPOR). Although the PMC CMS is high functional, the application has an old front-end screen presentation which is character-based and in need of a refresh. A new graphical user interface (GUI) complimented with a standard web template will modernize the application greatly. Finally, due to the existing JAM code and jterm requirement, the court has been unable to integrate with the electronic document system (EDMS), OnBase. This technology hurdle is keeping PMC from moving forward with active case imaging.

C. Proposed Changes and Objectives, “To Be”

By moving forward with the JAM to Panther web upgrade project, PMC will be able to integrate its' CMS with OnBase, which will prepare the court to shift from its' current *closed* case imaged environment and eventually move to an *active* case imaging environment. In an active case imaging environment, the court's civil case filings could be 100% electronically stored, allowing the opportunity to eliminate the majority of paper case files while providing access to active court case files on-line. Criminal case documents could also move to an electronic state. This will increase the court's ability to more effectively

manage and access case information. Additionally, from a disaster recovery perspective, the court will be in a position to have the ability to store court case documents electronically off-site. Finally, the legacy JAM screens do not permit a modern mouse-enabled user experience that takes full advantage of the real-estate that comes with larger workstation displays.

This upgrade will provide for new intuitive web enabled user screens that can more fully utilize large display screens. After carefully researching various CMS options over the past several years; including the possibility of a partial application rewrite or complete vendor package system replacement and after completing a successful JAM to Panther web pilot in 2014, PMC believes following the system's natural migration path with a full CMS JAM to Panther web upgrade is the most advantageous option. It is the most cost-effective and risk averse choice that will permit PMC to preserve all of its' existing technology assets (business logic, interfaces, database), integrate with OnBase, and create a more modern web enabled graphical user interface.

Benefits:

- Users will be able to access the upgraded CMS application from a web browser making distribution easy for our internal and external users. Updating the new application with routine enhancements should be a seamless process, requiring nothing more than a browser refresh.
- Much of the existing code base will be retained and leveraged reducing the costs associated with modernization.
- The database and electronic interfaces will be retained as part of the upgrade.
- The upgrade will eliminate the jterm requirement and allow for integration with OnBase via an API (Application Program Interface).
- The skills required to maintain the new web application will only require incremental knowledge from the existing development team and training will be incorporated into the project timeline and plan.
- User training will be minimal, as the application will be an off-shoot of the existing CMS Application.

The complete upgrade project is a six-phase project, however, this Judicial Project Investment Justification (JPIJ) request represents the **first three phases**. Additional phases will focus on full active case imaging and further enhancement to PMC's existing disaster recovery posture which will incorporate the benefits of electronic case file images with the integration with OnBase.

JAM to Panther Web CMS Upgrade Project Phases	
Phase	Description
Phase I	Professional Services for Determining Platform Requirements for CMS Upgrade
Phase II	Upgrade CMS from JAM to Panther web/PMC IST Developer training/OnBase integration via API for closed case imaged records
Phase III	Redesign Panther Web screens to an approved PMC screen design with global standards/PMC IST Developer Training
Phase IV	Active Case imaging integration with our new CMS, which will include any additional development to integrate specific active case forms/docs to view within CMS, setting up any new processes in OnBase to scan at the front counters or courtrooms, take in an on-line JSO or ATTC and add files to the OnBase database, purchase necessary hardware/software and complete the second phase of the computer room project.
Phase V	Scanning and loading all paper case files into OnBase-going paperless.
Phase VI	Update and enhance disaster recovery (DR) process and posture with our new paperless existence

The first project phase includes working with the vendor to determine platform requirements for a multi-tier web enabled environment, purchasing the hardware and setting it up. The second phase entails migrating the legacy JAM code to Panther web, training the court development team on how to do the upgrade and integrate CMS with OnBase, then moving the new web enabled screens into production. The Phase II screens will look very similar to our current screens, but will be larger and web enabled, allowing our users to have the benefit of a larger screen presentation and the option to use a mouse. By releasing basic web enabled screens that have not been completely redesigned as our first production release, it reduces the need for user training after Phase II. The third phase will focus on taking the newly upgraded CMS screens and redesigning them to a Court approved global standards web template. This will likely entail, combining some functionality into screens that may be separate today. The look and feel of the screens will change from old character-based screens to a modern web presentation. The redesign will require our business analysts to work closely with a web designer as well as court CMS users to ensure the development of the most intuitive and effective screens layouts.

As Phase III is taking place, we will have the option to release completed screens into production and train our users in segments as opposed to rolling out all new screens at the same time. By building this project into phases, we can more effectively manage change for our court, the division, and for our users and local partners, which we believe will both reduce project risk and increase success. PMC will partner with the state court EDMS vendor, Databank, for the OnBase integration portion of the project. Additionally, PMC will partner with IBM partner, Prolifics, on the migration portion of this critical upgrade project. PMC has had a successful business relationship with Prolifics for many years and we are confident this vendor is capable of leading our CMS Web Upgrade Project.

