

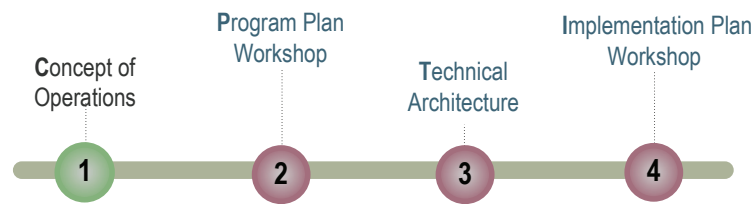
## Project Overview

### Project Charter: What was Doculabs Hired to Do?

Oregon Department of Transportation (ODOT) is seeking to develop an Enterprise Content Management (ECM) Program and FileNet/ECM capabilities within the Department. ECM is a new initiative to ODOT that demonstrates promise in addressing the Agency's needs to centrally store and control distributed electronic documents and access by internal staff and external partners.

ODOT contracted with Doculabs to assist in:

- Developing a concept of operations for ECM and a program plan for managing the ECM effort as a cohesive program
- Completing a comprehensive technical architecture for ECM with FileNet as the backbone of the document repository, and a defined approach for integrating with existing legacy applications, business systems, and complementary document applications
- Developing a phased implementation plan for moving to the future state and rolling out an enterprise solution through a series of back-to-back projects based on business line need



### Concept of Operations Design Goals & Methodology

- Review any relevant documentation, survey key stakeholders and end users; tabulate results (see Page 1 and 2)
- Interview key stakeholders in order to understand: the current ODOT environment; key document-centered processes; current approach for managing documents; existing use of ECM technology; and potential ECM applications that would provide benefit to the department (see page 3)
- Analyze the information to determine current ECM state, future state requirements, and gaps (see pages 4 and 5)
- Develop a Conceptual Design of the ODOT ECM services environment demonstrating integration with key systems (see page 6)

## 2. Doculabs' Quick Take

### Finding the Right Information Quickly and Efficiently is Dragging Users Down

- Due to a lack of broadly deployed ECM technologies (such as enterprise search, document management, e-mail management, process automation and workflow, and collaboration) users are spending far more time wrestling with information than using it to do their jobs.
- The fact that paper and electronic information is managed differently within each work group and in multiple repositories does not help matters – nor does the fact that no common policies and procedures exist to help users navigate the information lifecycle within ODOT.

### Emulate a Model for Success

- ODOT's Right of Way (ROW) project is the closest example to an ideal implementation of a FileNet-based ECM application in an organization. It will be important to analyze the key success factors (e.g. well-defined scope, good project management, established budget, etc.).
- Successful completion of ROW and other similar applications in the future will require careful planning and much more than technology to achieve success. A solid program management framework that includes a strong governance model, definition of an enterprise information model (taxonomy), communications and marketing plan to ease user adoption, and a host of other requirements will have to be built, used, and maintained for on-going success to be possible.

### External Pressures will Necessitate Accelerated Change

- ODOT is increasingly having to respond to more complex requests for documentation, thanks to increased activity in the areas of claims, litigation, and public record requests. The massive increase in regulatory documentation requirements is also making it difficult for a fixed staff to respond effectively using the same techniques used in the non-electronic era.
- Although the records classification and retention schedules have been defined and communicated, there appears to be limited monitoring of adherence to the records policies and no record tracking automation deployed. This represents risk to the organization, especially with the increase in claims and public record requests. Areas such as records management can no longer be ignored, as there are real and present consequences due to inaction.

## 1. Project Vision and Goals

The vision of the Concept of Operations is to plan for managing the existing ECM effort as a cohesive program. ODOT wants to leverage ECM technology in order to deliver on the promise of being able to centrally store and control distributed electronic documents and access by internal staff and external partners. Developing such a capability will allow the organization to respond more quickly to external requests, whether they be from the public, partners, other state or federal agencies, etc.

Key goals of the ECM Program are:

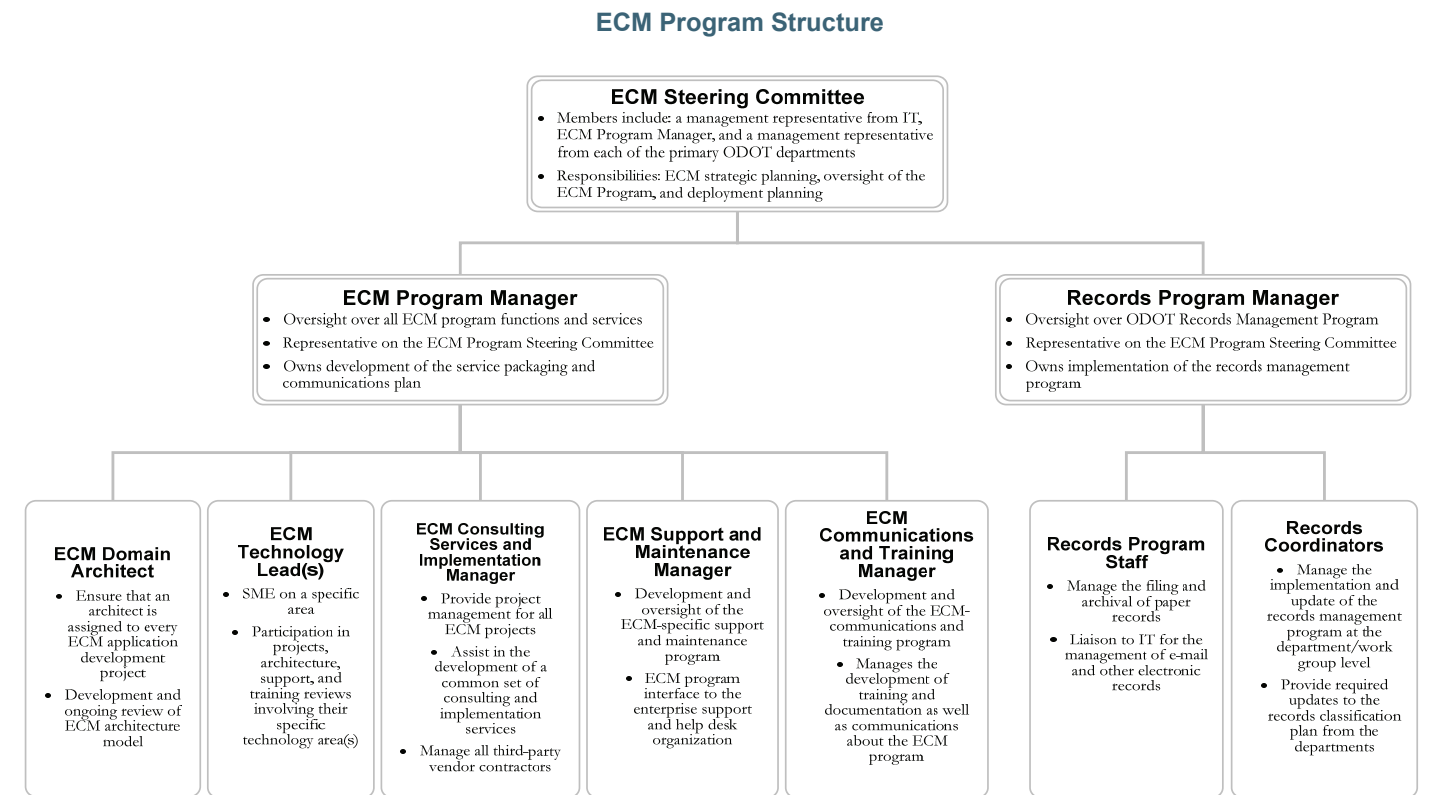
To **develop a governance structure** that will support implementing ECM shared services by defining the management structure for the future ECM shared services program, defining roles and responsibilities that indicate clear ownership of all components of the shared services deployment process, and be able to forecast the demand for various ECM services to enable ODOT to define the resources that will be necessary to service that demand.

