

E-Docs Requirements Framework

May 19, 2011



Project Summary

The project objective is to create a framework that can be adapted by any agency to quickly identify all key requirements crucial to the success of EDM/AWS so that the agency can:

- Efficiently obtain consistent vendor proposals targeting the agency's actual key requirements that can be easily compared side-by-side.
- Accurately select the hardware and software solution best suited to the agency's specific needs based on functionality, supportability, return-on-investment, migration path, and implementation risk.
- Create a clear implementation plan for purchase, installation, conversion, training, operation, and support of the selected solution.

Project Goal

- Provide a framework for use by any agency to create key requirements for publishing an RFP for an EDM/AWS. The framework will have:
 - A table of contents
 - An executive summary
 - A section describing the process for obtaining key requirements
 - A section describing topics and areas of knowledge to use when determining key requirements
 - Appendices as needed

Project Outcome

This framework has combined project management essentials with guidance provided by the federal government for obtaining agency-unique requirements for an EDM/AWS, and includes a recommended list of requirements topics to be covered by the project team that was developed by comparing and building upon requirements used by numerous agencies. This framework also includes an example statement of work and references to other resources that the agency's requirements team may find useful. An agency can expect to have a significant investment of resources in terms of employee time, contractor fees, procurement, installation, integration, implementation, training, and maintenance of the software and hardware necessary to do even a limited EDM/AWS. It is important that an agency use proven project management tools to improve the likelihood of success.

Project Benefits

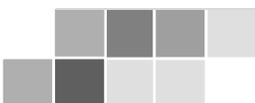
Taking a step-by-step, disciplined approach and applying internationally accepted project management tools and skills increases the likelihood that a project team will successfully provide requirements that meet the agency's need for an EDM/AWS that:

- Supports the agency's strategic goals
- Supports the agency's fully identified business processes
- Meets the agency's obligations for security, public records management, protection of confidential personal information and other confidential records
- Makes the best use of the agency's resources
- Harmonizes with the agency's current systems
- Produces a system that provides tangible benefits to the agency and its customers.

Project Team

For more information about this project, contact team members:

- Scott Heidenreich — Scott.Heidenreich@epa.ohio.gov
- Connie Livchak — Connie.Livchak@epa.ohio.gov
- Larry Macioce — Larry.Macioce@com.state.oh.us
- Tonya Griffith — Tonya.Griffith@jfs.ohio.gov
- Cindy Whicker — Whicker@osd.oh.gov Cindy Whicker



A Framework for
Obtaining agency Requirements for an E-document
Management/Automated Workflow System (EDM/AWS)

May 17, 2011

E-Docs Requirements Framework and Process Team

Project Manager: Scott Heidenreich, Environmental Manager, Ohio EPA

Project Team: Tonya Griffith, Dept. of Job and Family Services
Connie Livchak, Environmental Supervisor, Ohio EPA
Larry Macioce, Dept. of Commerce
Cindy Whicker, Ohio School of the Deaf

Prepared as a Team Project for:

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Department of Administrative Services
State of Ohio
Columbus

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Introduction

An e-document management/automated workflow system (EDM/AWS) Request for Proposal (RFP) can be used to obtain many significant benefits in addition to simply comparing one vendor response to another. An RFP can be used to determine the:

- Risk inherent in a proposed system
- Suitability of EDM/AWS to your needs
- Financial impact of a proposed system
- System's total cost of ownership (TCO)

Yet, many organizations are limited to using an RFP just for collecting and comparing vendor responses, and many find even that task to be very time-consuming and incomplete. The reason for this is most EDM/AWS RFPs do not use a question and vendor response format correctly suited to the product being acquired.¹

A successful RFP uses best practice techniques to make it agency-specific not just for initial procurement, but throughout all phases of the system evaluation, selection, and implementation process. The following steps will assist your agency in creating an optimal RFP:

- Identify your unique requirements efficiently and accurately (which is the focus of this document).
- Use the RFP as a system implementation management tool utilizing Earned Value Management (EVM)².
- Collect all information needed to accurately determine Total Cost of Ownership (TCO) and Return on Investment (ROI).
- Use the correct RFP question format needed to collect all decision-making data.
- Evaluate vendor responses quantitatively at both the system and financial levels.
- Choose the solution best suited to your organization's needs.³

This process framework document is intended to help an agency identify its unique requirements efficiently and accurately for use in an RFP for an EDM/AWS, and not the other aspects of using an RFP listed in the introduction.

In the document titled "Electronic Records Management Guidance on Methodology for Determining Agency-unique Requirements"⁴, the federal government recommends the following steps for identifying an agency's unique requirements:

¹ "Effective RFP Techniques", *The Optimized RFP Guide*, Infotivity Website, DMS System Planning Tools, <http://www.document-management-software-system.net/rfpetechiques.html>, downloaded 4/15/2011

² "Earned value management (EVM) in its various forms is a commonly used method of performance measurement. It integrates project scope, cost, and schedule measures to help the project management team assess and measure project performance and progress." *A Guide to the Project Management body of Knowledge (PMBOK Guide)*, 4th Edition, PMI, Inc., PA, 2008.

³ "How to Write an RFP Optimized to Your Needs", *The Optimized RFP Guide*, Infotivity Website, DMS System Planning Tools, http://www.document-management-software-system.net/opt_guide_order.html#V, downloaded 4/15/2011

1. Determine EDM/AWS Scope
2. Review Infrastructure/IT Architecture
3. Review Agency Records and Information Resources Management (IRM) Guidance and Directives
4. Review Available Standards
5. Review Requirements
6. Requirements Classification
7. Stakeholder Review

The keys to effective implementation of this framework are the proper use of project management methodologies. Project Management is a means to an end. Some people may resist spending time to manage a project because they see it as taking time away from completing the assignment. Because sponsors and team members want to participate in a successful project, using project management techniques increases the likelihood that a project will be completed successfully, which means in budget, within scope, and on-time.

Depending upon the scope and nature of the project, project management can range from informal planning between the sponsor and the person responsible for the project (aka, project manager) to formal project management with a designated project manager, project team, and a written project plan with a statement of work, charter, and sections that address each of the items in Table 1.

Regardless of the scope and nature of a project, the person responsible for managing the project should at a minimum reflect on each of the areas of project management, if for no other reason than to check assumptions and ensure that something important isn't missed that could adversely affect the outcome of the project.

The topics that should be addressed formally or informally, to the extent appropriate, for any project are as follows⁵:

⁴ *Electronic Records Management Guidance on Methodology for Determining agency-unique Requirements*, Electronic Records Management (ERM) E-Government Initiative, Enterprise-wide Electronic Records Management Issue Area, August 23, 2004, <http://www.archives.gov/records-mgmt/policy/requirements-guidance.html#dod-standard>

⁵ *A Guide to the Project Management body of Knowledge (PMBOK Guide)*, pg. 43, 4th Edition, PMI, Inc., PA, 2008

Table 1. Project Management Knowledge Areas

Project Management Knowledge Area	Description
Integration Management	Ensuring the project team is functioning well and completing their tasks and assignments.
Scope Management	Ensuring the project stays on task and doesn't veer off course or mushroom to something bigger than intended.
Time Management	Ensuring the project stays on-time and meets deadlines.
Cost Management	Understanding the costs and managing the budget of the project.
Quality Management	Establishing the quality control ⁶ and quality assurance ⁷ that will be used to ensure the project deliverables meet the customer and sponsors requirements.
Human Resource Management	Ensuring the project has the appropriate human resources to be successful.
Communications Management	Ensuring stakeholders and customers are identified, and identifying the methods, frequency, and audience of communications to be used for the project.
Risk Management	Evaluating the circumstances (risks) that may cause the project to be delayed or to fail, evaluating the likelihood and severity of the risks, creating a plan to deal with the risks should they happen, and monitoring to evaluate if a risk is imminent.
Procurement Management	Ensuring that the team has the supplies, tools, contractors, and other items necessary to complete the project successfully.

