Create Content Review and Publication Processes with Liferay DXP

Lecture Script

# Introduction

Slide 1:

Hello, my name is [your name] and I will be teaching you how to create content review and publication processes using Liferay DXP 7.4. Let us begin.

Slide 2:

The key takeaways from this module are:

* Custom workflows can be created to define complex review processes that reflect and/or improve existing practices.
* Page and Content Auditing can be used to efficiently sort through a page’s content to check for issues with categorization, accessibility, and SEO, thus improving the end quality of the content.
* Publications can be created to make and schedule Site changes simultaneously across multiple Users and pages.

Slide 3:

Before beginning the exercises for this module, you will need to have:

* Java JDK installed to run Liferay DXP
* Unzipped module exercise files in the following folder structure:
  + Windows: C:\liferay
  + Unix Systems: [user-home]/liferay
* A running instance of Liferay DXP or CE 7.4
* The Marvin Robotics Site created using the Minium Site Accelerator

Note: The download link directs you to download Java JDK 8. Running Liferay DXP on more recent versions of Java JDK may result in errors.

Slide 4:

Our Use Case for this module is Marvin Robotics. Marvin Robotics is a manufacturing company that produces industrial robots that is using Liferay DXP to create both a B2B ecommerce store and a customer-facing Main Site for their business.

* Marvin Robotics needs to address the following issues:
  + Product-related content that is created needs to be approved by both Tricia McMillan (After Sales Manager) and Ford Dent (Ecommerce Manager)
  + Marketing content needs to be properly timed to publish alongside ongoing promotions

Slide 5:

* (Continuation of list from previous slide, continue reading without break)
  + Multiple Users are in charge of making edits across Marvin Robotics Sites, occasionally resulting in conflicting changes
  + The Web Team supervisor wants the ability to review and approve multiple changes simultaneously

Slide 6:

The relevant Key Performance Indicators that we will be focusing on for Marvin Robotics’ platform are:

* Increase the number of review options available for created content
* Decrease the number of errors in released content
* Reduce the amount of time that content spends in review

# Creating Custom Workflow Definitions

Slide 7:

In this section we will take a look at creating custom workflow definitions.

Slide 8:

* To define complex workflows in Liferay DXP, administrators have two main options:
  + Write and upload an XML definition
  + Use the built-in workflow designer
* Some advantages of using the workflow designer include:
  + Drag and drop interface
  + Faster than writing a definition in XML
  + Easily editable in the event of organizational changes
* While Liferay DXP contains the Single Approver workflow out-of-the-box, custom workflows are needed for any review process that involves multiple stages of approval.
* Workflows can also be combined with Forms to create processes that require documentation at each stage. This will be explored in more detail in the Gather and Analyze Data with Liferay DXP module.

Marvin Robotics can benefit from a custom workflow involving parallel review for a product highlight article, a form of web content, which needs to be approved by members of both the product and marketing teams.

Slide 9:

* Workflow Nodes represent specific points in an approval process and typically fulfill one of the following roles:
  + Begin the review process
  + Approve or reject an Asset
  + Reassign a Task
* The workflow designer supports the following workflow node types:
  + Start and End nodes
  + Fork and Join nodes
  + Condition Nodes
  + State nodes
  + Task nodes
* A bit more about the types of workflow nodes:
  + *Task* nodes indicate the workflow task and its assignee.
  + *Fork* and *Join* are paired nodes for splitting the review process for multiple reviewers in parallel, and then rejoining when reviews are complete.
  + The *Join XOR* node allows the workflow to proceed as long as the transition from one of the parallel reviewers is invoked.
  + The *Condition* node establishes a condition before the review process can proceed.
  + The *Start* node begins the workflow.
  + The default *End* node by default sets the workflow status to *Approved*.
  + *State* nodes place the review process in a particular mode, or state. Start and End nodes are special types of state nodes.