To establish a **common approach to information organization** including the development of an information taxonomy, a classification of information essential to enable future sharing of information across ODOT; and the creation of document and content policies, procedures, and guidelines.

To **create a services and support delivery model** that provides the framework for resource planning and for ECM solution packaging; as well as a deployment methodology for rolling out multiple, replicable ECM applications across the enterprise.

## 3. Stakeholders and Roles

Below is some initial detail on Doculabs' model for an organization structure and stakeholder roles and responsibilities for the ODOT ECM program. Further discussion is required with ODOT as to how these roles can be accommodated within current resources.

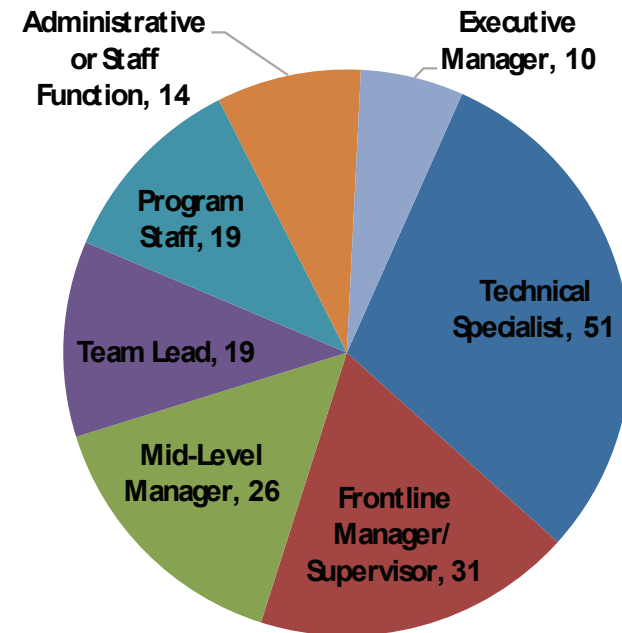


## 4. Survey Participants

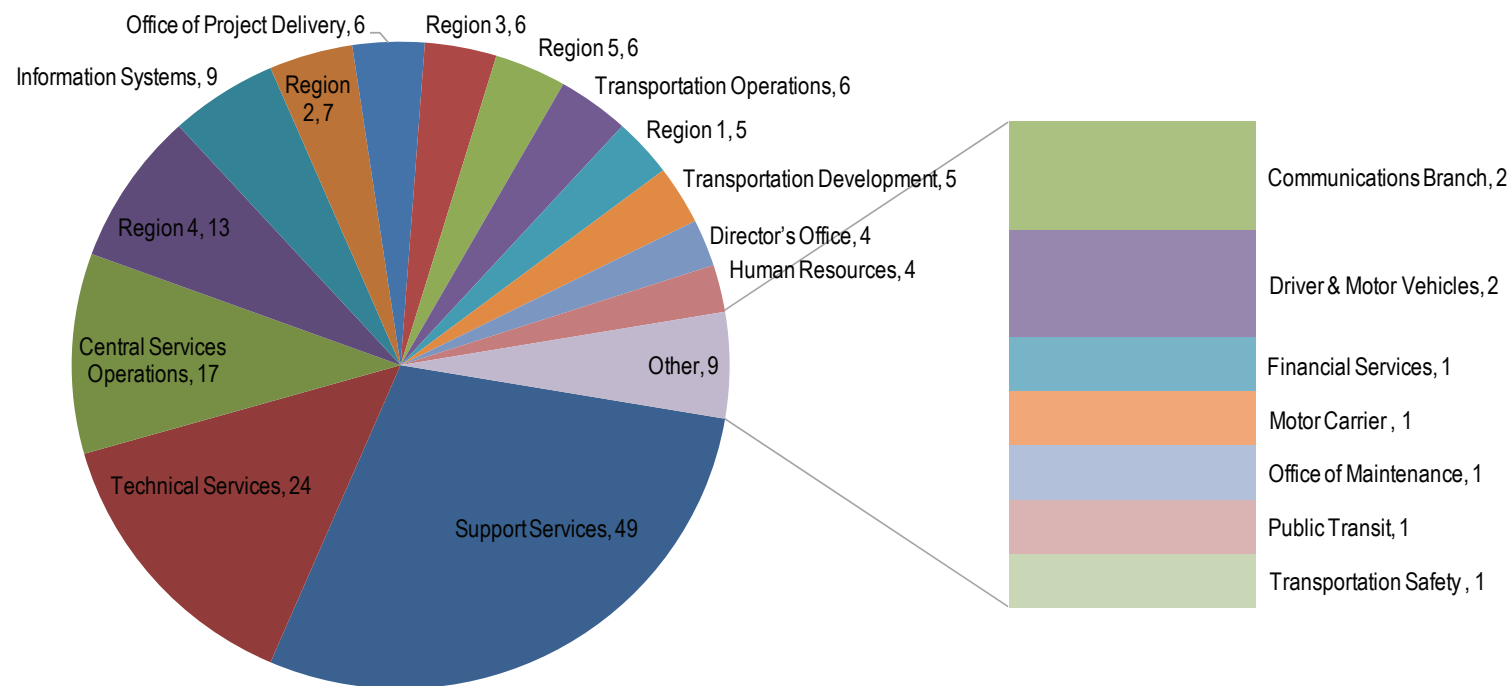
In January 2007, Oregon DOT and Doculabs conducted an online survey of selected ODOT staff. The survey included 18 questions designed to obtain details about the use of information and documents and their impact on work processes. A total of 169 users completed the survey. The results provided valuable insight that was used during the interview process.