Below you will find testimony from Project Management Training course students that have learned about the nine knowledge areas of project management and have begun implementing their knowledge to conduct this project;

"Most people don't plan to fail; they fail to plan." For me, project management gives me direction. It leads me through a planning process to ensure I don't miss anything, so that my project is successful. *Tonya Griffith*

Project management provides good tools for assessing how well the project is doing as it progresses. Rather than finding out the project is failing toward the end, problems can be anticipated and remedied as they occur. *Connie Livchak*

I like that project management has a clear structure and process of how to complete your project. The tools and techniques of project management enable the team to work through each area of the project; it builds from one step to the next. Going through the process of project management helps everyone involved stay on task and understand what we are all trying to accomplish. *Cindy Whicker*

⁶ "Quality Control" (inspection) is the activities that the person producing the deliverable will do to ensure that the deliverable meets the customer and sponsor requirements.

⁷ "Quality Assurance" (auditing) is the activities that a third party will do to ensure that the person producing the deliverable is following the established quality control procedures. The third party can be a project team member assigned to Quality Management, the project manager, the sponsor, or the customer.

After starting this class, I realized that project management is logical, it just makes sense. *Larry Macioce*

Working on a project with a group of trained project managers committed to applying project management tools has been a great experience. We have had the opportunity to actually apply these tools, test them, scrutinize them, and find that they are robust, actually work, provide great communication for the team, and keep the project moving along with confidence. *Scott Heidenreich*

Recommended Process for Identifying an agency's Unique Requirements

Combining the steps recommended by the federal government with accepted project management knowledge, results in the following recommended process for identifying an agency's unique requirements for an EDM/AWS. Each of the following steps is discussed in more detail in "A Guide to the Project Management Body of Knowledge (PMBOK Guide) (Project Management Institute, Inc. 2008) and the document titled "Electronic Records Management Guidance on Methodology for Determining agency-unique Requirements" (US Department of Defense 2004). So, only a brief description of each step will be included here.

Table 2. Requirements Process Steps

Process Step	Description
1. Create Statement of Work	The sponsor creates a statement of work and uses it to communicate with stakeholders the essentials of what the project is about, including the business need, description of the product that the project will create. See Appendix 1 - Example Statement of Work for EDM/AWS. Once the charter is completed and agreed upon by the sponsors, then it is used to create the charter.
2. Create Charter	The charter is the document that formally authorizes a project and records the initial requirements that satisfy the stakeholders' needs and expectations. A project manager is assigned to the project and works with the sponsor to create the charter. In addition to other information included in a typical charter, for this project the charter needs to identify the following:
	2.1. An explanation of the project team's duties and the responsibilities of the agency's Information Technology (IT) department.
	2.2. A decision also needs to be made whether the project team and their IT department partners will work to create the requirements list or whether a contractor with expertise in the EDM/AWS industry will be procured to assist the project team and IT department with this project.
3. Create Project Team	<p>The project team is identified and assigned by the sponsor with recommendations from the project manager.</p> <p>3.1. It is recommended that the team include team members who can manage one or more project management knowledge areas useful to the project (See Table 1).</p> <p>3.2. It is recommended that the team have access to SMEs and have a contractor available that are subject matter experts in each of the following subject matters:</p> <ul style="list-style-type: none"> 3.2.1.1. Document Capture 3.2.1.2. Business Process Management 3.2.1.3. IT and Document Security 3.2.1.4. Hosting Provision 3.2.1.5. EDM/AWS Operation and Design Requirements 3.2.1.6. Legal Requirements for managing public records and documents for legal discovery. 3.2.1.7. Implementation
4. Team Launch	The team is formed, and spends a little time clarifying their understanding of the charter and briefly addressing each of the project management knowledge areas listed in Table 1.
	4.1. The IT Department procures a contractor to assist in the project, if that is authorized as part of the project.

5. Determine EDM/AWS Scope	<i>A scoping document is critically important for this project. EDM/AWS can range from a single system of documents, to all documents associated with selected business processes, to a comprehensive system that encompasses nearly every form of communication conducted by the agency.</i>
6. Review Infrastructure/IT Architecture	Identify unique agency infrastructure or architecture that could result in unique requirements for the ERM system ⁸
7. Review agency Records and Information Resources Management (IRM) Guidance and Directives	This will include agency specific policies and applicable state and federal laws pertaining to records management, confidential personal information, confidential records handling, HIPAA and FERPA requirements, public records release, security, etc.
8. Review Available Standards	There are several industry standards available for EDM/AWS. It would be valuable for the project team to review some industry standards (e.g., AIIM Standards Committee on Integrating Records Management and Document Management Requirements, http://www.aiim.org/standards.asp?ID=24484 ⁹ and others). This is especially important if the team will not have a contractor assisting to obtain EDM/AWS requirements for the agency.
9. Gather Customer and Stakeholder Requirements	Information about the activities, needs, and requirements of Stakeholders, sponsors, customers, and SMEs are gathered. A recommended list of requirements topics with a brief description of each is found in this framework document starting on page 9.
10. Review Requirements	The project team reviews each of the requirements that have been gathered and performs list reduction to consolidate similar requirements, clarify requirements, or eliminate requirements based on a set of criteria chosen by the team See (US Department of Defense 2004) for a list of recommended review criteria.
11. Requirements Classification	This step is used to prioritize requirements and assess the functionality of each additional agency-unique requirement. ¹⁰ A list of recommended key requirements for the EDM/AWS is prepared for review by the sponsors, stakeholders and customers (See (US Department of Defense 2004) for a list of recommended classification criteria). This list will prioritize the requirements and explain the prioritization.
12. Sponsor, Stakeholder, and Customer Review	The project team works with the sponsors, stakeholders, and customers to evaluate the prioritized recommended key requirements. Once stakeholder comments and/or opinions are known, it is possible to broaden the mandatory requirements to include those requirements most beneficial to stakeholders, to re-write requirements as needed, and to prioritize optional requirements according to their usefulness. ¹¹ The result is a list of requirements that can then be used to create a request for proposal (RFP) for an EDM/AWS.
13. Project Close	The project team finalizes all of its activities and documentation, (including closing the contract if a contractor was hired), presents the project deliverables to the sponsor, evaluates how well the team met its objectives and scope, produces recommendations for what to do differently on future project teams, and finalizes its historical documents so they can become available for future project teams.

⁸ *Electronic Records Management Guidance on Methodology for Determining Agency-unique Requirements*, Electronic Records Management (ERM) E-Government Initiative, Enterprise-wide Electronic Records Management Issue Area, August 23, 2004, <http://www.archives.gov/records-mgmt/policy/requirements-guidance.html#dod-standard>

⁹ Ibid

¹⁰ Ibid

¹¹ Ibid

At this point the project team has completed its work and the sponsor forwards the list of key requirements to the person responsible for managing the agency's RFP process. The project team would then become SME's for the person writing the RFP. The project team may be requested to participate in the evaluation and grading of the proposals, depending upon how the agency's RFP process works.