Prolifics has been solving customers' business problems with technology solutions by providing expert consulting services and high-value technology enablers for over 37 years. Founded in 1978 in New York City, Prolifics first specialized in building high-performance transactional systems for many of the biggest firms on Wall Street. Today they have offices throughout North America, Europe and India, Prolifics utilizes its wealth of expertise to offer comprehensive business solutions, having worked with over 3000 companies, both domestically and internationally, across a broad range of industries including banking, insurance, government, telecommunications, manufacturing and brokerage. Their global delivery model ensures they provide customers with the most effective solution to fit their requirements.

Prolifics has a Level 5 ranking—IBM's highest on its technical expertise scale—and is a two-time recipient of the IBM Award for Overall Technical Excellence. Prolifics' customer solutions have also been honored with over 48 IBM Awards including Best Portal Solution, Best Industry-Oriented Social Business Solution and Outstanding BPM and SOA Solutions. Prolifics brings forth a team of highly skilled consultants, subject matter experts and leaders, with over 400 technical certifications across the entire IBM software portfolio. Bringing thought leadership to the industry, Prolifics consultants and executives have been published in several trade journals and often speak at conferences. Some of their consultants have been selected for the IBM Champions program that honors developers who help others make the best use of IBM software and solutions.

In addition to their product offerings like JAM and Panther, Prolifics also specializes in Business Process Management (BPM), Service-Oriented Architecture (SOA) & Integration, Enterprise Portals and Web Content Management, Social Business, Mobility, Security, Application Performance Management, Application Infrastructure, Enterprise Content Management, Data Analytics, Testing Services, and more. The company has a dedicated practice to each of these core areas as well as teams dedicated to Project Management Office (PMO), Resource Management and Delivery Processes.

D. Quantified Justification

This is an unknown at this time, however, we anticipate that there will be large staff time efficiencies gained through integration with OnBase (easier to find case files on-line vs. looking through shelves for paper files) and ease of use with a newer graphical user interface.

Section II. Project Approach

A. Proposed Technology

Given the complexities of the upgrade combined with the unknown specifics regarding the system design, we have broken down our requirements into four distinctive areas, and outlined our various requirements for each area where professional services will be necessary in defining the system components necessary to support a scalable, back-end infrastructure with high availability.

Our primary objective for having these areas defined is to design a system architecture capable of offering redundancies sufficient to withstand the failure of one or more components without a service disruptions as well as increasing our overall disaster recovery (DR) posture.

Area 1: Web Server

The Court will be upgrading to a CMS which relies solely on a web based client (apart from OnBase and other related systems). Accordingly, we need to ensure that the web server infrastructure is both fault tolerant and capable of meeting established performance and response time requirements (*which will be established by our software development team*).

Following are the areas where we will seek guidance from professional services as part of our contract:

Hardware requirements. Our desire is to virtualize our web servers if at all possible. Based on our current VMware virtualization architecture, we will need to ensure that we have sufficient host resources available.

High availability. The proposed design must be fault tolerant and not dependent on a single web server and capable of automatic fail-over in the event of a web-server issue.

Our current Unix expertise is AIX, but for the proposed web servers we are looking for alternative Linux based options that could be virtualized within our VMware environment, but still supported by the Informix/AIX team. Alternatively, if we were to use an AIX based OS for our web servers, we would like to virtualize that environment.

We would like a recommendation from our vendor for a web server that will run Panther web, as well as scale to support future development needs (i.e. Apache, IBM HTTP).

Network load: Plan for the increase in network traffic resulting from moving to a web based application and enhance network infrastructure, if needed.

Support for future development plans beyond the initial Panther migration. Panther is only the first phase of our CMS upgrade. Beyond the Panther migration, if future development is performed using technology outside of the Panther server, we need to ensure that our system will scale to support this. Additionally, we need this to determine our long term development plans so that we can plan our infrastructure accordingly.

Training and staffing level recommendations based on new technologies for ongoing support and administration.

Area 2: Informix Backend Database

PMC will continue to leverage its existing AIX Informix back-end. As part of this upgrade, we will obtain professional recommendations in the area of making our environment scalable and fault tolerant. Additionally, we are expecting feasibility and architectural recommendations in the area of moving our infrastructure from its current state of running on dedicated servers to one which is virtualized. Prolifics and IBM should be able to provide us with the necessary guidance and specifications in this area.

Scalability: We need to make sure our Informix environment will scale appropriately to support the new Panther environment as well as future web development requirements

Virtualization: We would like professional services to present architectural design recommendations for a virtualization environment to support our AIX and Informix environments in order to leverage the efficiencies gained through server virtualization.

