



ADOA - ASET
Arizona Strategic Enterprise Technology

Project Investment Justification (PIJ)

*A Statewide Standard
Document for Information Technology Projects*

**Project Title: Web Portal Payment Processing
Solution**

Agency Name: ADOA-ASET
Date: August 9, 2013
Prepared By: Rico Cruz

TABLE OF CONTENTS

I. GENERAL INFORMATION	3
I.A GENERAL INFORMATION {A}.....	3
I.B SPECIAL FUNDING CONSIDERATIONS {A}.....	3
II. PROJECT OVERVIEW	3
II.A MANAGEMENT SUMMARY {A}.....	3
II.B EXISTING SITUATION AND PROBLEM, “AS IS” {A}.....	4
II.C PROPOSED CHANGES AND OBJECTIVES, “TO BE” {A}	4
III. PROJECT APPROACH	4
III.A PROPOSED TECHNOLOGY {REQUIRED FOR PIJ APPROVAL}.....	4
III.B OTHER ALTERNATIVES CONSIDERED	5
III.C MAJOR DELIVERABLES AND OUTCOMES.....	5
IV. POLICIES, STANDARDS AND PROCEDURES	6
IV.A ENTERPRISE ARCHITECTURE	6
IV.B SERVICE-ORIENTED ARCHITECTURE PLANNING AND IMPLEMENTATION	6
IV.C DISASTER RECOVERY PLAN AND BUSINESS CONTINUITY PLAN.....	6
IV.D PROJECT OPERATIONS	6
IV.E WEB DEVELOPMENT INITIATIVE	6
IV.F STATE IT GOALS.....	6
V. ROLES AND RESPONSIBILITIES	7
V.A PROJECT ROLES AND RESPONSIBILITIES	7
VI. PROJECT BENEFITS	8
VI.A BENEFITS TO THE STATE	8
VI.B VALUE TO THE PUBLIC.....	8
VII. PROJECT TIMELINE {A}	9
VII.A PROJECT SCHEDULE	9
VIII. PROJECT FINANCIALS	9
VIII.A PRE-ASSESSMENT PROJECT FINANCIALS {REQUIRED FOR PRE-ASSESSMENT PIJ ONLY}.....	9
VIII.B DETAILED PROJECT FINANCIALS {REQUIRED FOR PIJ APPROVAL}.....	9
VIII.C FUNDING SOURCE {A}.....	10
VIII.D SPECIAL TERMS AND CONDITIONS (IF REQUIRED) {A}.....	10
VIII.E FULL-TIME EMPLOYEE PROJECT (FTE) HOURS	11
IX. PROJECT CLASSIFICATION AND RISK ASSESSMENT	11
IX.A PROJECT CLASSIFICATION AND RISK ASSESSMENT MATRIX.....	11
X. PROJECT APPROVALS	13
X.A CIO REVIEW {A}.....	13
X.B PROJECT VALUES	13
X.C PROJECT APPROVALS {A}.....	13
APPENDIX	14
A. ITEMIZED LIST WITH COSTS	14
B. CONNECTIVITY DIAGRAM	14
C. PROJECT SCHEDULE - GANTT CHART OR PROJECT MANAGEMENT TIMELINE	14
D. NOI (WEB PROJECTS ONLY)	14
GLOSSARY	15

I. General Information

I.A General Information {A}

Agency CIO:	Aaron V. Sandeen	Contact Phone:	
Agency Contact Name:	J.R. Sloan	Contact Phone:	
Agency Contact Email:		Prepared Date:	August 9, 2013

I.B Special Funding Considerations {A}

Yes No - Does this project require funding approved for a Pre-PIJ Assessment phase?

If **YES**, provide details for the **Pre-PIJ Assessment** funding needs by filling out the areas marked with **{A}** or **{Required for Pre-PIJ Assessment only}**. Further information and details will be required after the assessment for final PIJ approval.

If **NO**, provide details for the final PIJ by filling out **all** areas **excluding** those sections marked with **{Required for Pre-PIJ Assessment only}**.

II. Project Overview

II.A Management Summary {A}

I. Problem Description

Upon the expiration of the 2007 State Web Portal contract with NICUSA, Inc. (NIC) on June 26, 2013, the Arizona Department of Administration (ADOA) will incur a substantial monthly fee to extend the contract until the transition to a new solution is complete. There are currently 29 web-based applications that handle financial transactions utilizing the State Web Portal. Almost 430,000 such transactions were processed in 2012, bringing in nearly \$70,000,000 in revenue to the State.