Recommended Requirements Categories when Identifying an Agency's Unique Requirements

The intent of the EDM/AWS is to significantly replace paper-based processes, reduce cost, automate communications, streamline collaboration, and accelerate the completion of critical business tasks. To do so effectively and efficiently, many considerations need to be evaluated prior to developing an RFP. Numerous relevant documents readily available on the Internet were used as benchmark information. The most comprehensive electronic document management requirement list found was the NORCON 58-311B, entitled Electronic Document Management System: Description of Requirements (NOEX 2008).

The requirements category list was expanded upon based on communicated agency needs and SME feedback, along with comparisons with other RFPs. Table 3 is a compilation checklist of the resulting recommended requirements categories for evaluation and delegation to either the agency's requirements team or agency IT department. For a technical explanation of many of the requirements in Table 3, refer to the NOEX, 2008 article.

Table 3 lists the categories of different types of requirements that need to be evaluated and addressed by an agency's requirements team that is using this framework. The requirement number is listed in the first column. The second column has a brief description of the requirement category. The last two columns are used to identify whether the agency's requirements team or the agency IT department will be responsible for determining the agency specific requirements for that requirement category. A brief explanation of the requirements category is found in the corresponding numbered paragraphs following Table 3.

Table 3. Recommended Requirements Categories

Req #	Requirement Category	Responsible Party	
		Agency Requirements Team	Agency IT
1	Document Capture		
1.1	Scanning		
1.2	Batch Management		
1.3	Scanner Operation, Controls & Features		
1.4	System Quality Control		
1.5	Agency Quality Assurance		
1.6	Metadata		
1.7	Recognition Technology		
1.8	Bar/QR Codes		
1.9	Administration		
1.10	Release		
1.11	Viewing, Editing, & Annotating		
1.12	Output Management		
1.13	Retention Requirements		
1.14	Storage		
2	Business Process Management		
2.1	Process Management		
2.1.1	Legal Discovery		
2.1.2	Public Records Law Compliance		
2.1.3	Public Records Requests		
2.2	Administration		
3	Operation & Design Requirements		
3.1	Web-Based Software		
3.2	Functionally Modular		
3.3	Scalable Architecture		
3.4	Physical Limitation		
3.5	Multi-Channel Access		
3.6	Concurrent User		
3.7	Ease of Use		
3.8	Edit & Process Controls		
3.9	Accommodating Dates & Date Logic		
3.10	Documentation		
3.11	Reports & Queries		

3.12	Response Time		
3.13	Audit Trails/Transaction Back-up		
4	Security –Internally		
4.1	Access Rights		
4.1.1	Attorney/Client privileged documents		
4.1.2	Sensitive & Confidential Personal Information		
4.1.3	Trade Secrets		
4.1.4	Personally Identifiable Information (PII)		
4.1.5	Other		
4.2	Single Log On		
4.3	User ID/Password Security		
4.4	System Administration		
4.5	Unauthorized Log-on		
4.6	Access by Persons with Disabilities		
4.7	Software Upgrades & Enhancements		
4.8	Interface with Off-the-Shelf HW & SW		
4.9	Certification		
4.10	Backward Compatibility		
4.11	Additional Software Functionality		
5	Hosting Provider		
5.1	Service Legal Agreement & Support		
5.2	Data Center		
5.3	Disaster Recovery/Business Resumption		
5.4	High Availability		
5.5	Backup/Storage		
5.6	Power Redundancy		
5.7	Hardware		
5.8	Standard Certification		
5.9	Network Capabilities		
6	Security – Externally		
6.1	Data Center Security		
6.2	Monitoring Capabilities/System Maintenance		
6.3	Data Ownership		
6.4	Solutions Management		
7	Implementation		
7.1	Installation		
7.2	Integration		
7.3	Transition from Current to New System		
7.4	Training		

The following information includes brief descriptions of requirements concepts that should be considered when evaluating the functions of an EDM/AWS. The descriptions are not comprehensive and are included here as examples to provide information to provoke discussion and evaluation during the requirements gathering process. It is recommended that the agency obtain expert assistance for the agency's requirements team and the agency IT department from a competent, consultant experienced with helping agencies obtain requirements and familiar with the EDM/AWS industry.

1.0 Document Capture

The first technical consideration for an appropriate Electronic Document Management/Automated Workflow System (EDM/AWS) is the ability to capture, store, retrieve, and manage your agency's documents, while minimizing user intervention. The EDM/AWS should allow for selecting the capture method and tagging of documents at the time it is either created or received. Integration and synchronization of the objects' compression and storage, labeling and indexing, categorization for automated content tagging, annotation, and categorization for records retention and appropriate level of confidentiality are necessary elements the EDM/AWS must provide.

1.1 Scanning

The EDM/AWS should consider document replication of different paper sizes, envelopes, as well as variable duplexing combinations, such as, single-sided, two-sided, and multiple paged documents. Compatibility with your agency's scanners and support of distributed scan stations where data capture software is located on individual PCs is necessary.

1.2 Batch Management

The EDM/AWS must have the capability to set up document batches where automatic identification of the document and form type is recognized as it is scanned, establishing different processing steps depending on the document type. Additionally, a complete or an incomplete status notification should occur after running a batch.

1.3 Scanner Operations, Controls, & Features

The scanning interface should be user-friendly and include the choice of common document types with pre-defined scan setting, metadata scheme, and processing work flows.

1.4 System Quality Control

The scan control software must be integrated with viewer software so that pages that were scanned can be viewed. Image enhancement should be done through automatic settings with the ability to manually edit.

1.5 Agency Quality Assurance

After running a job, it is necessary to be able to view the scanned product to ensure it adheres to your agency's quality standards. It will be necessary for the agency to develop an understanding of the quality standards for scanned documents that are necessary to meet legal and business needs for accuracy and authenticity. The agency will need to implement quality assurance standards for employees to use to ensure the system quality controls are working as intended.

1.6 Metadata

The EDM/AWS must be able to produce accurate and reliable search results for documents generated and received. The users' ability to do so depends on accurate metadata, relevant subject classification, and descriptive key words.

1.7 Recognition Technology

A clear understanding of the types of non-electronic documents created and received by the agency will be needed to ensure that recognition technology will be able to properly interpret the documents. Multiple recognition technologies should include:

- Fully scriptable Optical Character Recognition (OCR),
- Fully scriptable Intelligent Character Recognition (ICR) for unconstrained hand print and natural cursive handwriting,
- Bar/QR Code Recognition,
- Full-text indexing,
- Optical Mark Recognition, and
- Manual keying of computer unrecognizable data.

The error rates per document or field and the correction mechanisms provided to correct the errors should be revealed in detail.

1.8 Bar/QR Codes

The EDM/AWS should be able to generate bar or quick response (QR) codes that will be read from individual documents or from bar/QR code sheets used with batches. It should also be able to read a bar/QR code anywhere within the margins of a page.