Database abstraction layer for Informix database via an API – As part of the professional services, we need the development of, and hardware requirements for an API for use with future application development. We will not open the database directly to calls from our internally developed applications.

Ability to extend to public access – If the court has any plans for future public web access of our data, we need architectural and design advice for building an architecture that can allow public access without compromising security. In addition to true public access, we need to ensure that our solution can be accessed by other (non-court) departments of the City while maintaining a strong security posture.

Training recommendations based on new technologies for ongoing support and administration.

Area 3: OnBase Integration

One of the most significant areas of productivity gains to be realized by the Court will be realized by moving to electronic case files. While this is a phase II project goal, we will want to review our software and hardware architectural needs early on in the design process.

Engage both Databank and Prolifics to specify requirements for OnBase integration with CMS.

(Future phase)

- Obtain design to build in high availability for our OnBase system
- SQL/OnBase Administration: We need a dedicated SITS position to support our OnBase environment. Depending on the Operations scope of responsibilities, this position will need a backup.
- Training and staffing level recommendations based on new technologies for ongoing support and administration.

Area 4: Other-Storage and Disaster Recovery (DR) planning

The following are areas that we can explore internally, but are of high importance and related to the CMS upgrade.

Back end storage: The Courts EMC back-end storage will reach its end of support life on 12/31/2016. As part of this design process we should specify a replacement suitable for supporting the Court's storage needs. Solid state storage should be part of this review and we recommend that we engage Prolifics and IBM for recommendations based on our performance requirements.

Geo-redundancy: We want to explore the possibility of a hot or warm site where we could host systems (either physical or virtual) for the purposes of minimizing our recovery time objective (RTO). We would like to explore cloud services which could host replicated copies of our data and critical server VMs as an option for business continuity and as a possible optional DR path.

B. Other Alternatives Considered

- LJ AJACS
- Tempe CMS
- ASP.NET web front end rewrite

E. Major Deliverables and Outcomes

- Upgrade current CMS platform to support a multi-tier web environment
- Upgrade current CMS screens to a web enabled graphical user interface
- Integrate CMS with EDMS, OnBase via an Application Program Interface (API)
- Design and develop new CMS screens that will offer high usability and long term sustainability for future application enhancements
- Train development staff to assist with the upgrade and screen redesign in conjunction with the vendor, to ensure application support long term
- Preserve current database and structure
- Preserve fine-tuned business logic

- Preserve back-end processing and electronic data feeds with local data sharing partners

D. Project Dependencies

Projects having business deliverables being depended on:

Project Name	Project Manager	Business Deliverable
OnBase integration	Vendor, Data Bank PM from PMC, Tom Carroll	API for CMS

Projects that depend on business deliverables being provided as part of this project:

Name of Business Deliverable	Project Name	Project Manager

E. Project Development Timeline

**Development
 Start Date:**
 January 2016

**Development
 End Date:**
 December 2018

Section III. Policies, Standards, & Procedures

A. Enterprise Architecture (EA)

- Yes No - Does this project meet all standards and protocols for technology solutions, as defined in Judicial Branch Enterprise Architecture published at <http://www.azcourts.gov/cot/EnterpriseArchitectureStandards.aspx?>

If **NO** please describe **NEW** or **EXCEPTIONS** to standards or protocols needed.

Panther is currently listed in the "Retirement" category of the EA standards. Panther is based on JPL (JAM programming Language). JPL is an interpreted language with a C-like syntax.

After migrating to Panther web, PMC will have the option to move to any programming language. We are merely following our system's natural migration path. Although Panther is not a mainstream modern programming language, it is still used by large global Fortune 500 companies. These are companies who invested in JAM and have well-written business systems who want to modernize with minimal costs and risk. Below are a few current customers: Lucent, Xerox, Fidelity Investments, Kraft and London Life

Panther is still actively supported by Prolifics. In fact, Panther is compatible with Windows 10 and the next Enhancement release is scheduled for March 2016.

Here is a link to the Prolifics website for additional information:
<http://docs.prolifics.com/panther/enews/jam-panther-enews-15-08.html>

B. Disaster Recovery Plan/Business Continuity Plan

- Yes No - Does this project require a Disaster Recovery Plan and Business Continuity Plan?

C. Project Operations

- Yes No - Is there a written assessment of short-term and long-term effects the project will have on operations? (Please see six project phases)

D. Judicial Strategic Plan Objectives

Please check which goal the project is in support of; if more than one, indicate only the primary goal.

