

Streamlining EMC Documentum Web Publisher to Increase Web Author Productivity

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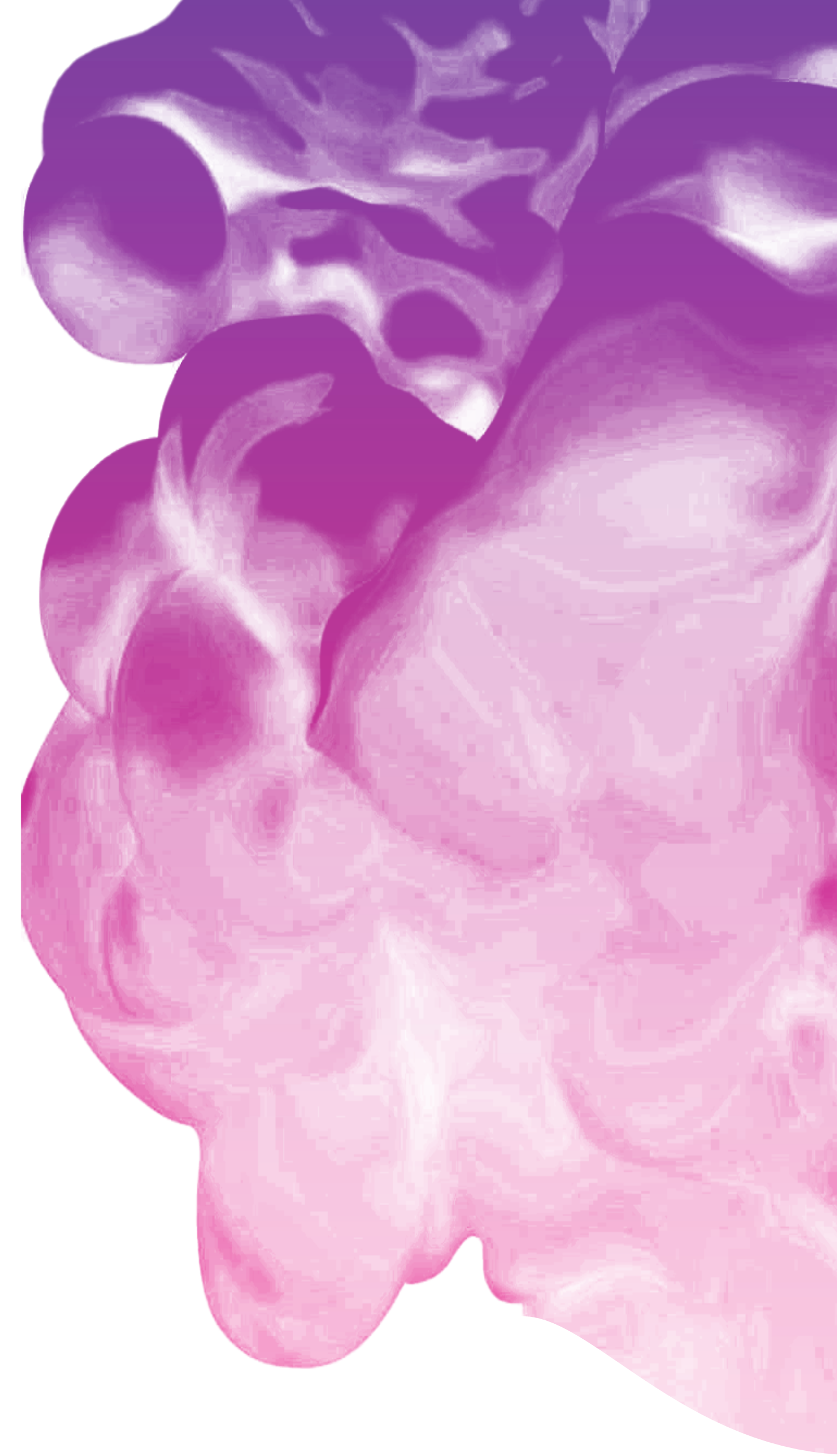
Manager, Content Management Office

Wells Fargo

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Blue Fish Development Group



Overview

- Wells Fargo and Internet Services Group (ISG)
- Business requirements for authoring public site (wellsfargo.com)
- Documentum Usability project overview and goals
- Project Approach
- Project Results
- Implementation and rollout
- Lessons learned
- Q&A