1.9 Administration

The EDM/AWS should be able to assign metadata and classifications during or after the initial scan. It must provide easy, visual reference during high-speed batch coding of the images. The user should be able to code a batch as a single document or separate a batch into several documents of one or more pages, which may have different metadata.

1.10 Release

The EDM/AWS should allow an authorized user to review comments (entered by operators involved in the scan), quality, and metadata functions before the documents are rendered and released to the storage location.

1.11 Viewing, Editing, & Annotating

The document viewer must support viewing functions for all file formats regardless of file size, dimension, density, color, model and resolution. A full range of library services for viewing and editing documents is also necessary, as well as transferring documents into another file.

1.12 Output Management

The EDM/AWS should support sending, routing, printing, and faxing documents and content retrieved from the storage area using standard communications tools and interfaces.

1.13 Retention Requirements

Documents stored must be governed by established retention schedules. Once created or acquired documents should be easily classified according to the agency's retention rules. Also, the way the document is retained should correspond to the stage the document is currently in. Work-in-progress documents would be in the format in which it was created, final documents in a non-changeable format with version control features, and archived documents in non-changeable, non-proprietary format.

1.14 Storage

The EDM/AWS should include comprehensive storage with high availability during normal business hours in non-proprietary formats. Once a document is archived, it should be stored in a format that does not allow modifications. Documents in permanent archives should be accessible indefinitely. The documents should be stored in a way that will allow migration to new storage devices or technologies as they are added.

2.0 Business Process Management

2.1 Process Management

Mark-up functionality and version controls must be available for work-in progress documents. The EDM/AWS should be capable of automatically generating documents along with receipt or notification when a process is completed. The EDM/AWS should also be able to automatically trigger records declaration, create folders, and designate retention based on workflows and document types.

2.1.1 Legal Discovery

Include your agency's legal department as an SME to understand your agency's discovery requirements so they are addressed in the EDM/AWS. The system may be required to provide redaction services, provide confidential hold temporarily or indefinitely, and indexing/exhibit numbering.

2.1.2 Public Records Law Compliance

Ohio's Public Records Law is found in the [Ohio Revised Code 149](#). Legal SME's should review the requirements from the perspective of complying with these laws.

2.1.3 Public Records Requests

Fulfillment of public records requests needs to be timely, comprehensive, and tracked. An advantage of an EDM/AWS is the more effective completion of the request, if incorporated into the requirements.

2.2 Administration

Predefined users must be able to change or copy workflows as needed. This includes the ability to modify the process flow by adding or nullifying stages on an impromptu and instantaneous manner. The system must also be able to change work assignments within the context of each workflow. This will allow the system to be easily adapted for changes in employee responsibilities, and provide coverage for vacancies and absences. Queuing features must be able to handle these processes easily.

3.0 Operation & Design Requirements

3.1 Web-Based Software

The interface software should require minimal software installation to the desktop, except perhaps the scanning software.

3.2 Functionally Modular

Each module must operate separately but when combined must work as one system, such as an integrated suite of programs, or extensions to the main software package.

3.3 Scalable Architecture

The hardware and software should be able to be added, removed, or upgraded as capacity needs change without reconfiguration of the system. An explanation for expected loss of functionality or an increase in efficiencies and the conditions for either, should be articulated.

3.4 Physical Limitation

Identification of any limitations within the proposed system, such as individual document file size, storage limitations, processor growth limitation, database limitations, number of users' limitations, etc., should be disclosed.

3.5 Multi-Channel Access

The EDM/AWS should be available by authorized personnel from any location during normal business hours and support portable devices, provide security for and encrypt all data during transmission.

3.6 Concurrent User

The EDM/AWS should support concurrent local and remote users that will be accessing through desktop PCs, Internet, and wireless devices.

3.7 Ease of Use

There needs to be a consistent look and feel across modules and system navigation should be straightforward.

3.8 Edit & Process Controls

The EDM/AWS should provide on-line editing and process control features to maximize the accuracy of system data.

3.9 Accommodating Dates & Date Logic

The EDM/AWS should include century recognition by storing years in a 4-digit format, accommodating leap years.

3.10 Documentation

On-line and hard copy user manuals should be available for viewing. In addition, on-line help screens and tutorials should be provided for user training and help. Customizations to the system provided for the agency should be thoroughly documented as well for use during future upgrades, reinstallations, and possible migration to other systems.

3.11 Reports & Queries

Comprehensive reporting tools allowing access to data should be made available to authorized users. A variety of methods for obtaining information should be made available, including online and real-time production of reports.

3.12 Response Time

Sub-second responses are the goal of the EDM/AWS; however, many variables don't make this goal practical. Document streaming, thumbnail versions and the ability to lower initial resolution help improve the impression of sub-second responses when not practical.

3.13 Audit Trails/Transaction Back-up

Automatic on-line and off-line backups should be a feature of the EDM/AWS. If failure occurs, everything but the in-process job should be available. Also, recovery must occur to the last completed work unit of an automated process.

4.0 Security-Internal

4.1 Access Rights

A user profile should be established for authorized users as well as the ability to restrict user rights. When users are added or deleted to a profile, the impact to approval hierarchies and workflows needs to be defined.

4.1.1 Attorney/Client Privileged Documents

Contact your agency's legal counsel to determine privileged documents requirements. Limited access could be provided through a number of mechanisms that best meets your needs.

4.1.2 Sensitive and Confidential Personal Information

Certain [sensitive](#) and an confidential [personal information](#) is exempt from public disclosure in Ohio (ORC 149.43 – 149.45, 1347.15) and needs to be protected from release without authorization and documentation of the release.

4.1.3 Trade Secrets

The system must allow trade secrets to be identified and segregated to prevent release except to those authorized. Release of the trade secrets must be documented.

4.1.4 Personally Identifiable Information (PII)

Skip Holler, Chief Information Security Officer at Ohio EPA, recommended that an EDM/AWS system protect PII. This information is used to uniquely identify, contact, or locate a single person or can be used with other sources to uniquely identify an individual, and must be prevented from access, except by authorized personnel for authorized reasons.

4.1.5 Other

Laws specific to your agency may require compliance with other confidentiality requirements such as the Health Insurance Portability and Accountability Act (HIPAA) of 1996 and the Family Educational Rights and Privacy Act (FERPA).

4.2 Single Log-On

To simplify using the system for the user and lower resistance to acceptance by users, the EDM/AWS should provide a single log-on process using a standard, directory service system providing security functions across all modules.

4.3 User ID/Password Security

The security function should allow for the establishment of passwords and the ability to require expiration and warning time periods, in addition to fixed expiration dates. The system should have the ability to suspend or stop user rights when a user ID is terminated or inactivated.

4.4 System Administration

The security system must allow security coordinators to reset passwords and enforce changing of passwords. Furthermore, security coordinators should be able to view access rights provided to the specific users as well as the views that an individual will see.

4.5 Unauthorized Log-On

Multiple attempts to obtain access to the EDM/AWS must be documented. Information such as, date and time, work station name, User IDs, and the passwords tried should all be recorded. If too many attempts are unsuccessfully made, log-on capabilities should be disabled and the security administrator notified.

4.6 Access by Persons with Disabilities

Compliance with the Americans with Disabilities Act (ADA) requirements should be encouraged and may be required for your agency.

4.7 Software Upgrades & Enhancements

The EDM/AWS must allow for automatic distribution and downloading of modification and upgrades to remote computers, including personal computers. The changes should preserve previous enterprise-wide changes, current functions, and personalized preferences on the desktop.