- Strengthening the Administration of Justice
- Maintaining a Professional Workforce
- Improving Operational Efficiencies
- Improving Communications
- Protecting Children, Families, and Communities
- Improving the Legal Profession

Section IV. Roles and Responsibilities

Key Personnel Name	Job Title	Responsibility
Judge B. Don Taylor	Chief Presiding Judge	Sponsor
Judge Eric Jeffery	Assistant Presiding Judge	Sponsor
Jennifer Gilbertson	Information Systems Officer	High Level Project and Communications Manager
Randy Smiley	Information Technology Project Manager	Development Project Manager
Tom Carroll	Operations Manager	Operations Project Manager
Zona Cecil	Sr. IT Systems Specialist	Sr. Systems Analyst-CMS
Rick Modisette	IT Systems Specialist	Systems Analyst-CMS
John Melisko	Lead User Technology Specialist	Lead User Tech -OnBase Admin
Tanya Gray	Sr. User Technology Specialist	Sr. User Tech
Alton Jones	IT Service Specialist	Helpdesk support
Mayumi Kruse	IT Service Specialist	Helpdesk support
Mike Ricuito	Lead Business Systems Analyst	Lead Business Analyst
Steve Miller	IT Analyst/Programmer II-BA	Business Analyst
Linda Jarrett	IT Analyst/Programmer II-BA	Business Analyst
Curtis Rounsborg	IT Analyst/Programmer I-BA	Business Analyst
Kim Bruntmeyer	IT Analyst/Programmer I-BA	Business Analyst
Chris Krum	IT Analyst/Programmer III-Programmer	Sr. Programmer
Jat Saini	IT Analyst/Programmer III-Programmer	Sr. Programmer
Yi-Huey Li	IT Analyst/Programmer III-Programmer	Programmer
Sesh Pilla	IT Analyst/Programmer II-Programmer	Programmer
Sita Burada	IT Analyst/Programmer II-Programmer	Programmer
Dan Dodge	DB Consulting Services, DBA consultant	Database consultant
Debbie Marcet	Prolifics PM	Prolifics Project Manager
Amrith Kaur-Maldonado	Prolifics, IT PM	Prolifics Technical Consultant
Glenn Silverberg	Prolifics, Lead Programmer	Prolifics Designer and Developer
TBD	Prolifics, Programmer	Prolifics Developer
TBD	Databank, Technical Consultant	Databank Technical Consultant
Ester Reeves	Court Controller	Subject Matter Expert (SME)
Robin Brown	Criminal Division Administrator	Subject Matter Expert (SME)
Patricia Lucero	Civil Division Administrator	Subject Matter Expert (SME)
Loren Braud	Court Staff Attorney	Subject Matter Expert (SME)
Lisa Valdivia	Accountant III	Subject Matter Expert (SME)

Section V. Public Value and Benefits

A. Value to the Public

Score: 0=None, 1=Minor, 2=Moderate, 3=Considerable, 4=Substantial, 5=Extensive.

<i>Detail Description of Project Benefits: VALUE TO THE PUBLIC</i>	<i>Score</i>
Client Satisfaction: Describe how stakeholders will likely respond to the anticipated changes or improvements.	5
Customer Service: Describe anticipated improvements to internal or external service delivery including faster response time, increased access to information, reduction in client in-person visits, etc.	5
Life/Safety Functions: Describe how the project will reduce risk in functions related to public protection, health, environment, and safety.	5 (Increased disaster recovery options/posture)
Public Service Functions: Describe how project enhances licensing, maintenance, or payments to public entities.	N/A
Legal Requirements: Cite the federal or state mandate and/or describe any interfaces with federal, state, or local entities.	N/A
Other: List any other valuable benefit to the public.	NA
TOTAL	15

FINANCIAL AND INTANGIBLE BENEFITS DESCRIPTION

- Ease of use-more modern new graphical user interface, which could equate to better custom service
- Staff time savings (searching for paper files vs. on-line) with Onbase integration
- Upgraded system and no loss of functionality or unnecessary changes to business process, less training for staff and more familiarity
- Leverage existing asset investment (database, business logic, interfaces, existing staff) This equates to a cost savings to tax payers.

B. Benefits to the State and Local Judiciary

- PMC can continue to successfully manage its large volume court caseload
- PMC can continue to participate in the Full FARE program
- PMC can continue to participate in CPOR
- PMC can continue to provide adhoc report requests to the AOC during the legislative session
- PMC can continue to track and follow CourTools requirements
- PMC will be prepared to participate in the CDR (Central Document Repository) project
- PMC can continue to be an innovative technology leader for the large volume LJ Courts in Arizona

Score: 0=None, 1=Minor, 2=Moderate, 3=Considerable, 4=Substantial, 5=Extensive.