As Marvin Robotics plans on utilizing the Process Builder to create custom workflows, they will of course need to be familiar with the available nodes. Certain design processes from the web team will make use of Fork and Join nodes in their workflow processes due to the collaborative nature of their work, whereas Condition nodes will come into play with the Kaleo Forms process that Marvin Robotics will create to mimic their Order Management process.

Slide 10:

* **Task nodes** represent actual tasks that need to be fulfilled in the review process
* When a Task node is added in the workflow designer, you must configure its Assignment Type
* The Task Assignment Type determines how the Task is assigned to the User or Role responsible for completing it
* Tasks have the following properties:
  + *Description:* Provides a description of the Task
  + *Name:* Defines the database name
  + *Type:* Shows the type of node in use
  + *Actions:* Different actions can be added to this part of the workflow, like Task Timers or scripts.
  + *Notifications:* One or more notifications can be created and sent out to different audiences.
  + *Assignment:* This is where you can assign who will be responsible for performing the task.
* The available Assignment Types, include the following:
  + *Asset Creator:* Assigns the task to the original Content Writer or Content Creator of the asset
  + *Resource Actions:* Assigns by permissions
    - For example, you can assign something to a particular user who has permission to edit a blog post.
  + *Role:* Assigns by a single role
  + *Role Type:* Assigns by one or more roles
  + *Scripted Assignment:* Assigns via script
  + *User:* Assigns to one or more specific users
* It is also important to note that custom Roles can be created during the creation of a workflow definition by assigning a task to a new, undefined Role. From there, you can add the appropriate permissions and assign the Role to its appropriate User(s).

In general, Task nodes in Marvin Robotics workflows will represent reviews performed by various Users on submitted content, though other actions that Task nodes may represent include updating content and creating Publications for publishing content.

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So what does this mean for Marvin Robotics?

Using the workflow designer, they can create a custom workflow like the one pictured here, which outlines a workflow for the creation of Marvin Robotics marketing content (e.g., a banner ad for a current promotion). The Content Creator creates the piece of content which is then reviewed by the marketing team lead and then subsequently by the ecommerce manager with steps for revisions and resubmissions along the way.

Slide 12:

Now it’s time for a knowledge check on what we’ve learned about custom workflow definitions. [read bullets in slide] Now take some time to pause the video and fill in the blanks.

Slide 13:

And here are the answers to the knowledge check: [read bullet points]

**Slides 14-18 [skip]**

# Preparing Pages and Content for Production

Slide 19:

In this section we will explore some methods we can use to prepare pages and content for publication in Liferay DXP.

Slide 20:

* The Browser Panel enables page creators to quickly find and edit the content used on a particular page
* Content is distributed by type and can be filtered for quick access and editing, which:
  + Allows small updates or corrections of errors missed in the review process
  + Decreases total page creation time, enabling faster turnaround on new content
* The Browser Panel will be primarily useful for Widget and Content Pages rather than Display Pages as the former page types tend to be mixed in content type and would thus benefit from a method to sort through content effectively.

While not exclusively useful to a manufacturing firm like Marvin Robotics, the Browser Panel assists nearly every use case in the sense that it makes finding, sorting, and editing a page’s content simple and quick. This fast turnaround (especially when used in conjunction with features like Forms and other feedback methods) can be leveraged into a responsive Site that can continue to provide for the needs of its visitors (and by extension, its customers) in a prompt manner.

Slide 21:

* Page Audit performs a series of checks that measure a page’s compliance with best practices for accessibility, search engine metadata, and SEO
  + Based on Google PageSpeed Insights
  + Gives warnings and tips to improve content based on the above categories
* The checkpoints used during the Page Audit encompass Accessibility and SEO issues. These include:
  + Low contrast ratio
  + Missing img-alt attributes
  + Incorrect image aspect ratios
  + Missing meta-description
  + Link texts
  + Page blocked from indexing
  + Invalid hreflang
  + Invalid canonical URL
  + Illegible font sizes
  + Small tap targets
  + Missing <title> elements
  + Uncrawlable links

Accessibility and SEO are increasingly important parts of B2B commerce, with both contributing heavily towards a business’s ability to stand out from their competitors. With the Page Audit tool, Liferay software offers the Marvin Robotics team the ability to optimize their content with respect to these categories, giving a kind of preview for a page’s content performance and offering suggestions to improve any content that is found lacking in these areas.