Wells Fargo Overview

- **Wells Fargo Bank**
 - 4th largest bank in US by market capitalization
 - 23 million customers
 - \$500 billion in assets
 - 6,200 stores
- **Internet as a strategic advantage:**
 - Nation's first bank to provide online account access
 - Public web site (www.wellsfargo.com)

Wells Fargo Internet Services Group (ISG)

- We have succeeded in making the Internet the most utilized channel at Wells Fargo
 - 62 MM sessions per month, outpacing store deposits and withdrawals, phone and ATM
 - 59% of consumer accounts accessed online
 - 51% of business accounts accessed online
 - 7.9 MM consumer customers online
(up 17% from prior year)
 - 800K small businesses online
(up 23% from prior year)

A screenshot of the Wells Fargo online account login form. The form is titled 'View Your Accounts' and features the Wells Fargo logo in the top left corner. It contains three main sections: 1. Username: with a text input field and a 'Username Help' link below it. 2. Password: with a text input field and a 'Password Help' link below it. 3. Sign On to: with a dropdown menu set to 'Account Summary' and a red 'Sign On' button to its right.

Business Requirements for Public Web Site (wellsfargo.com)

- **Business requirements for wells Fargo.com public site**
 - High uptime requirements
 - Quick publishing
 - Enforce navigation standards
 - Enforce web site “look and feel” standards (templates)
 - Create page layout flexibility for marketing
- **Software:**
 - EMC Documentum Web Publisher - with separate XMetal XML editor for authoring (heavy client)
 - Documentum Site Caching Services
 - Independent delivery layer (web/app servers)

Web Content Management Timeline for wellsfargo.com

- **2003: Rolled out Content Management to technology maintenance groups.**
 - Content-only publishing down from 2 weeks to as little as 1 hour
 - No business authors yet
- **2004: Process and administration improvements**
 - Fixed, tweaked, and learned how to maintain the system
 - Implemented XML templates to enforce “look and feel,” and separate content from graphic design, which allows business authoring
 - Rolled out to select business authors
- **2005-6: Customizing user interface**
 - Improve usability and efficiency of overall Content Management System

Content Templates with Web Publisher

- **Wellsfargo.com**
 - 5,000 pages of content
 - 20 templates
- **Benefits**
 - Consistent look & feel
 - Separation of design and content
 - Cost effective global changes
 - Consistent html tagging standards
 - More “light-weight” pages
 - More ADA compliant pages



Project Background

- **Author background introduction**
 - Variety of technical skill and frequency of use
 - Programmers (10-15)
 - Frequent users (4-10) – moderately technical
 - Very occasional users (e.g. Human Resource/PR) (10-12) – experts in their fields, but not experts on computers
 - New users – a special class
 - CMS requires author training
 - Geographically diverse

Project Goals

- **Purpose**
 - Create requirements to address major pain points and usability pitfalls of our content management system
- **Primary goal**
 - Improve overall Documentum usability for new and infrequent users
- **Secondary goal**
 - Improve productivity of power users
- **Approach**
 - Partnered with Blue Fish Development Group to analyze our issues, interview users, and deliver recommendations for improvement

Documentum Usability – Major Features

- Dashboard – Inbox, frequently used templates, in-process workflows, etc
- Wizards – create/edit wizards
 - Enforced business process of creating a new Change Set for all changes (Wells Fargo-specific)
- Bulk upload improvements
- Hiding rarely used fields
- Maintain backward compatibility with UI