The following charts present excerpts from the survey results, which underscore some of ODOT's key issues in the current state.

### Which Best Describes your Role?



### What is Your Department?



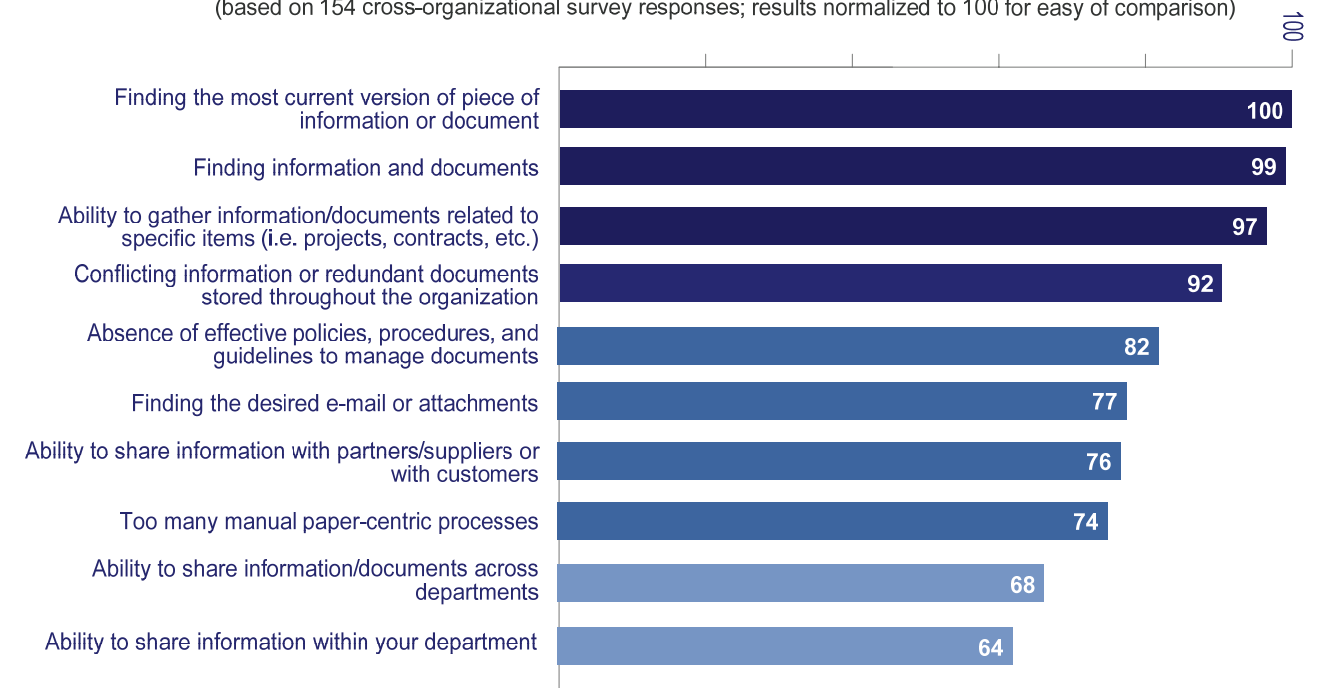
## 5. Summary of Selected Survey Results

### Demand High for Finding the Right Information Quickly and Efficiently

When asked what the top content- and process-related issues users faced, survey participants repeatedly indicated that it is difficult to find information, and even more importantly the most recent version of a particular piece of information. This indicates that Oregon DOT's user demand is squarely in the area of better information management and retrieval. Such a high level of demand rates higher than other areas of potential concern such as collaboration or more effective policies, procedures, and guidelines.

### Absolute Ranking of Top Content- and Process-related Issues

(based on 154 cross-organizational survey responses; results normalized to 100 for easy of comparison)



The following are sample paraphrased comments from the online survey that refer to the issues people are having on a daily basis:

- There are varied interpretations about where to place and look for documents in the server file structure
- Many existing referencing systems are not consistent or intuitive
- Finding information on the ODOT intranet
- Managing the string of e-mails, and making sure I have the last one in a series
- Web sites not kept up-to-date
- Organizing electronic documentation in a meaningful way for retrieval
- Maintaining up-to-date documents/information on the agency's website
- Too much paperwork; paper file management; too much paper usage
- Naming of e-files and e-documents
- Duplication of documents and work products
- Searching Outlook PST files
- Documentation is stored in a lot of different places; this can make for a lot of wasted time, especially for someone who is new to the organization