<i>Factors to Include</i>	<i>Score/\$</i>
Court Performance: The extent to which duties and processes will improve or positively affect business functions. Consider reduced redundancy and improved consistency for the court.	5
Productivity Increase: The improvements in quantity or timeliness of services or deliverables. Consider improved turnaround time or expanded capacity of key processes.	5
Operational Efficiency: Rating may be based on improved use of resources, greater flexibility in court responses to stakeholder requests, reduction or elimination of paperwork, legacy systems, or manual tasks.	5
Accomplishment Probability: The extent to which this project is expected to have a high level of success in completing all requirements for the division or court.	5
Functional Integration: The impact the project will have in eliminating redundancy or improve consistency. Consider the impact of information sharing between departments or divisions, or between agencies in the State.	5
Technology Sensitive: The implementation of the right types of technology to meet clear and defined goals and to support key functions. Consider technologies and systems already proven within the court, division, or other similar organizations.	5
Other: List any other applicable benefit. Leveraging existing technology Assets	5
TOTAL	35

FINANCIAL AND INTANGIBLE BENEFITS DESCRIPTION

- Ease of use-more modern new graphical user interface for court staff
- Staff time savings (searching for paper files vs. on-line) with Onbase integration
- With OnBase integration, PMC can participate in the Central Document Repository (CDR) project
- Better disaster recovery options (now all data and scanned records can be off-site, currently only data is off-site)
- Upgraded system and no loss of functionality or unnecessary changes to business process
- Leverage existing technology asset investment (database, business logic, interfaces, existing staff)
- Partnering with a proven, highly skilled global technology vendor with which PMC has an existing successful business relationship

A. Development and Operational Project Funding Details

(Double click on table below – add funding in **whole dollars** and then click outside the table to return to Word doc)

DEVELOPMENT COSTS						
Category	FY16/17	FY17/18	FY18/19	FY____	FY____	Total
Professional & Outside Services	\$ 57,380	\$ 678,280	\$ 298,000			\$ 1,033,660
Hardware	\$ 496,000					\$ 496,000
Software	\$ 150,000					\$ 150,000
Communications						\$ -
Facilities						\$ -
License & Maintenance Fees	\$ 80,000	\$ 64,000				\$ 144,000
Other						\$ -
Total Development Costs	\$ 783,380	\$ 742,280	\$ 298,000	\$ -	\$ -	\$ 1,823,660

Enter Total Development Cost (above) in Project Values table on Approvals page.

*OPERATIONAL COSTS						
Category	FY16/17	FY17/18	FY18/19	FY____	FY____	Total
Professional & Outside Services						\$ -
Hardware						\$ -
Software						\$ -
Communications						\$ -
Facilities						\$ -
License & Maintenance Fees						\$ -
Other						\$ -
Total Operational Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Enter Total Project Cost (below) in Project Values table on Approvals page.

	FY16/17	FY17/18	FY18/19	FY____	FY____	Total*
TOTAL PROJECT COSTS *(Includes development and operational costs)	\$ 783,380	\$ 742,280	\$ 298,000	\$ -	\$ -	\$ 1,823,660

**All existing court FTE's will be used for this project in conjunction with the list of professional and outside services.*

B. Funding Source

(Double click on table below – add funding in **whole dollars** and then click outside the table to return to Word doc)

Section VI. Project Financials

ALL COSTS MUST BE SUBSTANTIATED IN APPENDIX A. ITEMIZED LIST WITH COSTS.

1. *Professional and Outside Consultants Cost*

The dollars expended for all third-party consultants and contractors, such as project leaders, operations or technical support, communications, and LAN administrators. In Appendix A, include the billing rate, number of hours, and the tasks to be performed.

2. *Hardware*

All costs related to computer hardware and peripherals used on a project, including mainframes, midrange, micro- and mini-processors, laptops, hand-held devices, and peripheral devices such as disk drives and printers.

3. *Software*

All costs related to applications and systems related software for the project.

4. *Communications*

All costs related to analog and digital networks, communication processors, software, frame relays, phone switches, cabling, wiring, LAN/WAN, and other items associated with communications.

5. *Facilities*

All costs related to improvements or expansions of existing facilities required to support this project, as well as rentals, leases or purchase of new IT facilities.

6. *Licensing and Maintenance Fees*

All licensing and maintenance fees that might apply to hardware, software and any other products included as up-front costs in this project (ongoing costs are considered operational not development).

7. *Other*

Other IT costs not included above, such as documentation, manuals, travel, training and living expenses.

Training costs should be included if expenditures are specifically incurred for this project. If there is an in-house training department and the cost of the training is absorbed, no costs should be reported. Travel costs should be the amount of expenditures and not the value of automobiles, trucks, or other goods.

NOTE: FTE costs may be included in section C. below, as required.