Project Approach

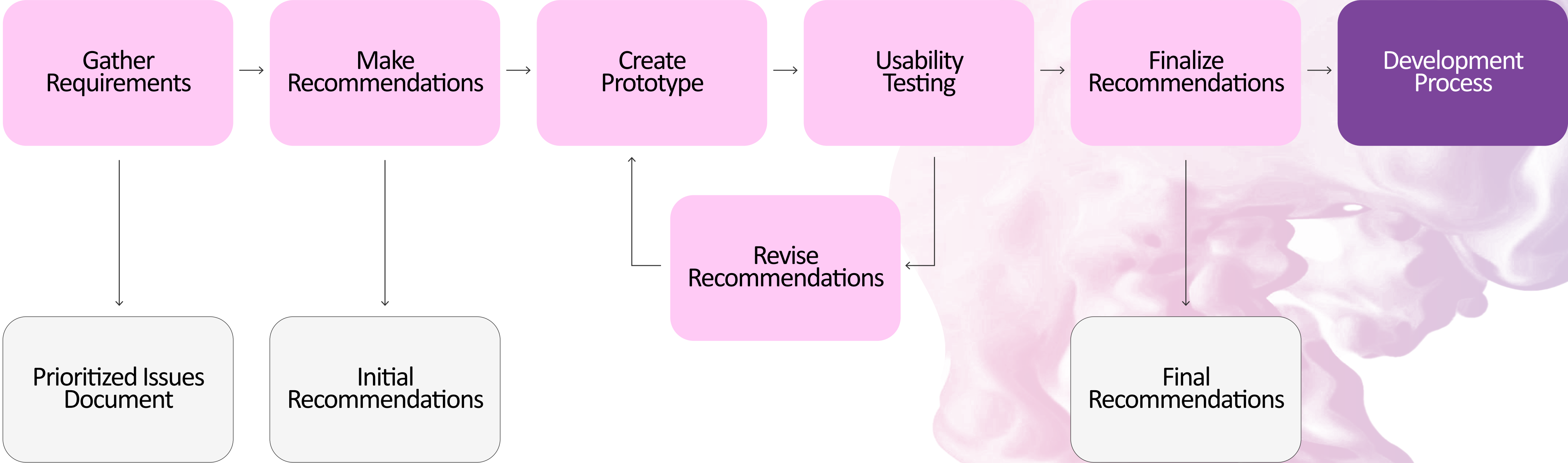


Project Process

- Identifying and prioritizing feature requests
 - Focus
 - Evaluating ROI and soft factors (author satisfaction and adoption)
 - Looking ahead to upgrades
- Initial prototype/wireframes
- Usability testing round 1 – an eye opener
- Second prototype/wireframes
- Usability testing round 2 – success!
- Final requirements
- Implementation



Project Approach



Features List and Interviews

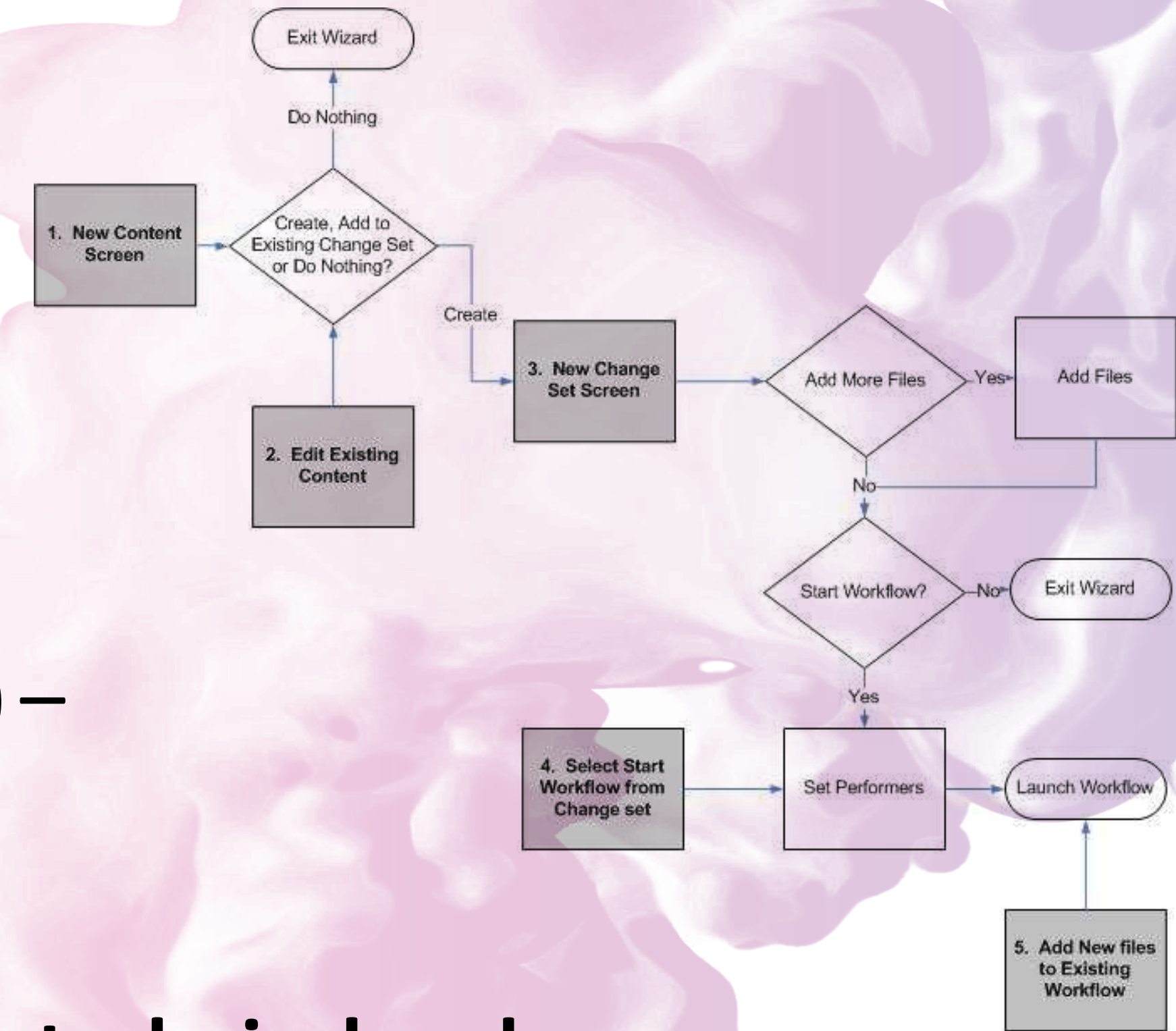
- Two weeks of onsite interviews. Blue Fish analyst interviewed over 20 technical and business users
 - Documentum administrators
 - Developer users
 - Business authors
 - ISG maintenance queue users
 - Information architects
 - Content Management Office
- The final issues list included over 50 discrete issues of varying sizes