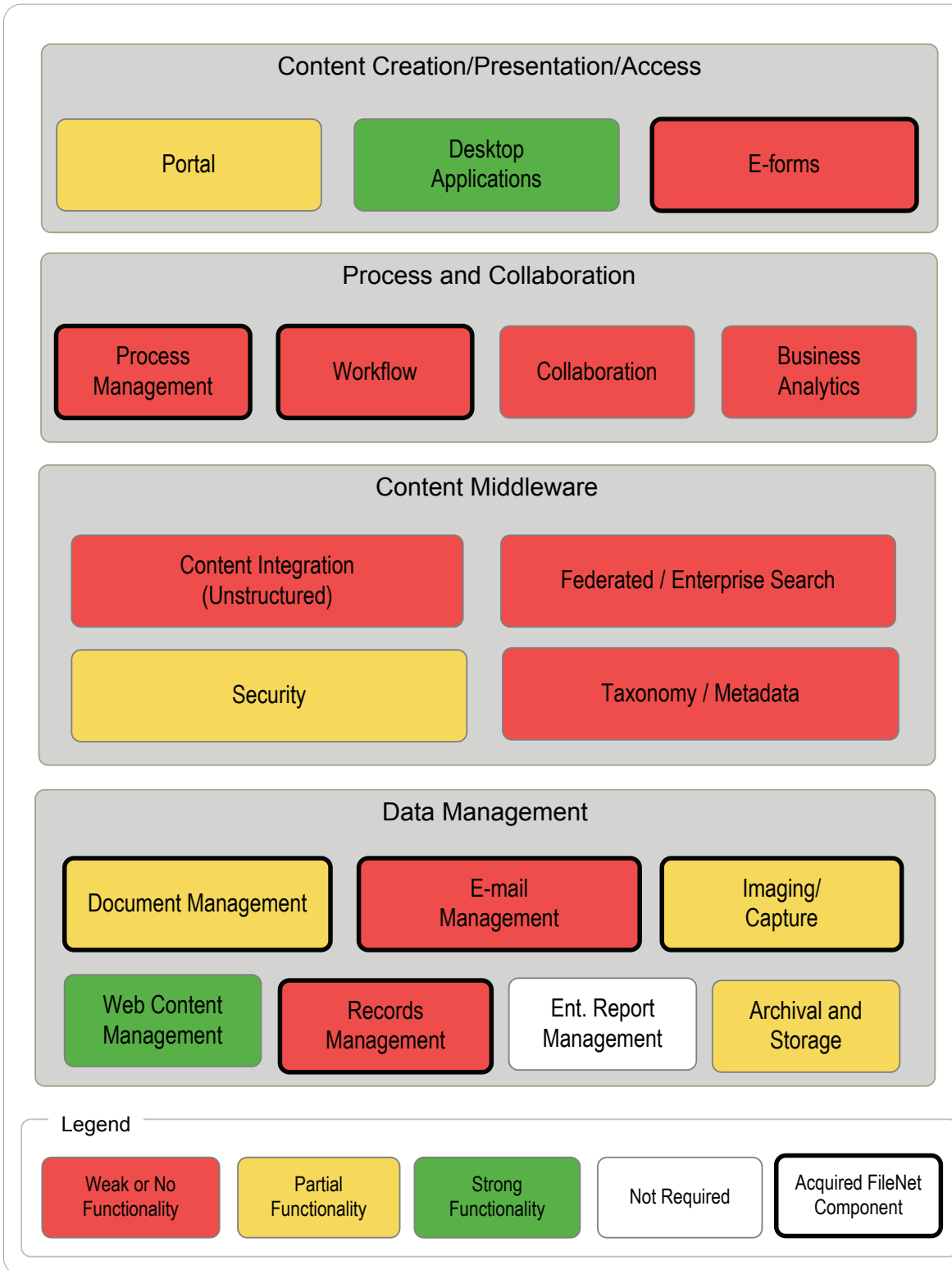
## 6. ECM Technology View

Based on the information gathering conducted in January 2007, the following charts show Doculabs' evaluation of ODOT's current state and go-forward requirements for content management technology. These diagrams are based on a high-level representation of a content management application architecture.

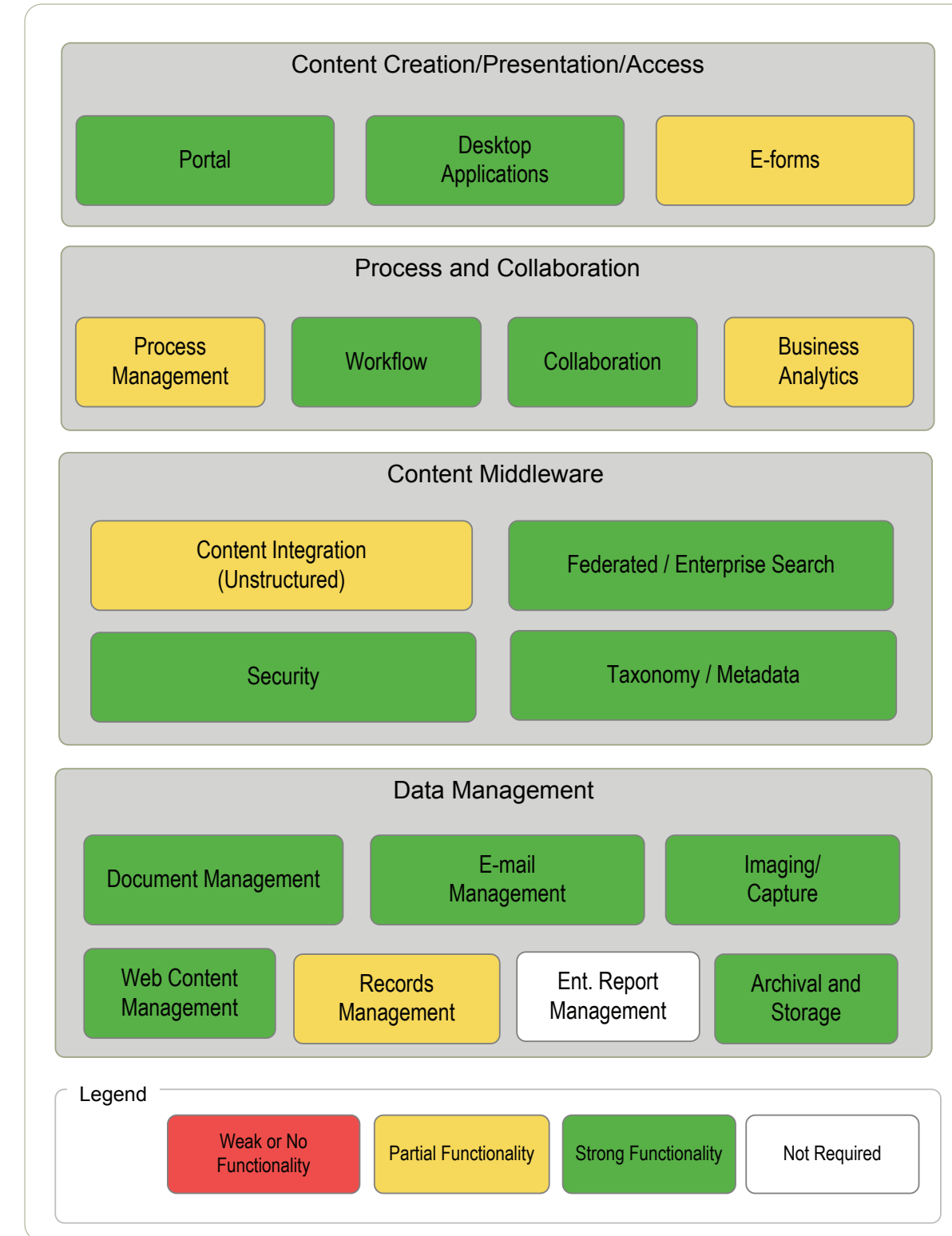
Color coding has different implications for the current state and future state diagrams. Specifically:

- In the Current State diagram, box color is an approximate indication of whether technologies in each area have been implemented to meet functional requirements. For example, a red box (such as Taxonomy/Metadata) indicates that functionality is either nonexistent at ODOT or the implementation is not effective. In some cases, such as e-mail management, ODOT plans to implement FileNet eMail Manager, but that implementation has not yet occurred. The dark border around a box indicates that it is a FileNet component that has been purchased, but may or may not have been implemented.
- In the Future State diagram, box color indicates the level of functionality that should be in place to support the ECM program vision and the ECM application identified during the interview process. For example, a number of ECM applications require strong functionality in the process management and workflow areas.

### Current State Analysis



### Future State



## 7. ECM Technology Component Definition and Review

### Content Creation/Presentation/Access:

Tools used to create, access, and present content from source systems or repositories.

#### Portal

A personalized, browser based gateway to a variety of content resources, repositories, and applications. Historically used in the context of Internet content sharing (i.e. web portals), but more increasingly used to describe a means of delivering enterprise wide content to internal users. For ODOT, would include spatial or location navigational linking for ease of use. Microsoft SharePoint is available as a portal.

#### Desktop Applications

A technology which allows users, from the desktops, to create and manage content in its many forms. Microsoft Office is the standard at ODOT for desktop applications.

#### E-forms

A technology solution for automating the collection, storage and distribution of information, typically via computer generated facsimiles of paper forms, usually with the objective of avoiding redundant manual data entry processes. FileNet eForms is available at ODOT in this area.

### Process and Collaboration Services:

Tools that facilitate and automate processes, workflows, and collaboration within an organization.

#### Process Management

Technology that manages and automates the execution of business processes that involve system interaction. Can also automate, via prompting, human interaction. Process Management technology typically include design tools for mapping out a workflow or process definition (including its users, steps, rules, and conditions), and a process engine that executes the workflow. Often includes a rules engine for the purpose of creating encapsulated business rules. FileNet BPM is used at ODOT for this component.

#### Workflow

Technology that manages and automates the execution of business processes that involve human interaction. Workflow technology typically include design tools for mapping out a workflow or process definition (including its users, steps, rules, and conditions), and a workflow engine that executes the workflow. The workflow functionality in FileNet Content Manager and BPM is available at ODOT for this component.

#### Collaboration

Technology designed to promote and enhance the creation, sharing, and dissemination of information. Collaboration technology has several sub-types, including document collaboration, workspace collaboration, and presentation collaboration. For ODOT, the workspace collaboration, in the form of a project workspace, is anticipated to provide the most value. Microsoft SharePoint and FileNet Collaboration Manager (if acquired) is available at ODOT for this component.

#### Business Analytics

Technology to allow for the compilation and review of content-related analytics, often related to the performance of moving content work through an organization. The analytics functionality that is part of the FileNet BPM component can be utilized here.

### Content Middleware Services:

Tools that facilitate the effective use of the content management system and integration with structured content systems.

#### Content Integration

A toolset designed to allow users or components of a document or content management system to access and exchange information and workflows between multiple repositories. ODOT has no component available in this area.

#### Federated / Enterprise Search

Ability to query information sources and view the results. Can apply to web content searches, database searches, local or federated content repositories, or the information and unstructured data residing in file systems. ODOT has no component available in this area.

#### Taxonomy / Metadata

A classification structure for a content repository. Taxonomies help users organize content, navigate to specific content objects within the repository, and search for content. A good taxonomy enables the same content to be located and accessed via multiple paths, and in the case of ODOT would include geographic, or location specific content. ODOT has not invested in any functionality in this area.

#### Security

The ability to properly secure information from inappropriate access. Includes User, Group, Role access rules, as required. Security services at ODOT are system and/or project based.

### Data Management Services:

Tools that provide the infrastructure required to store, retrieve, and manage the physical content that is being managed by a content management solution.

#### Document Management

Technologies used to collect, manage, and deliver unstructured information such as scanned paper, productivity suite documents, and other information types within a central repository. Manages multiple versions of documents. Typically provides both physical and logical file folder mechanisms.

#### E-mail Management

Provides the ability to improve manageability of messages (and enhanced by fax integration); archiving individual users' e-mail messages as official records over the long term, and to retrieve, retain and dispose of them based on business rules and corporate policy. FileNet eMail Manager is available at ODOT for this component.

#### Imaging/Capture

Ability to capture, profile, manage, store, and display content (document) images. Usually refers to the digitization of paper documents, and the indexing and import of those images into a managed repository for use in business processes or for archival. ODOT uses FileNet Capture for this component.

#### Records Management

Tools and applications that allow organizations to specify the lifespan of an electronic record and to control the access, retention, destruction and disposition of that information within a repository or storage system. ODOT has not invested in any functionality in this area.

#### Web Content Management

Technology to manage web (e.g. HTML) content. Also typically provides tools to manage and deploy whole web sites.

#### Archival and Storage

Tools and technologies to manage the long term storage of content. Provides the ability to integrate and manage, long term, the content within the Records Management, Document Management, and E-Mail Management domains.

#### Enterprise Report Management

Technology designed to provide for easier report creation and distribution. Provides the ability to parse reports into a more granular report distribution (for example, a user may only see pages 5 through 15 of a report). Provides for automatic purging of old reports. If acquired, FileNet Report Manager would be available for this component.

## 8. Gap Analysis

The ECM technology assessment and gap analysis highlights a number of high-priority technology areas where ODOT needs to make investments. Below is a listing of some of those high-priority areas.