4.8 Interface with Off-the-Shelf Hardware & Software

The EDM/AWS must work with common, off-the-shelf software and hardware products with which it interfaces like scanners and printers.

4.9 Certification

The Vendor must describe any certifications that have been performed on the software.

4.10 Backward Compatibility

The EDM/AWS is required to comply with previous versions of commonly used programs. A list of programs and versions should be supplied, along with exceptions.

4.11 Additional Software Functionality

Any additional functionality beyond what is requested in the RFP should be identified as such, described in detail, and proposed as a separate line item.

5.0 Hosting Provider

5.1 Service Level Agreement & Support

If offering a Service Level Agreement (SLA) an itemized breakdown of services should be included such as average response time/resolution time for network problems, or system problems, issues with security, etc.

5.2 Data Center

A detailed description of how the data center will run the EDM/AWS is required, including hardware utilized, subcontracting agreements, etc.

5.3 Disaster Recovery/Business Resumption

A description of disaster recovery procedures on how an emergency affecting the EDM/AWS will be managed should include a discussion on how interim services will be provided and how bringing functionality back to normal would be accomplished.

5.4 High Availability

The level of availability of the vendor must be explained and costs associated with each option provided.

5.5 Backup/Storage

Details of the storage environment and backup system should be described and include limitations of the system.

5.6 Power Redundancy

Power redundancy is a secondary power system to back-up primary power used to operate the EDM/AWS. Types of power redundancy, the number of operational hours, and experience with major power failures are factors to consider.

5.7 Hardware

The relationship between the EDM/AWS vendor and hardware vendor should be articulated and whether any hardware components are shared across multiple vendor customers.

5.8 Standard Certification

Certifications or auditing results of the data center should be provided.

5.9 Network Capabilities

Details on network capabilities are important to discuss, such as single points of failure in the network and the amount of data that can be transferred to hosted servers per time period performed.

6.0 Security – External

Narrative on the security measures in place to limit unauthorized access to the network and servers should be articulated.

6.1 Data Center Security

Measures in place to stop unauthorized physical or virtual access to the servers and other hardware should be spelled-out.

6.2 Monitoring Capabilities/System Management

A description of system monitoring and automated system management capabilities should be provided. This would include audit reports or third party audits that will be made available to the agency so security of the hosting environment can be confirmed.

6.3 Data Ownership

In the event of contract termination, a formal document articulating data ownership and retrieval must be provided.

6.4 Solutions Management

When problems occur, specify the process for reporting problems and include the contact chain-of-command, preferred method of contact, and hours of availability, along with contingency plans. If hosted by a third party, responsibilities should be explained in the SLA in the event of a security breach.

7.0 Implementation

7.1 Installation

Staffing for such a product will require a broad knowledge base (i.e. operating system software, database software, content management software, etc.). There may be internal SMEs and some statewide knowledge of EDM/AWS systems. If the installation function cannot be completed internally, request bids from EDM/AWS-specific contractors. When choosing an outside vendor, some suggestions to address are: cost, time, resources, and expertise of personnel.

7.2 Integration

Determine the availability of enterprise - class computer-off-the-shelf (COTS) software, enterprise document software, or enterprise - class content management software. If no off-the-shelf software is available, it will have to be written internally or contracted out. The agency will have to determine the scope of integration of the EDM/AWS with existing agency systems, and which if any systems will be replaced by the EDM/AWS rather than integrated with it.

7.3 Transition from Current to New System

Identify and document detailed system requirements from the existing paper and electronic systems; Interview staff who manually work the process to develop the new EDM/AWS system. During identification of system requirements assess current processes that could be improved, making clear and concise evaluation of needs. This process should be completed for all divisions within the agency. A proof of concept demonstration must be performed before acceptance of the system as a solution for the agency. The requirements must address whether the EDM/AWS will be installed and implemented all at once, or phased in over time.

7.4 Training

Identify and determine the level of training needed, who will provide the training and how it be delivered. Evaluation will need to be given to assess the comprehensiveness and effectiveness of the training.

Conclusion

This framework has combined project management essentials with guidance provided by the federal government for obtaining agency-unique requirements for an EDM/AWS, and includes a recommended list of requirements topics to be covered by the project team that was developed by comparing and building upon requirements used by numerous agencies. This framework also includes an example statement of work and references to other resources that the agency's requirements team may find useful.

An agency can expect to have a significant investment of resources in terms of employee time, contractor fees, procurement, installation, integration, implementation, training, and maintenance of the software and hardware necessary to do even a limited EDM/AWS. It is important that an agency use proven project management tools to improve the likelihood of success.

Taking a step-by-step, disciplined approach and applying internationally accepted project management tools and skills increases the likelihood that a project team will successfully provide requirements that meet the agency's need for an EDM/AWS that:

- Supports the agency's strategic goals
- Supports the agency's fully identified business processes¹²
- Meets the agency's obligations for security, public records management, protection of confidential personal information and other confidential records
- Makes the best use of the agency's resources¹³
- Harmonizes with the agency's current systems¹⁴
- Produces a system that provides tangible benefits to the agency and its customers.¹⁵

¹² Ibid

¹³ Ibid

¹⁴ Ibid

¹⁵ Ibid

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Appendix 1 - Example Statement of Work for EDM/AWS

PROJECT IDENTIFICATION		
Project Name	Project Sponsor	agency Name
Requirements for Electronic Documents Management and Automated Workflow System		
Project Number (Finance Code – Optional)	Project Manager	Date Created

INTRODUCTION AND BACKGROUND
<p>The agency's documents are an important resource for the residents, public officials, and businesses of Ohio, as well as other states, and certain federal agencies. Documents are currently kept in numerous formats including paper, imaged copies, on-line computer systems, desktop hard drives, magnetic tape and optical media. Agency documents include such things as sign-in/sign-out sheets, e-mails, correspondence, contracts, drawings, reports, meeting minutes, blueprints, photographs, videotapes, databases, and images.</p> <p>Over the past several years, a number of individuals, groups, and teams have evaluated aspects of e-document management, photo-management, improving efficiency through use of electronic forms, e-discovery, records retention, and automated workflows. But each of these efforts has a limited scope, met with limited success, and many were not implemented.</p> <p>The agency does not currently have consistent operating principles, processes, procedures, standards or technology for managing documents on an agency-wide basis. The agency is interested in implementing an electronic document management/automated workflow system (EDM/AWS) solution on an agency-wide basis.</p>

OBJECTIVES
<p>Quickly identify all key requirements crucial to the success of an EDM/AWS project so that the agency can:</p> <ul style="list-style-type: none"> • Efficiently obtain consistent vendor proposals targeting the agency's actual requirements that can be easily compared side-by-side. • Accurately select the hardware and software solution best suited to an agency's specific needs based on functionality, supportability, return-on-investment, migration path, and implementation risk.

- Create a clear implementation plan for purchase, installation, conversion, training, operation, and support of the selected solution.