Feature Prioritization

- Project team re-prioritized issues into two categories
 - In-scope for this project
 - Out of scope but many still need fixing
- Main reasons for "out of scope" items
 - Low usage (e.g. Site Map editor only used by a couple people)
 - Authoring tool enhancement or integration
 - Performance, including server capacity and network issues
 - Resolving intermittent bugs
- Ranking criteria for in-scope items (all equally rated on a scale of 1-5)
 - Pain level (how much pain the issue causes)
 - Reach (how many users or user types the issue affects)
 - Efficiency (how much of an inefficiency the issue causes)
 - Cost/complexity

Initial Recommendations

- Blue Fish delivered 76-page recommendations document based on re-prioritized Issues
- High priority issue groupings include
 - Ease of use
 - System intuitiveness
 - Enforcing business policy (require use of change sets) – to reduce business risk
 - Reducing system and user errors
- Recommendations evaluated by project team from technical and business perspectives. Feedback given to Blue Fish, and incorporated into revised document.



Usability Testing with Prototypes

- **Two rounds of usability testing. Twelve users. Clickable prototype based on Blue Fish recommendations.**
- **Round one**
 - Seven participants (frequent and infrequent users plus one newbie).
 - Positives: Dashboard screen, changeset/workflow process streamlined.
 - Improvement needed: Intuitive starting point, when to edit files, enforcing business process of using change sets for all edits, wording
- **Round two**
 - Prototype revised based on round one.
 - Five participants (frequent, infrequent, and novice; two from round one)
 - Outstanding results: Frequent users and newbies completed all tasks successfully and efficiently.
 - Direct quotes from participants: “user friendly,” “very clean,” and “streamlined.”