- There is a need for **portal technology** to retrieve content and associated data across the organization (especially project and contract files, and for responding to litigation and public record requests). Developing the requirements in this area would help determine whether a portal product or a customized user interface based upon the FileNet platform would be required.
- With the heavy reliance on paper processes and serial processing of work in multiple areas, **workflow technology** would bring greater efficiency to ODOT. Even some of the existing imaging systems do not support workflow.
- Currently, there is significant difficulty in sharing project, contract, and other content, as every area has their own indexing or numbering scheme. A critical need is to develop a **standard taxonomy** that incorporates the document index structure implemented for the MCIS, and FSIS systems to prepare for future content repository integration where such systems have a relationship. As part of this effort, metadata standards and methods as well as a standard approach for organizing repository(s) required for document can be included.
- With a lack of standard **roles and rules for accessing content**, both within and outside of the organization, security has been determined on a case-by-case basis. As more content is brought under document management control, developing this content access schema will become increasingly important.
- There is a need for a well-defined **storage management strategy** with tiered storage subsystems tied to record retention and archiving rules that can be used to group like documents together and determine the most effective media to archive ODOT content. This strategy is more important now as the public and litigation-related requests for ODOT content increase.

## 9a. ODOT's ECM Technology Assessment & Gaps

	Positive Assessments	Negative Assessments	Gaps
Portal	+Portal functionality available (SharePoint) to deploy in an organized and planned fashion	- Have not implemented any portal technology - No portal strategy for the organization - Lack of experience in assessing or implementing portal technology	<ul style="list-style-type: none"> <li>Need for portal technology to retrieve content and associated data across the organization, especially project and contract files; and responding to litigation and public record requests</li> <li>Need to complete an analysis of the requirements for the use of portal technology</li> </ul>
Desktop Applications	+Users getting work done effectively using standard desktop applications	- Few standards for using Microsoft Office and Outlook for managing content	<ul style="list-style-type: none"> <li>Need a consistent desktop approach for managing electronically generated content to avoid individually-based filing and organizational systems</li> </ul>
E-forms	+Have acquired FileNet eForms that can be implemented where needed +Use of e-forms available from outsourcers (e.g. for human resources functions)	- Multiple standards for e-forms (e.g. Adobe and FileNet) - Have had trouble identifying cases where e-forms are appropriate	<ul style="list-style-type: none"> <li>Need a clear standard and criteria for implementing e-forms</li> <li>Need a strategy to deploy e-forms as an pervasive, inexpensive way of automating some administrative processes</li> </ul>
Process Management	+Have the FileNet BPM tool and will gain experience implementing it in the Right of Way Project	- Opportunities for multi-department processes to be automated not yet identified - No integration of process management technology with financial or project management systems	<ul style="list-style-type: none"> <li>Need application implementation experience with process management tools</li> <li>Need to be consistent in redefining inter-departmental processes for greater efficiency</li> </ul>
Workflow	+FileNet BPM being implemented for workflow process in the RW project +Working on completing preliminary process analysis for project delivery and focus on automating this area	- Process inefficiencies in multiple departments due to a heavy reliance on paper - Most workflows processed serially since no tools to help run in parallel - Imaging system in Financial Services do not support needed workflow functionality	<ul style="list-style-type: none"> <li>Need to develop automated methods of triggering work by receipt of documents</li> <li>Need to revisit re-engineering findings in Accounts Payable</li> <li>Need to automate escalation processes</li> </ul>
Collaboration	+The FileNet Collaboration component is available as an addition to the current suite +Some basic experience using the SharePoint collaboration functionality	- Where SharePoint collaboration functionality has been used, it has been in an uncontrolled fashion - Duplicate work and information due to lack of process - Risk of miscommunication (reduced quality) due to lack of process	<ul style="list-style-type: none"> <li>Need for project collaboration for team, workgroup, and inter-department efficiencies</li> <li>Need the deployment of a single collaboration tool</li> </ul>
Business Analytics	+The FileNet BPM component analytics are available to be used for BPM applications +Organization has BRIO and Crystal Reports as standards	- Not part of the culture - React to contractual commitments not efficiency goals - Analytics technology not been implemented for measuring processes across multiple departments	<ul style="list-style-type: none"> <li>Need to develop a more performance-and collaboration-based culture (as opposed to a culture of evaluating process or project results)</li> </ul>

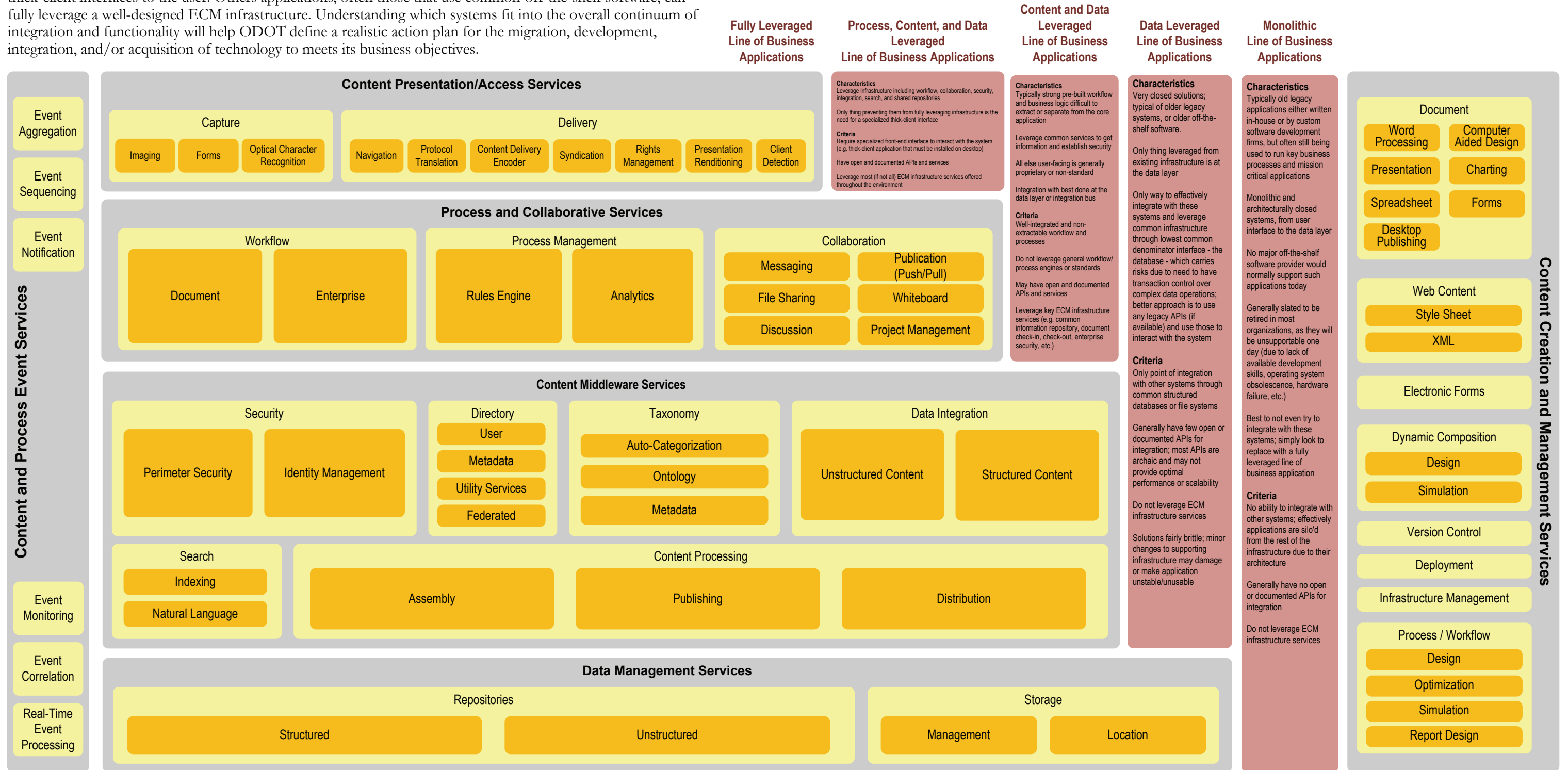
## 9b. ODOT's ECM Technology Assessment & Gaps

