Workflow for Enterprise Data Governance with Oracle Data Relationship Management - Build it or Buy it?

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Build it or Buy it?
Executive Overview

Organizations looking to deploy Enterprise Data Governance including a workflow system with Oracle Data Relationship Management (DRM) are faced with the following two choices on how to handle the workflow integration:

1. Utilize Oracle Data Relationship Governance (DRG) which utilizes the embedded workflow, in the latest DRM release, that is a configuration instead of code based creation model for workflows. (Buy Solution)

2. Integrate DRM utilizing the web service to a customer-chosen workflow tool such as MS Share Point or Savvion. (Build Solution).

Development of the workflow allows the company to fully automate the process from request through committing the change or update in DRM. Outlined below are the advantages and disadvantages of both the Build and Buy approaches, and in the end, concludes that it is smarter and cheaper to go with the Buy solution.

Building Automated Governance Workflow: Advantages and Disadvantages.

In deciding to choose the build path, organizations often struggle with the Total Cost of Ownership associated with the build process. Many factors come into play with that ownership including how tightly defined are the needs of the workflow solution, how is clear the vision and understanding of the workflow steps, how good is the understanding of the risks associated with custom built applications, and, finally, what are the skills and capabilities of the in-house staff for the architecture chosen to create the workflow process.

This section will cover the advantages and disadvantages of building a custom workflow solution to integrate with DRM instead of buying DRG and configuring it.

Advantages of Build Solution:

- Complete control of workflow
- Ability to tailor to unique business needs
- Provides ownership of the software code for the workflow solution
- Ability to integrate external information into the workflow design
- No additional license for DRG and associated maintenance
- Leverage preferred architectural framework for the work flow
• Utilizes in-house resources to support the fully custom workflow solution

Disadvantage of Build Solution:
• Custom code does not cleanly separate presentation and business logic, making it extremely difficult to scale the system
• Changes tied to development cycles lead by IT – typically long lead times
• Bug fixes can be slow and costly
• Enhancements can be very expensive
• Heavy coding and reliance on expertise in Java, WDK, APIs etc.
• Organizations are responsible for all upgrades and changes to support platform changes like changes to API, JAVA, etc.
• IT group is responsible for creating and maintaining all new features and enhancements
• Much higher Total Cost of Ownership over the life of the solution
• Additional licensing is typically required for the platform upon which build is executed
• No dedicated support team for issues
• All training and support is custom
• Longer time to realize full ROI
• Unable to display hierarchies in native DRM format
• Coding needed for hierarchy display capabilities
• Software upgrades tied to IT timelines based on needs around testing and updating custom code

Buying Automated Governance Workflow: Advantages and Disadvantages

In deciding to choose the Buy path, organizations often struggle significantly less determining Total Cost of Ownership as this method provides a clearer understanding of the development time. Organizations still need to control scope creep during the design and implementation processes. In addition, there are fewer risks with the Buy solution since Oracle, as the vendor, has a dedicated support and development team that is available to help with Oracle Data Relationship Governance (DRG). Oracle also provides training to ensure that the customer’s team supporting DRG has the skills to handle any updates and enhancements to the workflow model going forward.

Buy solution advantages and disadvantages section covers the purchase of DRG vs building a custom workflow integration.
Advantages of Buy Solution:

- Development time is much shorter (refer to case study section for details)
- Quicker Return on Investment (ROI)
- Dedicated support and development team for DRG and DRM
- Network of Oracle and Partner implementation resources available
- Pre-Built application complete with best practices from working with 500+ customers and partners
- Configuration-based setup instead of coding based method in the custom solutions
- Training and support more readily available
- Oracle will “own the change” for new features and future platform support
- Much lower Total Cost of Ownership (TCO) for life of solution
- Changes are done by business resources not IT
- Very quick turnaround for new workflow features and functions
- Easily make changes and updates to the configuration to respond to changing business needs
- Display the hierarchies in native DRM format.
- Ability to request updates and enhancements from Oracle
- Software upgrades not dependent on testing and upgrading of custom workflow solutions.

Disadvantages of Buy Solution:

- Upfront software licensing and ongoing maintenance cost
- Integration with outside sources can be challenging
- Outside source information would have to be brought into DRM to be referenced
- Introduces a different workflow function than the corporate standard
- Could have to make compromises in requirements to fit tool capabilities – or think differently about how to design workflows to align best to delivered DRG functionality
- May not leverage preferred architectural framework for the workflow
Case Study Based on DRM Workflow Projects

Based on previous implementation activities for building a DRM workflow, several big differences were noted in the duration of the projects that directly affected the cost of these projects. Each of the projects in the sample we have used were executed by Oracle Consulting Services and were for custom workflow builds as specified by the customer. The durations are based on 4 custom projects that clients commissioned for specific tasks and functions.

The following chart outlines the timing differences for creating a simple workflow for two different dimensions in DRM custom workflow integration (Build) vs DRG (Buy). The duration change associated with the Dimension 2 represents the reusability of Dimension 1 tasks in the Buy solution and the Dimension 1 code that is reused in the Build solution. The steps included in the chart are those specific to the addition of workflow in a project and only include unit testing of the workflow capabilities. Workflows for each dimension are built to be able to handle the following actions: add, update, move, activate and inactivate members. Each of these actions has multiple workflow tasks included.

<table>
<thead>
<tr>
<th>Implementation Steps</th>
<th>Buy (weeks)</th>
<th>Build (weeks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRM setup and configuration for workflow integration</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td>Business Process Manager set up for DRM connection</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>DRM design</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Client workflow screen builds</td>
<td>-</td>
<td>20</td>
</tr>
<tr>
<td>Dimension 1</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td>Dimension 2</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Total implementation</td>
<td>6</td>
<td>55</td>
</tr>
</tbody>
</table>

| Enhancement Steps – New Dimension Workflow | |
| DRM setup and configuration for workflow integration | - | 2 |
| Business Process Manager set up for DRM connection | - | - |
| DRM design | 1 | 4 |
| Client workflow screen builds | - | 4 |
| Dimension 3 | - | 8 |
| Total enhancement weeks | 3 | 18 |

| Maintenance | |
| DRM | 0.25 | 0.25 |
| Middleware support | - | 0.25 |
| Workflow application support | 0.50 | 2 |
| Total maintenance weeks | 1 | 3 |
| Total project duration | 10 | 76 |
| Increase for Build over Buy | | 8x |

Table 1: Durations from Oracle Consulting Services Implementations (1 week = 40 hours)
Based on the case study above it takes at least 8X times the number of weeks for a custom workflow integration (Build).

Conclusion

Based on the case study and analysis of the advantages and disadvantages of Build vs Buy, it is typically more advantageous to pursue the Buy (DRG) solution than the Build (custom workflow solution) solution by a 1:8 margin for an Oracle Data Relationship Management solution.

Furthermore, the future costs of maintaining the Build solution and the need for additional testing and upgrade associated changes to the Build solution make it an even more expensive proposition. Therefore, purchasing an out of the box workflow solution like Oracle Data Relationship Governance (DRG) minimizes risk, provides a more predictable cost of ownership, and will provide a stable platform to configure.