SCOPE OF WORK

The scope of work involves the activities necessary to provide the information needed for the agency to publish a request for proposal (RFP) for an EDM/AWS solution. This includes identifying:

- the types of documents to include
- customer requirements
- the types of media to include
- the workflows to be automated
- areas of responsibility for implementation, training, support, and maintenance

and ensuring:

- compliance with Federal and State laws
- controls and workflows for confidential documents and information
- application of retention schedules and the related workflows
- workflows and controls for discovery during legal actions
- workflows and controls for public records requests
- the system provides for self-service by customers
- the system minimizes intrusion into employees day-to-day work

[Optional but recommended: The agency will provide the project team with a contractor with expertise in the EDM/AWS industry to assist with the gathering and evaluation of stakeholder requirements.]



Project Plan

E-Docs Requirements Framework Process Team
May 17, 2011



Project Plan

E-Docs Requirements Framework Process Team

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PROJECT STATEMENT OF WORK

Project Identification

Project Name

Framework for Issuing an RFP for an Electronic Document Management/Automated Workflow System

Project Sponsors

Pam Allen, Chief, DMWM, Ohio EPA
Chuck Molnar, Deputy CIO, Commerce Dept.
Linette Alexander, Deputy Director, ODJFS
Pam Brodie, Director of Outreach, Ohio School for the Deaf

Agency Name

Ohio EPA
Commerce Department
Ohio Department of Jobs and Family Services
Ohio School of the Deaf

Project Manger: Scott Heidenreich, Env. Manager, Ohio EPA

Project Team: Tonya Griffith, Dept. of Job and Family Services
Connie Livchak, Env. Supervisor, Ohio EPA
Larry Macioce, Dept. of Commerce
Cindy Whicker, Ohio School of the Deaf

Date Created: March 29, 2011

INTRODUCTION AND BACKGROUND

The agency's documents are a valuable resource that must be managed efficiently, effectively, and in accordance with numerous laws. This is necessary to provide for the efficient functioning of the agency and transparent and accountable government. The agency's documents are also a resource for research, business, and guidance to stakeholders outside the agency.

- Managing paper documents is expensive, insecure, and inefficient.
- Paper workflows are inefficient.
- A high legal liability exists due to statutory public records requirements, required confidential personal information protections, and legal discovery requirements.
- It is more efficient to manage, duplicate, store, and produce, electronic records.



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With shrinking budgets and reduced resources, the gains in efficiency and reduction in costs, along with the increased security provided by electronic document management and automated workflow systems makes implementation of this type of system imperative.

Many agencies have begun to evaluate or investigate the possibility of implementing EDM/AWS with varying degrees of success. This framework will provide a roadmap for agency's to be able to successfully obtain RFP's for an EDM/AW solution.

OBJECTIVES

1. The project objective is to create a framework that can be adapted by any agency to quickly identify all key requirements crucial to the success of EDM/AWS so that the agency can:
 - Efficiently obtain consistent vendor proposals targeting the agency's actual key requirements that can be easily compared side-by-side.
 - Accurately select the hardware and software solution best suited to the agency's specific needs based on functionality, supportability, return-on-investment, migration path, and implementation risk.
 - Create a clear implementation plan for purchase, installation, conversion, training, operation, and support of the selected solution.
2. Produce a presentation to be delivered on May 17, 2011.

SCOPE OF WORK

The scope of work involves all activities necessary to provide a framework for issuing an RFP for an electronic document management/automated workflow system. The scope includes identifying:

- Identifying and interviewing subject matter experts
- Creating the deliverables necessary to meet the objectives
- Presenting the materials to the PMP Class and guests



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E-Docs Requirements Framework Process Team

Project Charter

Project Title And Description:

Framework for Issuing an RFP for an Electronic Document Management/Automated Workflow System

Project Manager Assigned And Level Of Authority:

Scott Heidenreich, Ohio EPA, Env. Manager; this is an independent team as part of the DAS Project Management Professional course. The project manager is the team leader.

Acceptance Criteria:

- Framework document completed with input from SME's by May 17, 2011.
- Forty minute MS Powerpoint presentation, all team members participate.

Business Case:

An agency's documents are a valuable resource that must be managed efficiently, effectively, and in accordance with numerous laws. This is necessary to provide for the efficient functioning of the agency and transparent and accountable government. The agency's documents are also a resource for research, business, and guidance to stakeholders outside the agency.

It is expensive to manage the large volume of documents received and produced by the agency each year. The costs are due to labor and copying for public records requests, attorney review for misfiled confidential records, transportation of the records, and storage of the records both on-site and off-site. Moving to electronic records is a more sustainable practice because it can significantly reduce the amount of paper purchased, recycled, or disposed.

In some offices, as much as 30 percent of the rented square footage is taken up by storage of paper documents. The documents necessary for some public records requests, take up several cubic yards of space for just one facility and are labor intensive to index, prepare, sift out confidential personal information (CPI) and other confidential information, copy, and transport to the customer or court.

Many of the paper workflows could be automated electronically to provide for more efficient movement of documents within the agency, and reduce costs related to printing,



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lost records, and lost time searching, collating, and converting records to an electronic format during investigations and research.

A high legal liability exists due to statutory public records requirements, required confidential personal information protections, and legal discovery requirements that expose the agency to potentially high penalties, legal expenses, and lost cases.

Electronic records are easier to duplicate and store off-site, making a business resumption plan easier and less costly to implement in the event of a catastrophic failure of the business location, such as a fire or other building failure that would normally destroy paper records.

Significant cost savings along with significant improvements in agency efficiency and customer satisfaction are expected. For example, a case study by 3M for a hospital with a similar number of employees as Ohio EPA found that converting to an EDMS/AW resulted in projected savings of \$684,000 over the first five years after implementation for paper-related expenses and in the first year:

- Increased physician satisfaction and responsiveness with immediate, simultaneous access to records both onsite and offsite.
- Annual FTE savings across the entire organization totaled \$43,000
- Lowered record deficiency rate to one percent
- Electronic record has enabled improved compliance with HIPAA regulations and legal record requirements
- Reduced release of information turnaround time from 44 days to six days, resulting in improved patient satisfaction and a projected revenue increase of \$88,000 over the next four years

In another example, AMP, Australia's leading provider of retirement savings products and services with more than 2.5 million fund members. The implementation of the new business processes using workflow and imaging realized a 42 percent productivity improvement.

With shrinking budgets and reduced resources, the gains in efficiency and reduction in costs, along with the increased security provided by electronic document management and automated workflow systems makes implementation of this type of system imperative.

Many agencies have begun to evaluate or investigate the possibility of implementing EDM/AWS with varying degrees of success. This framework will provide a roadmap for agency's to be able to successfully obtain RFP's for an EDM/AW solution.



Project Plan

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Project Cost Analysis:

This project will use all sunk costs. The team will track time on the project so that an estimate of the sunk costs can be reported.

Product Description / Deliverables:

3. The project objective is to create a framework that can be adapted by any agency to quickly identify all key requirements crucial to the success of EDM/AWS so that the agency can:
 - Efficiently obtain consistent vendor proposals targeting the agency's actual key requirements that can be easily compared side-by-side.
 - Accurately select the hardware and software solution best suited to the agency's specific needs based on functionality, supportability, return-on-investment, migration path, and implementation risk.
 - Create a clear implementation plan for purchase, installation, conversion, training, operation, and support of the selected solution.
4. Produce a presentation to be delivered on May 17, 2011.

Risks And/Or Assumptions:

- One or more participants may become unavailable:
 - temporarily
 - permanently
- DAS Director may cancel this project due to it not being a multi-agency project
- Impasse by one or more team members

Project Timeline

The project shall be completed and a presentation made for formal presentation by May 17, 2011.