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		Development Budget	Operational Budget	Development Budget	Operational Budget	
Local General Fund						\$ -
State JCEF						\$ -
Other Local Fund	Local JCEF	\$ 1,823,660		\$ -		\$ 1,823,660
Federal Funds						\$ -
Other Non Appropriated Funds						\$ -
TOTAL PROJECT COSTS	Current fund balance = \$6,037,123	\$ 1,823,660	\$ -	\$ -	\$ -	\$ 1,823,660
Totals should = development and operational totals above						

C. Full Time Employee (FTE) Project Hours

Total Full Time Employee Hours		N/A
Total Full Time Employee Cost	\$	N/A

Section VII. Risk Assessment

RISK EVALUATION RANGES

LOW RISK PROJECT	0 - 8
MEDIUM RISK PROJECT	9 - 25
HIGH RISK PROJECT	26 - 42
VERY HIGH RISK PROJECT	43 +

Add Project Risk Details (if required)

The CMS Web upgrade from JAM to Panther is the least risky and most cost-effective option available for the Phoenix Municipal Court. The court can continue to leverage its CMS investment over the past 20 years while avoiding a database conversion and rewrite of its fine-tuned CMS business logic.

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JPIJ Project Classification & Risk Evaluation					
Risk Factor	Low (0)	Medium (1)	High (2)	Very High (3)	Score
Project Management Complexity					
Project Team Size (# of people)	1-5	6-10	11-15	> 15	2
Project Manager (PM) Experience	Deep experience in this type of project	Some experience in this type of project and able to leverage subject matter experts	Some experience in this type of project and has limited support from subject matter experts	New to this type of project	1
Team Member Availability	Dedicated staff for project activities only as assigned	Staff in place, few interrupts for non project tasks are expected and have been accounted for	Available, some turnover expected, some interrupts for non project issues likely	Dedicated team not available; staff will be assigned based on capacity	3
# of Entities Involved in Development Activity	1	2	3	> 3	1
Vendor (if used)	No Vendor required	Vendor has been used previously with success	Vendor has been used previously with some management support required	New Vendor and/or multiple vendors	2
Project Schedule	Schedule is flexible	Schedule can handle minor variations, but deadlines are somewhat firm	Scope or budget can handle minor variations, but deadlines are firm	Scope, Budget and Deadlines are fixed and cannot be changed	0
Project Scope	Scope is defined and approved	Scope is defined and pending approval	Scope being defined	High level definition only at this point	0
Budget Constraints	Funds allocated	Funds pending approval	Allocation of funds in doubt or subject to change without notice	No funding allocated	1
Project Methodology	Defined methodology	Defined methodology, no templates	High level methodology framework only	No formal methodology	0
IT Solution Complexity					
Product Maturity (if purchased)	Product implemented & working in > 1 gov't agency or business of similar size	Product implemented & working in 1 agency or business of similar size	Product implemented & working only in an agency or business of smaller size	Product not implemented in any agency or business	0
Solution Dependencies	No dependencies or interrelated projects	Some minor dependencies or interrelated projects but considered low risk	Some major dependencies or interrelated projects but considered medium risk	Major high-risk dependencies or interrelated projects	1
System Interface Profile	No other system interfaces	1-2 required interfaces	3-4 required interfaces	> 4 required interfaces	1
IT Architectural Impact	Follows COT-approved design; principles, practice & standards	New to the court but follows established industry standards	Evolving "industry standard"	No standards, leading edge technology	1
Deployment Impact					
Process Impact	No business process changes	Agency wide process changes	Multi-State Agency process changes	State-wide process changes	1
Scope of End User Impact	Department or Division level only	Multiple Dept. or Court-wide impacts	Multi-Court impacts	Statewide impacts	1
Training Impact	No training is required	Minimal training is required	Considerable training is required	Extensive training is required	1
Total Risk Score					16

Section VIII. Project Approvals

Management Review Checklist

Key Management Information	Yes	No
1. Is this project for a mission critical application system?	X	
2. Is this project referenced in your court's/county's IT Strategic plan? (<i>in city IT plan</i>)	X	
3. Is this project consistent with COT policies, standards and procedures?	X	
4. Is this project in compliance with the Arizona Revised Statutes and court rules?	X	
6. Is this project mandated by law, court case or rule? If yes, cite the federal requirement, ARS Reference, Court Rule or Case.		X


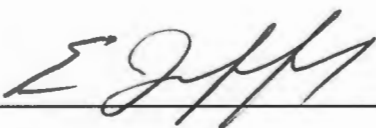
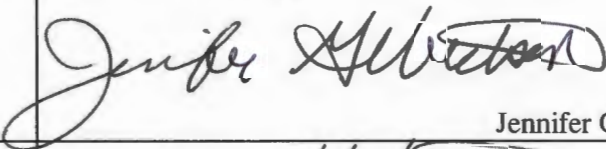
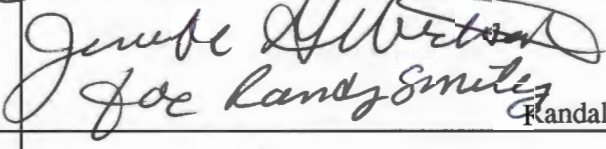