Results

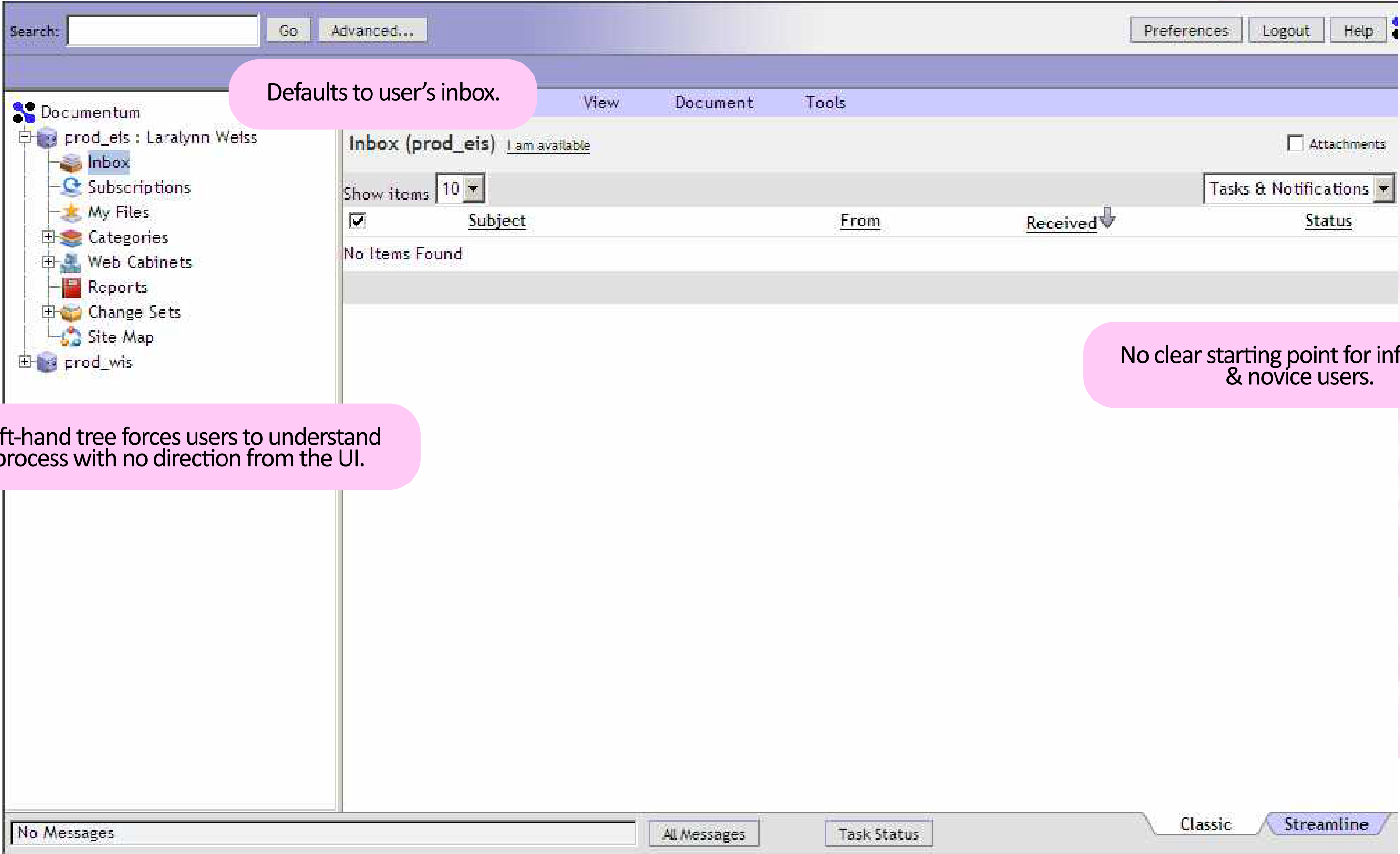


Key Recommendations

- Web Publisher Dashboard
- Content Creation Wizard
- Streamline Approval Process



Default View When Logged In



Defaults to user's inbox.

Left-hand tree forces users to understand process with no direction from the UI.

No clear starting point for infrequent & novice users.

New: Web Publisher Dashboard

Search: [] Go Advanced... Preferences Logout Help

Documentum File Edit View Document Tools

prod_wfs Chris Adams

Dashboard Welcome to Wells Fargo Content Management System

Most Common Tasks

- [Edit Existing Content](#) Make changes to existing content
- [Create New Content](#) Create new content
- [Import Files](#) Upload files from your computer

Template Shortcuts (for creating new files)

- [Info Box Template](#)
- [One-Column Category Page Template](#)
- [Jump Page Template](#)
- [... All Templates](#)

(Add a Template to the list)

<input type="checkbox"/>	Subject	From	Received	Status	Effective Date		
Tip: Workflows that are assigned to you will appear here. Change sets are within the workflows.							
My Change Sets (files grouped together) New Change Set What's a Change Set? Display 5 items							
<input type="checkbox"/>	Name	Modified	Status	Effective Date			
Tip: A change set is a collection of files. To begin a workflow, use "start workflow" in the tools menu.							
My Workflows (all active workflows that you initiated) Display 0 items							
<input type="checkbox"/>	Name	State	Start Date	Task Name	Current User	Received	Effective Date

Favorite Locations (Add a location to the list)

- [.../pages/checking/dda](#)
- [.../pages/com](#)
- [.../_reusable_components](#)

Tip: Add locations to this list that you want to access regularly.