SIGNED AND APPROVED BY:

(Title) _____



Project Plan

E-Docs Requirements Framework Process Team

PROJECT SCOPE

Project Identification

Project Name:

Framework for Issuing an RFP for an Electronic Document Management/Automated Workflow System

Project Sponsors

Pam Allen, Chief, DMWM, Ohio EPA
Chuck Molnar, Deputy CIO, Commerce Dept.
Linette Alexander, Deputy Director, ODJFS
Pam Brodie, Director of Outreach, Ohio School for the Deaf

Agency Name

Ohio EPA
Commerce Department
Ohio Department of Jobs and Family Services
Ohio School of the Deaf

Project Manger: Scott Heidenreich, Env. Manager, Ohio EPA

Project Team: Tonya Griffith, Dept. of Job and Family Services
Connie Livchak, Env. Supervisor, Ohio EPA
Larry Macioce, Dept. of Commerce
Cindy Whicker, Ohio School of the Deaf

Date Created: March 29, 2011

Project/Objectives

1. By May 17, 2011, create a framework that can be adapted by any agency to identify key requirements important to the success of Electronic Document Management/Automated Workflow System (EDM/AWS)so that the agency can:
 - Efficiently obtain consistent vendor proposals targeting the agency's actual key requirements that can be easily compared side-by-side.



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- Accurately select the hardware and software solution best suited to the agency's specific needs based on functionality, supportability, return-on-investment, migration path, and implementation risk.
- Create a clear implementation plan for purchase, installation, conversion, training, operation, and support of the selected solution.

2. Produce a presentation to be delivered on May 17, 2011.

Project Description/Deliverables – In Scope

The scope of work involves all activities necessary to provide a framework for issuing an RFP for an electronic document management/automated workflow system. The scope includes identifying:

- Identifying and interviewing subject matter experts
- Creating the deliverables necessary to meet the project objectives
- Presenting the materials to the PMP Class and guests

Project Features and Functions

- Provide a framework for use by any agency to create key requirements for publishing an RFP for an EDM/AWS. The framework will have:
 - A table of contents
 - An executive summary
 - A section describing the process for obtaining key requirements
 - A section describing topics and areas of knowledge to use when determining key requirements
 - Appendices as needed
- Provide a presentation to the PMP Cohort and sponsors on May 17, 2011.
 - Powerpoint slides
 - Each team member will do part of the presentation
 - Time for questions and answers
 - 60 minutes total time maximum

Out-of-Scope Objectives

This project team will not:

- prepare an RFP or related documentation for an agency
- define specific agency-related key requirements for an EDM/AWS
- select a vendor or solution



Project Plan

E-Docs Requirements Framework Process Team

Initial Project Organization

Project Sponsors

Pam Allen, Chief, DMWM, Ohio EPA
Chuck Molnar, Deputy CIO, Commerce Dept.
Linette Alexander, Deputy Director, ODJFS
Pam Brodie, Director of Outreach, Ohio School for the Deaf

Agency Name

Ohio EPA
Commerce Department
Ohio Department of Jobs and Family Services
Ohio School of the Deaf

Project Manger: Scott Heidenreich, Env. Manager, Ohio EPA

Project Team: Quality Management - Tonya Griffith, Dept. of Job and Family Services
Time and Cost Management - Connie Livchak, Env. Supervisor, Ohio

EPA

Scope Management - Larry Macioce, Dept. of Commerce
Communications Management -Cindy Whicker, Ohio School of the Deaf
Risk Management – Team

Subject Matter Experts

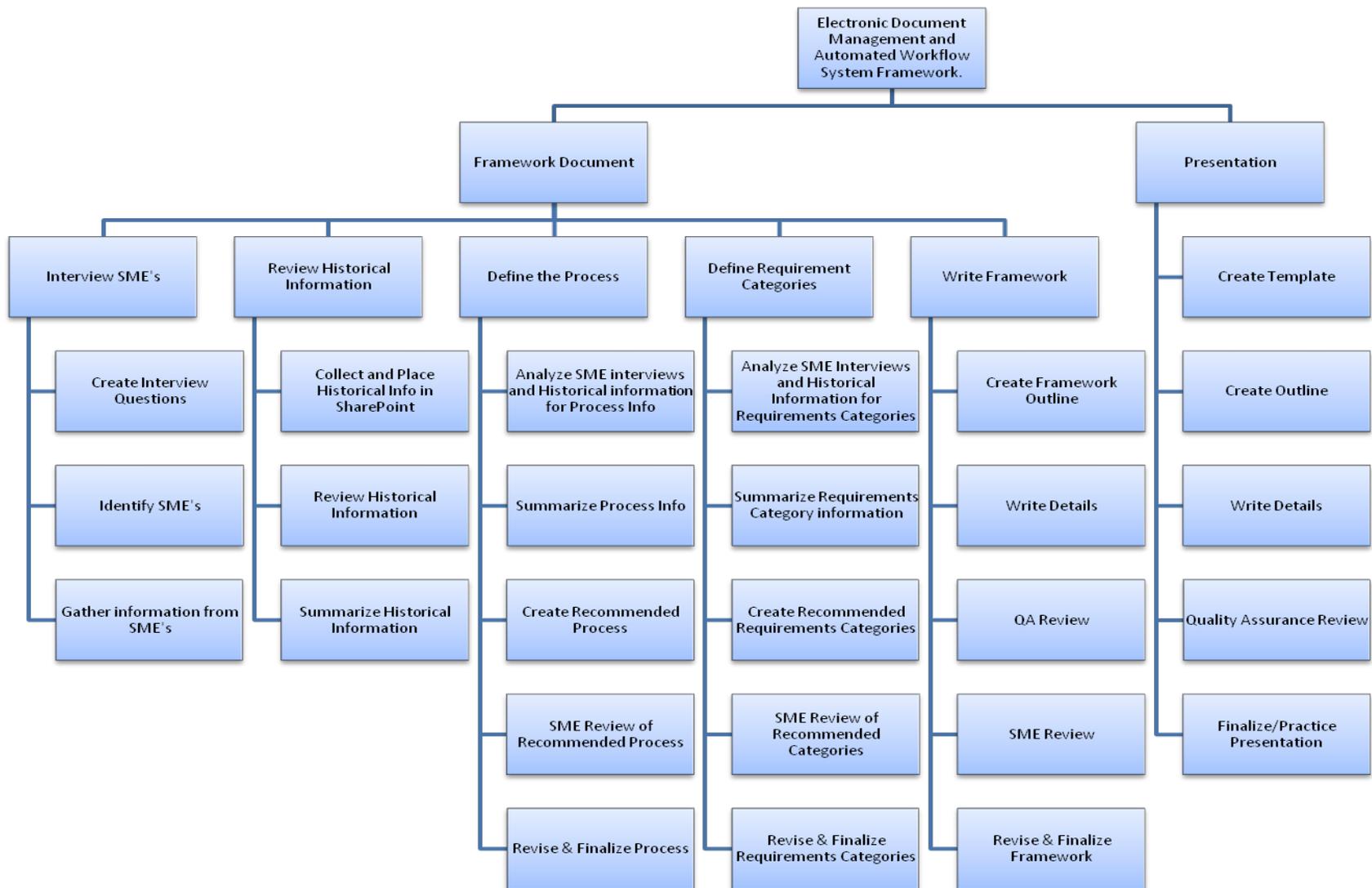
Jeff Hurdley, Attorney, legal discovery
Pete Simcic, Attorney, public records
Skip Holler, CISO, confidential personal information
Rich Boudier, Director's office, public records
Scott Wilson, Business Process Analyst
Louwana Tortora, IT Infrastructure
Larry Macioce, e-document management, Commerce
Tonya Griffith, e-document management, ODJFS