Details: *Provide details related to technology as part of the requirement.*

Project Values

Description	Section	Significance
Value Rating	V. A. Value to the Public	15
Economic Benefits	V. B. Benefits to the State and Local Judiciary	Score 35
Total Development Cost	VI. A. Development Costs	\$1,823,660.00
Total Project Cost	VI. A. Total Project Costs	\$1,823,660.00
FTE Hours	VI.C FTE Project Hours	<i>Using existing staff- didn't project time yet as they will continue operations and maintenance of existing CMS and routine operations.</i>
Project Risk Factors	VII. Risk Assessment Score (Maximum 48)	16

Formal Project Approvals

Project Title: CMS Web Upgrade Project

Responsibility	Approval Signature and Title	Date
Chief Presiding Judge:	 B. Don Taylor III	10/29/15
Assistant Presiding Judge:	 Eric Jeffery	10/29/15
Clerk of Court/Information Systems Officer:	 Jennifer Gilbertson	10-29-15
Development Project Manager	 Randall Smiley	10-29-15
Operations Project Manager	 Tom Carroll	10-29-15

Appendices

- A. Itemized List with Costs**
- B. Connectivity Diagram-- Architecture of CMS Web Application**
- C. Project Schedule -- Gantt Chart -- High-Level Project Management Timeline**
- D. PMC Integration Points Diagram**
- E. PMC Communication and Risk Plan**
- F. Prolifics Statement of Work (SOW)**

Glossary

If special terminology and acronyms are used, consider including a glossary of terms.

PMC-Phoenix Municipal Court

CMS-Court Management System

RTO-Recovery Time Object

DR-Disaster Recover

JPL-JAM Programming Language

API-Application Program Interface

PM-Project Manager

ITAP-Information Technology Analyst Programmer

BA-Business Analyst

SOW-Statement of Work

Document Information

Title: Judicial Project Investment Justification Version 2.0
Originator: Arizona Supreme Court, May 2004
Date: Revised November 5, 2010
Download: <http://www.azcourts.gov/cot/Documents.aspx>
Contact: Alicia Moffatt, 602-452-3791, email: amoffatt@courts.az.gov

Appendix A: Itemized List with Costs:

The majority of these costs (excluding the additional OnBase Client licenses*) are necessary due to the age of our existing systems which we currently rely on for our CMS. Even if we were not proceeding with this planned upgrade, we would be seeking funding to replace our legacy equipment. The costs associated with Informix clustering and SAN redundancy, have been added to build up additional resiliency in our environment, and can be leveraged in both the legacy and upgraded CMS environments.

Given that Phase 1 of the project is heavily steeped in the design of the system, these figures are high-level estimates and the specifics could certainly change as the design process evolves.

CMS Web Upgrade Project - JPIJ - Hardware & Software Costs

Hardware/ Licensing	Qty.	Unit Price	Extended Price
IBM Power 720 Server	8	34000	272,000.00
Informix Licensing for Clustering			80,000.00
SAN Replacement (based on VNX 5400 pricing)	2	112,000	224,000.00
VMware hosts	5	30000	150,000.00
OnBase Client Licenses*	100	640	64,000.00
Total Estimated HW/SW Costs			790,000.00