No Messages All Messages Task Status Classic Streamline

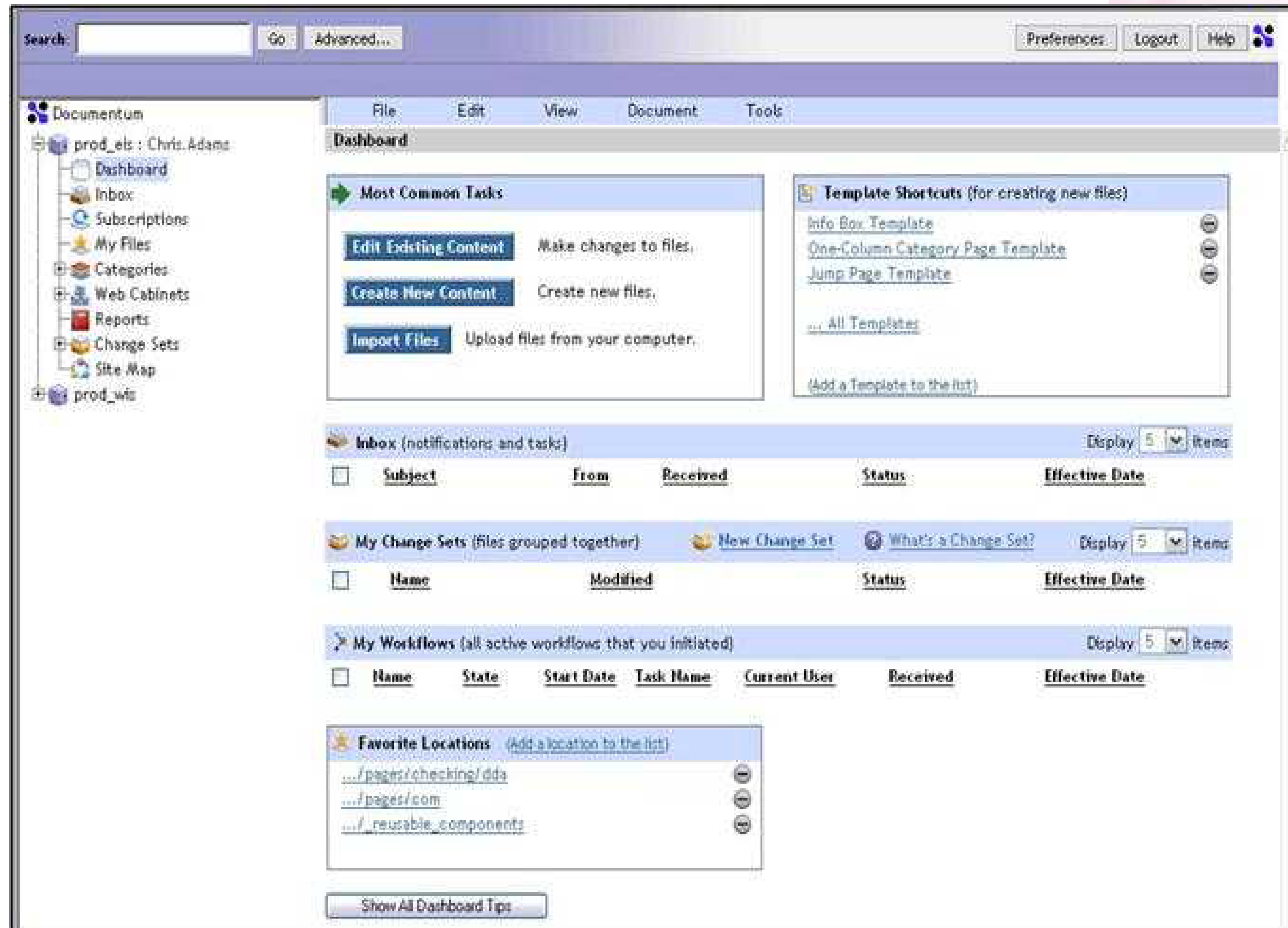
Inbox, Change Sets, and Workflows at the user's fingertips.