	Positive Assessments	Negative Assessments	Gaps		Positive Assessments	Negative Assessments	Gaps
<b>Content Integration (unstructured)</b>	<ul style="list-style-type: none"> <li>+Somewhat limited number of disparate content management repositories that will need to be integrated</li> <li>+IBM/FileNet has an effective content integration component that can be acquired when needed</li> </ul>	<ul style="list-style-type: none"> <li>- Currently multiple, non-compatible content management repositories (FileNet RW, BDIS, IGA and FSIS systems for example)</li> <li>- No standards or tools in place for information/content interchange</li> </ul>	<ul style="list-style-type: none"> <li>• Need to focus on developing a standard taxonomy that incorporates the document index structure implemented for the RW and FSIS systems to prepare for future content repository integration</li> </ul>	<b>Federated &amp; Enterprise Search</b>	<ul style="list-style-type: none"> <li>+Have existing prototype of such a system with custom FileNet search front-end developed for RW project</li> <li>+Already support for the approach of a common search front-end that is customized to the needs of each department and workgroup</li> </ul>	<ul style="list-style-type: none"> <li>- Current approach limited to a single project (RW)</li> <li>- No enterprise search standard</li> </ul>	<ul style="list-style-type: none"> <li>• Better search, better consolidation of repositories through consistent metadata first</li> <li>• Federated search will be important for sharing of project, contract, and other content for claims, public record requests, and discovery for litigation</li> </ul>
<b>Imaging / Capture</b>	<ul style="list-style-type: none"> <li>+Captured a large number of documents as part of the ROW project</li> <li>+Imaging implemented effectively in Motor Carrier and Financial Services</li> </ul>	<ul style="list-style-type: none"> <li>- Scanning still limited to a few applications</li> <li>- No remote or distributed scanning</li> <li>- FileNet Capture has more limited functionality compared to other solutions</li> </ul>	<ul style="list-style-type: none"> <li>• Need to develop a centralized capability (for the whole project life cycle: planning to maintenance to destruction) for more efficient content access for the regional offices of the Highway and Region group</li> </ul>	<b>Taxonomy / Metadata</b>	<ul style="list-style-type: none"> <li>+Consistent manual filing system and index in the central filing room</li> <li>+RW project building a standard index for project documents that can be leveraged</li> </ul>	<ul style="list-style-type: none"> <li>- No metadata or document classification standards either within or between departments</li> <li>- Multiple indexing and storage approaches within each department and between individuals</li> </ul>	<ul style="list-style-type: none"> <li>• Metadata standards and methods needed</li> <li>• A standard approach for implementing repository(s) required for metadata/documents</li> </ul>
<b>Records Management</b>	<ul style="list-style-type: none"> <li>+Completed records classification and retention schedule</li> <li>+Able to leverage the State archive standards and facilities</li> <li>+Well-organized and well-managed central file room</li> </ul>	<ul style="list-style-type: none"> <li>- Departments appear to be following the base records archiving but not clear if document destruction policies being followed</li> <li>- Limited monitoring of department records management processes</li> <li>- No implemented automation</li> </ul>	<ul style="list-style-type: none"> <li>• Need better document management systems and processes to improve records management without requiring duplicate spend in each department</li> </ul>	<b>Security</b>	<ul style="list-style-type: none"> <li>+Ability to leverage standards and resources of the State Security Office</li> <li>+Established standards for specific security products</li> </ul>	<ul style="list-style-type: none"> <li>- Little consistency in the management of and access to information</li> <li>- Security decided on a case-by-case basis instead of based on enterprise standards</li> </ul>	<ul style="list-style-type: none"> <li>• Need a standard set of roles and rules for accessing content both within and outside of the organization</li> </ul>
<b>Web Content Management</b>	<ul style="list-style-type: none"> <li>+Leveraging the State's web content management system</li> <li>+Implementing an internet e-bidding system</li> </ul>	<ul style="list-style-type: none"> <li>- Not clear how well managed the development, promotion, revision, and retiring of web content is within ODOT</li> <li>- Difficult to get metadata from the e-bidding system</li> </ul>	<ul style="list-style-type: none"> <li>• Need a better vision and defined process for the management of web content within ODOT</li> <li>• Need ODOT's own internal web content management tools</li> </ul>	<b>Document Management</b>	<ul style="list-style-type: none"> <li>+Basic document management implemented for several projects such as Financial Services, Motor Carrier, IGA and RW.</li> </ul>	<ul style="list-style-type: none"> <li>- With the decentralization of many groups, regional offices do not have access to documents they need</li> <li>- Too many disparate repositories (including paper ones); reliance on network share drives or e-mail</li> <li>- Too much time spent trying to determine which version is the original or most recent</li> <li>- Multiple locations for document storage adds complexity and challenges to content retrieval</li> </ul>	<ul style="list-style-type: none"> <li>• Increasing volume of paper means work is going to get more inefficient, harder to process without automation</li> <li>• Highest need in Financial Services, Support Services, Project Delivery and the Highway and Region Areas</li> <li>• Need to be able to respond to the increasing frequency and complexity of information queries responding to claims and litigation</li> </ul>
<b>Archival &amp; Storage</b>	<ul style="list-style-type: none"> <li>+Core infrastructure implemented of shared storage</li> </ul>	<ul style="list-style-type: none"> <li>- Not clear how many take advantage of the centralized methods for long term archive</li> <li>- Multiple repositories for paper and electronic records</li> <li>- Often not clear where originals are stored</li> </ul>	<ul style="list-style-type: none"> <li>• Not a clear storage management strategy with tiered storage subsystems tied to record retention and archiving rules</li> </ul>	<b>E-mail Management</b>	<ul style="list-style-type: none"> <li>+E-mail management project already planned</li> <li>+FileNet eMail Manager is a strong product that has already been acquired</li> <li>+Completed draft e-mail policy</li> </ul>	<ul style="list-style-type: none"> <li>- Need to make a decision about managing contractor e-mails</li> <li>- No analysis or taxonomy completed on e-mail to be managed</li> <li>- Significant use of e-mails within multiple work processes</li> </ul>	<ul style="list-style-type: none"> <li>• Need for both e-mail archiving and management functionality</li> <li>• Individual users and work groups need the ability to manage and search for their own e-mail related to their key processes</li> </ul>
<b>Enterprise Report Management</b>	<ul style="list-style-type: none"> <li>+Not a strong need for this technology</li> </ul>	<ul style="list-style-type: none"> <li>- No implemented automation</li> </ul>	<ul style="list-style-type: none"> <li>• May be opportunity for cost savings for reports in the Financial Services department</li> </ul>				