The State Web Portal is currently dependent on NIC's proprietary, non-standard Transaction Payment Engine (TPE) for payment processing of all credit card, debit card, and cash transactions. The 29 applications that process financial transactions have been specifically developed to work only with NIC's TPE. With the award of the State Web Portal services contract to four (4) vendors other than NIC, a new model for processing financial transactions must be implemented. It is critical that NIC continue to support the existing applications and financial transactions while the ADOA Arizona Strategic Enterprise Technology Office (ADOA-ASET) transitions the web portal payment processing system and works with the new vendors to convert the 29 financial applications.

II. Solution

As a first step, ADOA-ASET is proposing to implement a commercial off-the-shelf (COTS) payment processing system to replace the NIC TPE application. The proposed project will establish a new Web Portal Payment Processing Solution that will integrate with the State Accounting System (AFIS) and will be hosted in a secure Payment Card Industry (PCI) compliant data center. To replace TPE, ADOA-ASET has selected a COTS solution from Enterprise jBilling Software, Ltd., a company that specializes in payment processing software. The Enterprise Edition of this company's base product (jBilling) was more robust than comparable vendor offerings and can be easily customized to meet the specific requirements of the State.

III. Quantified Justification

During the contract extension period, ADOA-ASET will incur a cost of \$263,309 per month for six months of NIC support, with contract extensions available for two (2) additional three (3) month periods, or a total of twelve (12) months. As such, it is imperative that a new payment processing solution be implemented as soon as possible. The use of jBilling software and services to assist with the initial customization will expedite a replacement solution.

The jBilling software will allow ADOA-ASET to provide enterprise level capabilities to agencies utilizing the web portal environment for payment processing. ADOA-ASET will also have access to the source code, as well as the option to move hosting for the solution to the State Data Center (SDC) or an alternate provider, if desired.

II.B Existing Situation and Problem, “As Is” {A}

When TPE was originally implemented, it provided agencies utilizing the State Web Portal with payment processing, disbursement, and reconciliation capabilities needed to support financial transactions. Over time, its cost and lack of flexibility have limited its alignment with the State’s strategic goals. TPE is lacking in many capabilities that ADOA-ASET requires in an enterprise level tool. Furthermore, the lack of access to TPE source code has limited the State’s understanding of the technical functionality of the current application. With the award of a new State Web Portal services contract to Eagle Creek Software Services, Business & Decisions, IBM and Unisys, a replacement payment processing solution to support credit card, debit card, cash, and Automated Clearing House (ACH) transactions is required. A replacement for TPE will address all but the ACH transactions, which are handled by NIC via a different process. ADOA-ASET is working separately with Bank of America to assume support for the ACH processing.

II.C Proposed Changes and Objectives, “To Be” {A}

ADOA-ASET will contract for services provided by Enterprise jBilling Software, Ltd. to implement a customized payment processing solution to replace TPE. The proposed solution will be supported by the jBilling vendor and hosted in Amazon’s ‘cloud’ environment, which ADOA-ASET is currently utilizing for other vendor-hosted services. Once the solution is operational, ADOA-ASET will work with NIC and the recently awarded vendors to modify the 29 financial applications to use the new payment processing system. Implementation of this software will accomplish the following objectives:

- Provide a COTS solution with minimal customization required to meet the specific needs of the State.
- Allow ADOA-ASET to take advantage of any commercial enhancements that the vendor may make to the jBilling product.
- Provide the option for ADOA-ASET to engage jBilling for targeted enhancements to the solution as needed.
- Allow ADOA-ASET to discontinue support payments to the current vendor as soon as possible.
- Improve functionality over currently utilized software.
- Position ADOA-ASET to make further use of secure, vendor-hosted solutions.