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* In order to set up the Page Audit feature, you will need an API Key from Google PageSpeed Insights, obtained here:<https://developers.google.com/speed/docs/insights/v5/get-started>
* Once configured, a Page Audit can be launched on any public page by opening the associated panel and hitting “Launch Audit”
  + Page Audit will not work for the following page types as they are not crawlable:
    - Private pages
    - Local-run sites pages
    - Under-login pages
  + Issues have a detail view with description, tips to fix, and even direct links to the places where issues can be fixed
* For businesses that sell internationally, each language version of a page can be audited separately, ensuring content is properly optimized according to its intended audience.
* As the exercises for this module will be conducted using a local-run site, a Page Audit will not be performed in the associated exercise for this section. That said, the process for enabling Page Audit will be gone over in order to show you how to properly set up the feature.

Marvin Robotics will make use of Page Audit on its Main Site in order to maximize SEO.

Slide 23:

* **Publications** can be used to develop, track, and publish changes across an instance of DXP
* Users can use the tool to create separate *publications* that group their content into publishable blocks
* Minor or major changes can be made by switching between edit and production modes
* Edits can be published immediately or scheduled for later publication
* Publications can be used across the whole DXP instance, allowing Users to group changes across multiple Sites into a single Publication. This, along with its ability for Users to quickly swap between modes, make it ideal for small edits and updates, but it can also be used for larger scale Site changes.

Marvin Robotics can make great use of Publications to handle Site updates across their Main Site and digital storefront.

Slide 24:

* Publications can be created in *Publications* in the *Applications* tab of the *Global Menu*
* Once created, changes can be added to a publication by selecting it in the drop-down next to *Production*
* Making changes on parallel publications can be done without issue, so long as the changes do not conflict with one another
* Should two parallel publications conflict in their changes, a notification will pop up informing the User of the conflict, which can be manually resolved.

Marvin Robotics will generally not require parallel Publications on their Main Site as Site updates will usually be minor and made at regularly scheduled intervals. That said, the ability to create parallel Publications will prove invaluable in the digital storefront, where several individuals are responsible for maintaining the Site and updates occasionally overlap in content.

Slide 25:

* Before the changes made in a Publication go live, they can be reviewed in summary from the *Publications* bar in the drop-down menu
* Once approved, a Publication has two methods of being published:
  + *Publish:* Immediately publishes the Publication
  + *Schedule:* Allows the Publication to be scheduled for a later time
* The *Schedule* option for Publications can be particularly useful for timing the release of new content (potentially along with promotional pricing) to coincide with new sales or marketing campaigns.

Marvin Robotics will use scheduled Publications to publish marketing content to coincide with planned marketing campaigns.

Slide 26:

So what does this mean for Marvin Robotics?

Marvin Robotics will take the following steps to prepare their content for production:

* Implement a regular Page Audit schedule to ensure that content remains optimized
* Create regularly scheduled Publications for Main Site Updates
* Create regularly scheduled Publications for Store Updates

Slide 27:

Now it’s time for a knowledge check on what we’ve learned about preparing content and pages for production . [read bullets in slide] Now take some time to pause the video and fill in the blanks.

Slide 28:

And here are the answers to the knowledge check: [read bullet points]

**Slides 29-32: [skip]**

# Create Content Review and Publication Processes in Liferay DXP Summary

Slides 33-34:

Now it is time to go over what we have learned about Creating Content Review and Publication Processes in Liferay DXP. [read slide, pausing between each point]

Slide 35:

Check out learn.liferay.com for more information on using Workflows, Page Audits, and Publications in Liferay DXP, as well as other Liferay products.