New: Web Publisher Dashboard

The screenshot shows the Wells Fargo Content Management Web Publisher Dashboard. The interface includes a search bar at the top, a navigation menu on the left, and a main content area with several sections: 'Most Common Tasks', 'Template Shortcuts', 'Inbox (notifications and tasks)', 'My Change Sets (files grouped together)', 'My Workflows (all active workflows that you initiated)', and 'Favorite Locations'. Each section has a 'Tip' box. A 'Hide All Dashboard Tips' button is located at the bottom of the dashboard. Annotations include a pink box labeled 'Hide All Tips Tips' pointing to the button, and a pink box labeled 'Dashboard Tips' with arrows pointing to the tip boxes in the 'Inbox', 'My Change Sets', and 'My Workflows' sections.



Web Publisher Dashboard – Hide Tips



Default Content Creation Process

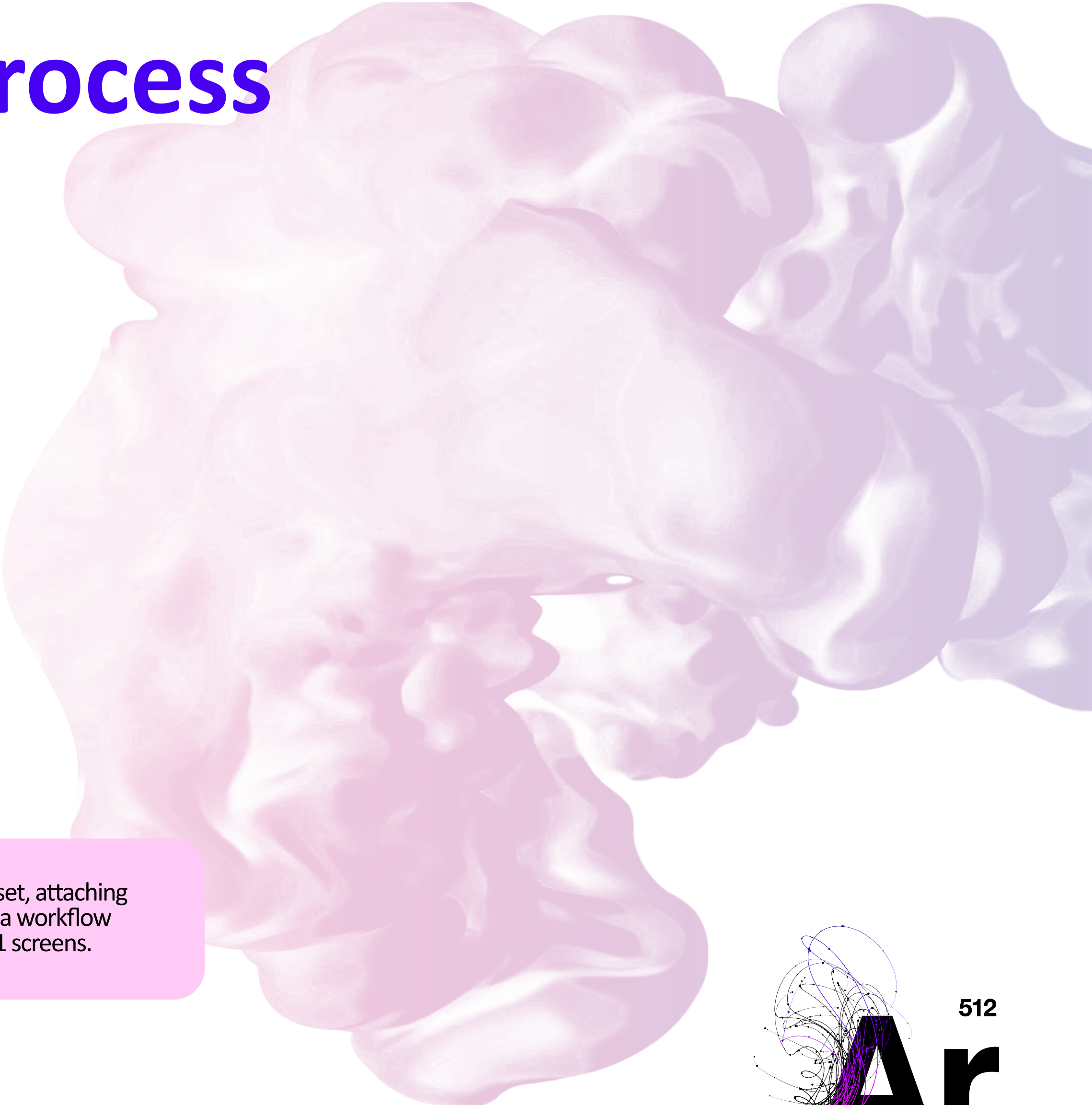
The screenshot shows a workflow management application with a 'Finish' screen. The 'Request Manager' section includes the following details:

- Description: test
- From: eisadm
- Received: 7/19/05 4:09 PM
- Due: 7/20/05 4:09 PM

The 'Assign Performers' section contains the following table:

Task Name	Performer
Change Author (2) **	Laralynn Weiss
Final Reviewer (4) **	Peter Zarleng
IA Specialist (1)	skip activity *
Preliminary Reviewer (3)	Skip Activity *
QA Tester (5)	Skip Activity *
Scheduler (6)	Skip Activity *

Setting up a change set, attaching file(s), and starting a workflow currently takes 11 screens.



New: Content Creation Wizard

Choose a Template

Choose a template

Templates: Template Cat

[Starts With]

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New Content

Create New Content

Create new content

New File Name
example: jump.xml

Page Title
Wells Fargo

Keywords
example: Wells Fargo Online - Bill Pay

Location [Browse](#)
example: CDS/pages/checking/dds

Searchable Make searchable on WellsFargo.com

Description
(131 characters max)
example: Comparison chart for checking accounts in the public section of the site.

Section ID
example: 2.1005

Add to a change set (standard practice for all)

New Change Set: Add file to a new change set.

Existing Change Set: Add file to an existing change set

Do not add to a change set (not recommended)

Change Set - Start Workflow

Create New Change Set

Create a change set to contain your file(s)

Change Set Name
This name will also be used when you start a workflow.

Effective Date: Date Hour Min
This is when the file(s) will publish if a workflow is completed. Choose a time between 6am and 3pm (PT).

Change Set Description
This description will appear for others when this change set is put into a workflow.

[\(+ \) More change set properties \(optional\)](#) Adjust additional properties for this change set.

Files [Add Files](#) [Create New Content](#)

Items per page: 5

Name	Version	Owner	
sample.xml	1.0,CURRENT	wcmadm	(remove)

Start a workflow for your change set

Now: Create change set and start workflow now. **Recommended:** You can edit files after they are in a workflow.

Later: Create change set now; start workflow later. Your change set will appear on the dashboard.

Wondering when to edit files?

- Files can be edited while they are in a change set or a workflow.

OK Cancel

Miscellaneous Features

- “Comments” were moved from their own tab to the main screen. Especially important for workflow rejections, to specify reason for rejection
- Ease of use - display default URL on Change Set Detail and Task Manager screens
- Enhanced “import” function to allow specification of multiple file folders
- Metadata attributes – may enter as many as you want (separated by semicolons), rather than one-at-a-time
- And Many Others

Implementation & Rollout



Implementation

- Implementation was done by Wells Fargo internal development team
- Documentum framework is very customizable
- “Backwards compatibility” for Documentum upgrades was key design goal
- QA and regression testing

Rollout Process

- User acceptance testing (UAT) before rollout
- Specific training for heavy users 1 week before rollout
- Project team supported rollout for first two weeks
 - Encourages good design decisions
 - Common issues are identified
 - Helps to train support personnel
- Adoption rate high (80%) but not 100%
 - Change is hard
 - Good idea to create backwards-compatibility
- Project cleanup effort – enhancements and bug fixes

Summary – Lessons Learned

- Make sure project goals are laid out clearly before you begin (“what does success look like”)
- Usability testing is important and useful for creating user interfaces (labels matter)
- Leave in backwards-compatibility
- Involve users in user acceptance testing
- Have project team support the rollout for initial period (warranty period)
- Documentum very customizable – but don’t underestimate the amount of work involved

Q&A