III. Project Approach

III.A Proposed Technology {Required for PIJ Approval}

The jBilling solution will be implemented as a vendor-hosted and managed offering. To ensure successful implementation, ADOA-ASET will leverage the vendor’s expertise in supporting strategic payment processing related system analysis, planning, and deployment. While additional functional enhancements to the jBilling payment process are expected to be phased in over time, the proposed project will implement the following initial capabilities as part of a secure, vendor-hosted solution that can subsequently be used to transition all agencies processing payments through the web portal:

- **Customers/Users** – This includes functions needed to set up ‘Agency’ and ‘Citizen’ information in jBilling so that payments made can be tracked properly.
- **Products, Plans and Pricing** – jBilling will store and offer options to maintain product and pricing information so that customer payments can be applied to the appropriate products, as required.
- **Purchase Orders** – jBilling will be configured to create one-time purchase orders, enabling citizens to be charged immediately.
- **Payments** – jBilling will be used to accept credit card, debit card, and cash payments. It will also handle payment splits required by the State.
- **Integration** – jBilling will provide integration with the major credit card processors and banks, secured checkouts for each application, integration with AFIS, and a reconciliation process through a common integration point.
- **Receipts** – Transaction receipts will be sent to citizens via confirmation e-mails through the notification functionality.
- **Reports** – Customized reports that summarize and provide details on payment transactions will be provided as part of the functionality to be developed.

License & Maintenance Fees to acquire the jBilling software subscription, web access and support are included as a FY14 development expense, based on a quote from SHI, the current State contracted software reseller. Initial and ongoing fees for Amazon to host the jBilling solution are also reflected under License & Maintenance expenses, with an annual increase anticipated.

Professional & Outside Services reflects a quote for jBilling resources from MSR Global, a consulting firm available through the Knowledge Services contract. The contracted resources will complete, test and deploy the required customizations and also provide training and knowledge transfer to assist ADOA-ASET technical resources with future integration and transition activities. Given the need to complete further analysis to ensure all requirements will be addressed, estimated costs include a 50% contingency.

III.B Other Alternatives Considered

In preparing for this project, ADOA-ASET considered three (3) other alternatives:

- Internally developing a replacement payment processing software solution.
- Utilizing Bank of America (B of A) payment services to replace all NIC components.
- Review of other comparable COTS products.

With the expiration of the NIC contract on June 26, 2013, ADOA-ASET will incur a monthly support fee of \$263,309 until a full transition to the new solution can be made. The amount of time, effort and risk involved is too great for ADOA-ASET to develop a custom payment processing software solution, which would significantly extend the monthly support costs.

Processing services available from B of A did not meet key requirements of the State, such as the ability to split payments across different funds or provide a repository for detailed tracking of transactions. Therefore, ADOA-ASET plans to utilize B of A services for only the ACH transactions.

Based on a comparison of four (4) comparable COTS products, ADOA-ASET selected the jBilling offering as the most robust solution to meet the needs of the State.

III.C Major Deliverables and Outcomes

- | | |
|--|----------|
| 1. PIJ approved - <i>pending</i> | 08/23/13 |
| 2. Complete initiation, planning and analysis activities | 12/16/13 |
| 3. Acquire and install jBilling software in hosting facility | 12/16/13 |
| 4. Implement/test/train on customized jBilling solution | 02/03/14 |
| 5. Go live with jBilling offering | 02/28/14 |
| 6. Close project | 04/26/14 |

IV. Policies, Standards and Procedures

IV.A Enterprise Architecture

Yes **No** - Does this project meet all standards and policies for Network, Security, Platform, Software/Application, and/or Data/Information as defined in <http://aset.azdoa.gov/security/policies-standards-and-procedures>?

If NO , please describe NEW or EXCEPTIONS to Standards {Network, Security, Platform, Software/Application and/or Data/Information}:

IV.B Service-Oriented Architecture Planning and Implementation

Yes **No** - Does this project qualify as an SOA application by improving application delivery for technology reuse and/or application reuse and/or services reuse?

IV.C Disaster Recovery Plan and Business Continuity Plan

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

IV.D Project Operations

Yes **No** - Is there a written assessment of short-term and long-term effects the project will have on operations?

IV.E Web Development Initiative

Yes **No** - Is this a Web Development initiative? If **YES**, a Notice of Intent (**NOI**) must be provided. Link: <http://aset.azdoa.gov/node/15>

IV.F State IT Goals

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

- Accelerate Statewide Enterprise Architecture Adoption
- Champion Governance, Transparency and Communication
- Invest in Core Enterprise Capabilities
- Proactively Manage Enterprise Risk
- Implement a Continuous Improvement Culture
- Adopt Innovative Sustainability Models
- Reduce Total Cost of Ownership
- Improve Quality, Capacity and Velocity of Business Services
- Strengthen Statewide Program and Project Management
- Build Innovative and Engaged Teams
- Other _____

V. Roles and Responsibilities

V.A Project Roles and Responsibilities

Please identify project roles and responsibilities:

Vendor supplied resources:

- jBilling Project Manager
- jBilling Technical Lead
- jBilling Developer

ADOA-ASET resources:

- Enterprise Project Management Office Project Manager
- Security, Privacy & Risk team members
- Software Integration team members
- State Data Center Distributed Systems Group team members
- Application Development team members
- Data Resource Management team members
- Enterprise, Capability and Delivery team members

Please indicate Project Manager (PM) certification:

The **project manager** assigned to the project is:

- Project Management Professional (PMP) certified
- State of Arizona certified
- PM certification not required

VI. Project Benefits

VI.A Benefits to the State

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

Description	Score
Agency Performance: The extent to which duties and processes will improve or positively affect business functions. Consider reduced redundancy and improved consistency for the agency.	0
Productivity Increase: The improvements in quantity or timeliness of services or deliverables. Consider improved turnaround time or expanded capacity of key processes.	0
Operational Efficiency: Efficiencies based on improved use of resources, greater flexibility in agency responses to stakeholder requests, reduction or elimination of paperwork, legacy systems, or manual tasks.	4
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 agency.	3
Functional Integration: The impact the project will have in eliminating redundancy or improve consistency. Consider the impact of information sharing between departments, divisions, or agencies in the State.	4
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 agency, division, or other similar organizations.	5
Total	16
Additional Information (provide details on scores > 3)	
<i>Describe additional details on scores > 3. Also provide details on any savings that may be applicable.</i>	
<p>Operational Efficiency: jBilling will provide more functionality at a lower cost.</p> <p>Functional Integration: jBilling will work seamlessly with other existing State systems, and will run in the same 'cloud' environment that ADOA-ASET is utilizing for other vendor-hosted services.</p> <p>Technology Sensitive: jBilling is a proven comprehensive system that will provide the capabilities needed for a long-term payment processing solution while also expediting replacement of the current proprietary NIC solution.</p>	

VI.B Value to the Public

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

Description	Score
Client Satisfaction: Rate how stakeholders may respond to anticipated improvements. This could apply to health and welfare services, quality of life or life safety functions.	1
Customer Service: Rate anticipated improvements to internal and external customer service delivery. Give consideration to faster response, greater access to information, elimination or reduction in client complaints.	3
Life Safety Functions: Applies to public protection, health, environment, and safety. Consider how this project will reduce risk in these functions.	0
Public Service Functions: Applies to licensing, maintenance, payments, and tax. Consider how this project will enhance services in these functions.	0
Legal Requirements: Consideration should be given to projects mandated by federal or state law. Other consideration could be given if there are interfaces with other federal, state, or local entities.	0
Total	4
Additional Information (provide details on scores > 3)	
<i>Describe additional details on scores > 3.</i>	

VII. Project Timeline {A}

VII.A Project Schedule

Provide estimated schedule for the development of this project. These dates are estimates only; more detailed dates will be required at project start-up once the project schedule is established.

Project Start Date: 08/26/13

Project End Date: 04/26/14

VIII. Project Financials

Project Funding Details

Select One

Pre-PIJ Assessment Funding Details Only

Full PIJ Project Funding Details

VIII.A Pre-Assessment Project Financials {Required for Pre-Assessment PIJ Only}

Project Funding Details for Pre-Assessment Project Investment Justification Only

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

ESTIMATED COSTS						
Category	FY2014	FY2015	FY2016	FY2017	FY2018	Total
Assessment Costs						\$ -
Development Costs						\$ -
Total Development Costs (including Assessment)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Operational Costs (if estimate is available)						\$ -
Total Estimated Project Costs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

VIII.B Detailed Project Financials {Required for PIJ Approval}

Development and Operational Project Funding Details

Funding Categories:

Professional & Outside Services: The dollars to be expended for all third-party consultants and contractors.

Hardware: All costs related to computer hardware and peripheral purchases for the project.

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

Communications: All costs related to telecommunications equipment, e.g., switches, routers, leased lines, etc.

Facilities: All costs related to improvements or expansions of existing facilities required to support this project.

License & Maintenance Fees: All licensing and maintenance fees that might apply to hardware, software and any other products as up-front costs to the project (ongoing costs would be included under operational expense).

Other: Other IT costs not included above, such as travel, training, documentation, etc.