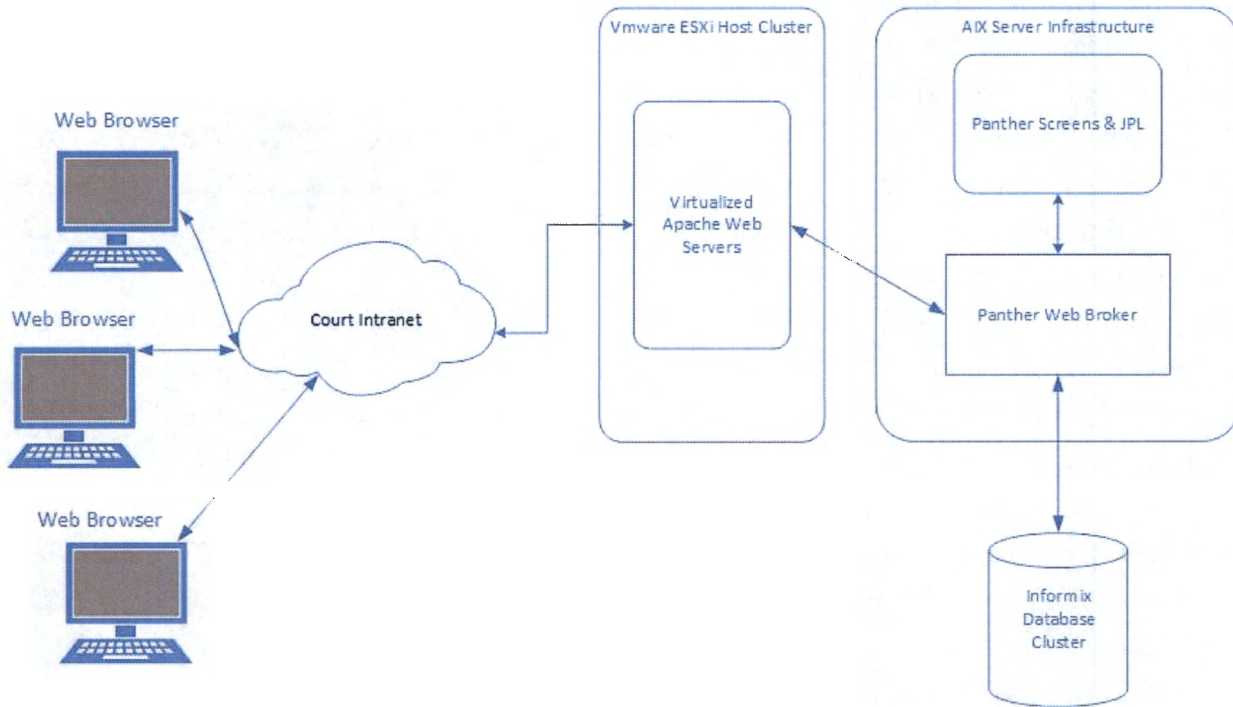
- The IBM Power 720 Servers will serve as the AIX based CMS application servers, JAM servers, as well as hosting our Informix database. (Our existing IBM servers are due for replacement in 2016)
- The Informix clustering licenses is an estimated cost to add in additional resiliency into our current and future CMS environment
- The SAN replacement (which is not directly shown in the diagram) reaches end of life at the end of 2016 and provides managed storage for all of our core infrastructure. The addition of a second storage array provides us with the ability to move in the direction of geographic redundancy for our data.
- The VMware hosts are due for replacement in 2016 and necessary for hosting virtualized servers, including our planned web servers.
- *The OnBase client licenses will be necessary to integrate OnBase into the updated CMS.

	Phase Description	Cost per Phase
Phase I	Professional Services for Determining Platform Requirements for CMS Upgrade	\$57,380
Phase II	Upgrade CMS from JAM to Panther web/PMC IST Developer training/OnBase integration	\$678,280
Phase III	Redesign Panther Web screens to an approved PMC screen design with global standards/PMC IST Developer Training	\$298,000
	Estimated Total Professional Services Costs:	\$1,033,660

Total Estimated costs for Phases I-III

Estimated Hardware and Software costs	\$ 790,000.00
Estimated Total Professional Services costs	\$1,033,660.00
Total	\$1,823,660.00

Appendix B: Connectivity Diagram - Architecture of CMS Web Application



Appendix C: Project Schedule -- Gantt Chart -- Project Management Timeline

High Level Project Management Timeline			
Task Name	Duration	Start	Finish
CMS upgrade	775 days	1/11/16	12/28/18
Phase 1: Workshops	50 days	1/11/16	3/18/16
Determine hardware, software & storage topology	2 wks	1/11/16	1/22/16
Familiarize Prolifics with database	2 wks	1/25/16	2/5/16
Map out OnBase integration	2 wks	2/8/16	2/19/16
Select technology for enhancements following migration	2 wks	2/22/16	3/4/16
Sketch out plan for migration	2 wks	3/7/16	3/18/16
Phase 2: Migration	405 days	3/21/16	10/6/17
Set up development environment	3 wks	3/21/16	4/8/16
Set up version control	2 wks	4/11/16	4/22/16
Develop the application	19 mons	4/25/16	10/6/17
Test application	6 mons	7/18/16	12/30/16
Train staff	3 mons	1/2/17	3/24/17
Prepare for production	4 wks	3/27/17	4/21/17
Phase 3: Enhancements	440 days	4/24/17	12/28/18
Train developers for maintenance and enhancement	5 wks	4/24/17	5/26/17
Train BAs for web design	6 mons	4/24/17	10/6/17
Create modern web page design template for CMS	12 mons	10/9/17	9/7/18
Get feedback on design capabilities and limitations	4 wks	9/10/18	10/5/18
Prepare page mock-ups	6 wks	10/8/18	11/16/18
Test page processing and efficiency	6 wks	11/19/18	12/28/18
Test page embedding and links	5 wks	11/19/18	12/21/18

Appendix D: PMC Integration Points Diagram (attached)

Appendix E: PMC Communication and Risk Plan (attached)

Appendix F: Prolifics Statement of Work (SOW) (attached)