Project Plan

E-Docs Requirements Framework Process Team

Work Breakdown Structure





Project Plan

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Initial Defined Risks

- Subject matter experts (SMEs) and stakeholders not being made available to the project team
- Budget cuts/staffing reductions/retirements causing team members to be pulled off the project
- Lack of priority being assigned to this project by some team members of the sponsors
- Team members may not be able to complete their tasks
- SharePoint access will not be possible for some or all members
- Team member may not be able to attend team meeting
- Team member may not be able to participate in presentation

Budget

The project team consists of students of the PMP class. Only sunk costs and volunteer hours will be used. The project team will track the hours worked on the project and sunk costs will be calculated at the end of the project.

Assumptions/Constraints

Assumptions:

- SMEs will be made promptly available for interviews, respond to surveys, and provide other needed information
- Projector will be available for presentation
- Team members will be made available by sponsors to complete needed project work
- Computer will be available at team meetings (projector too, if possible)

Constraints:

- The project team will meet at least weekly for status review of the project
- SharePoint will be used as the location for collaboration, creating, and storing project documents

Acceptance Criteria

- Project deliverables completed by May 17, 2011
- Drafts and interim versions of the report will be provided in the team's SharePoint site for review by the team and the PMP Trainer
- Dry-run presentation to PMP Trainer May 10, 2011
- Status updates on the project will be provided weekly at the team meetings



Project Plan

E-Docs Requirements Framework Process Team

Approval

Name: Nelson Gonzalez
Approved _____

Title: PMP Trainer

Approved (Y/N)

Date

Signature



Project Plan

E-Docs Requirements Framework Process Team

COMMUNICATIONS PLAN

Project Name:	Framework for Issuing an RFP for an Electronic Document Management/Automated Workflow System
Project Sponsor:	See Scope Statement
Project Manager:	Scott Heidenreich

Event	Target Audience	Message Objective	Timing	Vehicles	Sender	Feedback Mechanism	Impacts
Project Core Team Meeting's Agenda and Minutes	Team	Agenda should include at a minimum: the invited attendees, review of assigned action items, review of the project status, and a section to cover any new assigned action items. Other topics that can be included are: Review of the risk log, communications plan, any change request, or any outstanding issue.	Minutes posted to team SharePoint site within 48 hours of meeting. Team to review prior to next meeting. Reviewed and approved at next weekly meeting	SharePoint	Cindy Whicker	Agendas and Minutes will be archived in the project's "Agendas and Minutes" folder.	This will provide a means to assess the ongoing progress of the project and ensure that the team can immediately address any changes or unexpected events.
Project Core Team Weekly Meeting	Team	Communicate and confirm all decisions or agreements made, and any action items (with the assignee established) during the Core Team meeting.	Weekly or sooner if needed.	In-person, SharePoint, Conference Call	Project manager or person designated by the Project manager.	Minutes, Ground Rules, Project Plan	This will provide an ongoing repository of all established agreements, suggestions or assignments, including documentation sent throughout the Core Team.
Weekly Project Status Updates	Team	Project's status, high level achievements and any possible risks or issues, including conflicts.	Monday by noon	SharePoint Schedule, except for risks, which will be in the minutes	Connie Livchak	Excel Schedule in SharePoint	Keeps the team motivated and accountable to project plan



Project Plan

E-Docs Requirements Framework Process Team

High Level Project Status Updates	Nelson Gonzalez	Reassure Nelson that we will have a presentation ready on-time, ask advice for team	Weekly on Tuesdays	In-person and SharePoint	Scott Heidenreich	In-person and Discussion Board in SharePoint	Keeps the team motivated and accountable to project plan
Stakeholder/SME Communications	Stakeholders/SMEs	Gather information from stakeholders/SMEs	Completed by April 26, 2011	In-person, e-mails, phone	Scott Heidenreich	E-mail	Provide input and expertise for the framework deliverable
Thermometer Sheet	Nelson Gonzalez, Linda Andriko, Terri Vetter	Provide team development status and overall project completion status	Weekly on Tuesdays	Thermometer sheet handout	Connie Livchak	In-person hard copy	Feedback to trainers

Team Roster					
Name	Department	Role	E-mail	Work Number	Cell Number
Tonya Griffith	Job Family Services	Quality Manager	tonya.griffith@jfs.ohio.gov	614-728-6116	614-582-1427
Larry Macioce	Department of Commerce	Scope Manager	larry.macioce@com.state.oh.us	614-728-4509	614-203-2277
Connie Livchak	EPA	Schedule Manager	connie.livchak@epa.state.oh.us	614-644-2966	419-602-0533
Cindy Whicker	Ohio School for the Deaf	Communications Manager	whicker@osd.oh.gov	614-387-0128	614-284-7283
Scott Heidenreich	EPA	Project Manager	scott.heidenreich@epa.state.oh.us	614-728-5333	740-405-0571
Nelson Gonzalez	DAS	PM Trainer	nelson.gonzalez@das.ohio.gov	614-466-4210	614-370-5241



Project Plan

E-Docs Requirements Framework Process Team

RISK MANAGEMENT PLAN

Risk Description	Category	Potential Impact	Risk Owner	Probability of Occurrence (1-5)	Impact of Risk (1-5)	Risk Level (1-25)	Response Type	Risk Response Plan	Status
One or more team members temporarily unavailable	Project Management	May need to reassign work	Scott Heidenreich	5	3	15	Mitigation	Reassign work to one or more members, Connie may not be available at presentation, assign alternative presenter	Completed
One or more team members permanently unavailable	Project Management	Definitely reassign work	Scott Heidenreich	1	4	4	Mitigation	Reassign work to one or more members	Under review
DAS Director may cancel this project due to it not being a multi-agency project	Project Management	Kills project dead	Nelson Gonzalez	1	5	5	Acceptance	None	Under review
Impasse by one or more team members	Project Management	Delay project/miss deadline	Scott Heidenreich	1	2	2	Mitigation	Majority vote wins	Completed
SME's may not be able to review and provide information	Technical Resources	Quality of project may be less accurate and complete	Scott Heidenreich	3	1	3	Transference	Scott and Larry would act as SMEs	Completed
SharePoint unavailable	Technical Resources	Stop project until documents available	Team member that discovers SharePoint is not working	2	5	10	Mitigation	Off load critical documents to USB drive, member e-mails (work and private)	Completed
E-mail unavailable	Technical Resources	Delay communications	Team member that discovers SharePoint is not working	1	1	1	Mitigation	Communicate through SharePoint, forward link to private e-mail and work e-mail, call each other on work phones or cell phones	Completed
PowerPoint not available for presentation	Technical Resources	Would need to execute alternative presentation	Scott Heidenreich	1	1	1	Mitigation	Prepare presentation using hard copy handouts	Response in progress