## 10. Conceptual System Design

One of the key activities that follows the high-level application architecture view is the development of a more robust architecture model. The following view depicts a reference architecture for enterprise content and process management.

For an organization like Oregon DOT, there are a large number of line-of-business applications at various levels of sophistication. Some are extremely monolithic, providing everything from proprietary data repositories to fixed thick-client interfaces to the user. Others applications, often those that use common-off-the-shelf software, can fully leverage a well-designed ECM infrastructure. Understanding which systems fit into the overall continuum of integration and functionality will help ODOT define a realistic action plan for the migration, development, integration, and/or acquisition of technology to meets its business objectives.



# Concept of Operations

## 11. Interview Summary

As a follow-up to the online survey, Doculabs conducted two days of onsite interviews of individuals in key ODOT departments. The focus of the interviews was to gather additional detail on each area's key document-centered processes, their current use of ECM technology, and additional ECM application opportunities. This section provides a summary of this information for each area interviewed. Each is broken down into three sections: document-centered processes (identification of current business processes that are focused on moving documents/content through a workflow and lifecycle), current use of ECM technology (identification of any existing commercial, customized, or homegrown ECM technology being used), and identified ECM applications (identification of ECM-related applications to be implemented in the future using FileNet, SAP, or other solutions).

### Human Resources

#### Document-centered Processes

- Labor relations contract interpretation
- Grievance and EOC process
- Job classification process

#### Current Use of ECM Technology

- Hosted services for recruitment, payroll, and benefits
- Learning management system for scheduling and tracking classes
- No employee record automation

#### Identified ECM Applications

- Storage and retrieval of labor contract interpretations
- Centralized storage and retrieval of all grievance and EOC files
- Automation of the job (classification approval process)

### Motor Carrier

#### Document-centered Processes

- Management of trucking company oversight processes including: inspections, permits, and accounting vouchers
- Revenue-related processes including Weight Mile Tax (WMT) files, International Fuel Tax Agreements (IFTA), and International Registration Plan files

#### Current Use of ECM Technology

- MCIS Imaging System with centralized scanning used for multiple document types
- No major issues reported with the system

#### Identified ECM Applications

- No additional applications identified
- Potential need for a web-based interface for remote office access

### Highway and Region

#### Document-centered Processes

- Project scoping process
- State transportation improvement plan development process
- Discovery process responding to claims
- Inspection process
- IGA agreement management
- Budget development process
- Federal program management

#### Current Use of ECM Technology

- Some use of Microsoft SharePoint for basic storage and retrieval and collaboration
- No imaging, document management, or workflow implemented

#### Identified ECM Applications

- Automation of the project scoping process
- Project file management with integration with Microsoft Project Server and Bentley ProjectWise
- Inspection process automation
- Storage and retrieval for all planning documentation
- Automation of the budget development process
- Federal program documentation management
- Automation of the discovery process related to claims

### Financial Services

#### Document-centered Processes

- Processing financial documents including: invoices, journal entries, revenue transactions, travel reimbursements, checkbook transactions, and payroll timesheets
- Fuel tax processing
- Payroll file processing
- Local transportation loan processing
- Bond approval processing

#### Current Use of ECM Technology

- Financial Service Imaging System (FSIS) – home-built in 2000 and used to scan, store and retrieve invoices and supporting documents
- Metadata for the documents is “married up” with the images from the Mainframe accounting system (TEAMS)

#### Identified ECM Applications

- Basic web-based interface enhancement
- Distributed scanning for remote offices
- Automation of the manual, paper-driven licensing process
- Automating the payroll file process for handling corrections, garnishments, workers comp, and benefits
- Management of the fuel tax process including licensing (and licensing bankruptcies), collections, and start-up process for new jurisdictions
- Automating the remote retrieval and workflow associated with invoices, timesheets, and other financial documents in TEAMS
- Scanning of checks on the front end of the process
- Automation of local loans obtained thru the Oregon Transportation Infrastructure Bank
- Automation of the extensive bond approval process related to the Oregon Transportation Investment Act
- Travel claim processing
- Contract management
- Life insurance document processing

### Project Delivery

#### Document-centered Processes

- Project documentation process

#### Current Use of ECM Technology

- FileNet Capture being used for ROW project files
- No widespread use of ECM technology for project documentation

#### Identified ECM Applications

- Project file management
- Project team collaboration

### Support Services

#### Document-centered Processes

- Responding to document requests for litigation
- Contractor claims process
- Responding to public record requests
- IGA agreement process
- Bidding and award for highway construction contracts

#### Current Use of ECM Technology

- No implementation of ECM technology

#### Identified ECM Applications

- eDiscovery process
- Storage and retrieval of documents (including e-mail) for litigation and contractor claims
- Public record request processing
- IGA agreement and highway construction contract management