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

VIII.C Funding Source {A}

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

Funding Source Category	Name of Funding Source	Currently Available (\$)		New Request (\$)		Total (\$)
		Development Budget	Operational Budget	Development Budget	Operational Budget	
General Fund						\$ -
Federal ARRA Fund						\$ -
Federal Fund						\$ -
Other Appropriated Funds	Automation Projects Fund	\$ 123,148	\$ 321,274			\$ 444,422
Other Non-Appropriated Funds						\$ -
TOTAL PROJECT COSTS (Should = development and operational totals above)		\$ 123,148	\$ 321,274	\$ -	\$ -	\$ 444,422

VIII.D Special Terms and Conditions (if required) {A}

Special Terms and Conditions (if required)
NA

VIII.E Full-Time Employee Project (FTE) Hours

Provide estimated FTE Development hours that will be utilized for the duration of the project. Include IT as well as Business Unit FTE hours, if available. Enter into Project Values table on Approvals page. Enter FTE costs (if known) as well.

Total Full-Time Employee Hours	80
Total Full-Time Employee Cost	\$

IX. Project Classification and Risk Assessment

IX.A Project Classification and Risk Assessment Matrix

Rate each question to determine risk level at Low (0), Medium (1), High (2), Very High (3).

Enter Risk Score into Project Values table on Approvals page.

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)

PIJ Project Classification and 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	0
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 is in place, few interruptions for non-project tasks are expected and have been accounted for	Available, some turnover expected, some interruptions for non-project issues likely	Dedicated team not available, staff will be assigned based on capacity	1
Number of Agencies Involved in Development Activity	1	2	3	> 3	3
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	3
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	1
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	0
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 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	2
System Interface Profile	No other system interfaces	1-2 required interfaces	3-4 required interfaces	> 4 required interfaces	3
IT Architectural Impact	Follows State IT approved design principles, practices & standards	New to the State, but follows established industry standards	Evolving "industry standard"	No standards, leading edge technology	0
Deployment Impact					
Process Impact	No business process changes	Agency-wide process changes	Multi-agency process changes	Statewide process changes	0
Scope of End User Impact	Department or division level only	Multiple division or agency-wide impacts	Multi-agency impacts	Statewide impacts	2
Training Impact	No training is required	Minimal training is required	Considerable training is required	Extensive training is required	1
Total Risk Score					17

X. Project Approvals

X.A CIO Review {A}

Key Management Information	Yes	No
1. Is this project for a mission-critical application system?	X	
2. Is this project referenced in your agency's Strategic IT Plan?	X	
3. Is this project consistent with agency and State policies, standards and procedures?	X	
4. Is this project in compliance with the Arizona Revised Statutes and GRRC rules?	X	
5. Is this project in compliance with the statewide policy regarding the Accessibility to Equipment and Information Technology for Citizens with Disabilities?	X	
6. Is this project mandated by law, court case or rule? If yes, cite the federal requirement, A.R.S. reference or court case.		X
Details: <i>Provide details related to technology as part of the requirement.</i>		

X.B Project Values

The following table contains summary information taken from the other sections of the PIJ document.

Description	Section	Significance
Assessment Costs {A}	VIII. Project Financials {Required for Pre-Assessment PIJ Approval Only}	\$
Economic Benefits	VI. Benefits to the State	16
Value Rating	VI. Value to the Public	4
Total Development Costs	VIII. Project Financials	\$123,148
Total Project Costs	VIII. Project Financials	\$444,422
FTE Hours	VIII. Project Financials	80
Project Risk Factors	IX. Risk Summary	17

X.C Project Approvals {A}

Select One Pre-PIJ Assessment Approval Only PIJ Project Approval

Project Title: Web Portal Payment Processing Solution

Responsibility	Printed Name	Approval Signature	Date
Project Manager:	Dina Martinez		
Agency CIO:	Aaron V. Sandeen		
Project Sponsor:	J.R. Sloan		
Agency Director:	Brian C. McNeil		

Appendix

B. Connectivity Diagram

NA

C. Project Schedule - Gantt Chart or Project Management Timeline

NA

D. NOI (Web Projects Only)

NA

Glossary

Document Information

Title: Project Investment Justification – PIJ Version January 2013
Originator: Arizona Department of Administration – AZ Strategic Enterprise Technology Office
Date: January 2013
Download: <http://aset.azdoa.gov/>
Contacts: **ASET Oversight Managers:**
<http://aset.azdoa.gov/content/project-investment-justification>
Web Design (NOI Contact):
<http://aset.azdoa.gov/webtools>