PM500883

Thinking Outside the Box with Autodesk Fusion 360 Manage

Dr. Scott Hoover, PhD.
IMAGINiT Technologies

Learning Objectives

- Discover how different customers were able to use Autodesk Fusion 360 Manage to manage outside-the-box workflows
- Learn about the challenges, solutions, and outcomes these customers realized by implementing these business processes
- Assess which nontypical workflows you may be able to manage within Autodesk Fusion 360 Manage
- Determine how to calculate a return on investment to justify the addition of these types of workflows to their tenant

---

Description

When company leaders purchase Autodesk Fusion 360 Manage software for their organization, they're typically looking to manage their Items and Bills of Materials (BOMs), the change process that goes along with it, and quality processes. What some customers don't realize, though, is that they don't have to stop at managing workflows within Autodesk Fusion 360 Manage. Since the tool has the capabilities of building a workspace from scratch—and, more importantly, the ability to build any workflow with the workflow editor—users are really only limited by their imaginations in terms of what business processes they manage with Autodesk Fusion 360 Manage. This course will provide a variety of examples of "outside the box" workflows that customers are managing with Autodesk Fusion 360 Manage. We'll outline each customer's challenges, solutions, and outcomes. In addition, we'll discuss the return on investment each customer realized by implementing these outside-the-box workflows.

Speaker(s)

Dr. Scott Hoover, Ph.D. is a Solutions Consultant for IMAGINiT. Scott's primary role is to implement the Fusion 360 Manage technology for clients. Scott is an Autodesk certified Fusion 360 Manage implementer and as a part of the IMAGINiT PLM team, Scott has successfully completed numerous Fusion 360 Manage implementations. Scott received his Master's and Doctorate in Industrial Engineering for the University of Louisville and has been working with IMAGINiT for over 10 years. Scott has researched multi-industry processes, procedures, and workflows through the use of quantitative models to help improve workflow methods and procedures.

Boa Technologies

Boa Technologies began using Fusion 360 Manage about 7 years ago. They began their implementation with the typical Items and Change workflows. They quickly grew and adapted the system to help them manage a wide variety of other business processes. Resulting in having nearly 30 different workspaces being used.

Molds

The challenge that Boa was having with their molds was that their 3rd party vendors did not know when a mold needed to be replaced or scrapped, and thus when, the process to create a new one, needed to begin. So the solution that we came up for this particular problem was we developed two different workspaces to help Boa manage the production molds.

1. Mold Items
   - Revision Controlled workspace
   - Establishes all physical parameters of the mold
   - Relates the mold to the parts that it forms in the Parts and Assemblies workspace
2. Molds Project and Tracking
   - Basic workspace with Workflow
   - 1 to 1 relationship with Mold Item
   - Tracks mold lifecycle from purchase order release, construction and testing, until it is production cerftified
   - Captures daily Shot Counts of the mold via Grid Tab.

By implementing these workspaces, Boa was able to become more proactive in their process of getting their molds retired and new ones created instead of being reactive. By being proactive, Boa was able to reduce the amount of wasted components they were creating.

Color Samples

The challenge Boa was experiencing with their Color Samples was that their old system for managing color samples was an antiquated system that did not allow them to link material information with the color target information even though both sets of data were collected as a part of the old system. To address this, three workspaces were created.

1. Color Target
   - Basic workspace
   - Contains the metadata associated to the different colors
   - Capture RGB values to be able to show a color preview
2. Materials
   - Basic workspace
   - Contains the metadata associated to the different materials
3. Color Samples
   - Basic workspace with workflow
   - Derives data from both the Color Target and Material workspaces

- The records in this workspace represent a unique combination of 1 Material and 1 color

The primary benefit that Boa gained from implementing these workspaces was the ability to retire an old, antiquated system.

Fusion 360 Manage Scripts

As Boa grew their system from a few workspaces to close to 30, it became increasingly difficult for the Admin to keep up with changes being made to the JavaScript code for the different workspace. He first began by saving files into a folder on his PC with revision letters attached to the end of the file name. He quickly realized that a workspace could be created to help manage the scripts.

A revision controlled workspace was created so that each record that is created represents a single javascript. The admin will attach the .js file to the record by utilizing the attachment tabs. From this, any time a revision needs to be made to the script, the existing Change Order workspace is used to update the revision to the script.

This has allowed the admin to confidently keep up with the revisions of the scripts and should their be a need to go back and review a previously created script, there is not time wasted from searching system folders for the script.

Superior Essex

Superior Essex began using Fusion 360 Manage in 2021 to help manage their New Product Introduction workflow.

Test Requests & Tests

As a part of Superior's new product introduction process, they require that tests be formed on the product. Prior to implementing Fusion Manage, Superior Essex used a homegrown system that no one within their organization new how to program or update. These prevented them from having a system that could stay updated with changes to their business. In addition, the system at times could corrupt documents that had uploaded to the system.

To help with this challenge, 2 workspaces were developed:
1. Test Request
   - Basic workspace with workflow
   - The item details of the record allow the users to related the test request back to a specific NPI project.
   - The Grid tab is used to list out all of the requested tests that are needed for the specific request.
   - As the workflow transitions, a JavaScript creates a record per grid line in the Test workspace.
2. Tests
   - Basic workspace with workflow

- Email notfications are sent to the lab technicians when the test is created. Once they are complete, the transition the workflow for the test to complete. Once all of the test for a particular test request are complete, the workflow for the Test Request is automatically transitioned to the next workflow state.

By utilizing Fusion 360 Manage to help control these process, not only did Superior Essex gain control of their process and get rid of their fear of corrupted data, but they gained the ability to quickly and easily update their process should their business change. This allows them easily perform Continuous Improvement activities to gain efficiencies.

Owens Corning

Owens Corning began using Fusion 360 Manage in 2014 to help manage their Capital project delivery. Since the inception of the tool into their business, Owens Corning has grown to use the tool to help them manage a wide variety of business and office processes.

Travel Request (Passport, Stamps, & Visa)
Due to Owens Corning's project taking place in countries all across world, there is a need for a lot of travel by Owens Corning resources. To help manage this, there was a need for a Travel Request process so that approvals could be given to the resources for their travels. In addition, it was necessary for Owens Corning to keeps track of the amount of time a resource spent in a particular country as well as the length and expiration of their visas. To accommodate these requirements, three workspaces were created.

1. Travel Request
   - Basic workspace with Workflow
   - Owens Corning resource create a record to request travel
   - Approvals are given
   - Resources record cost of travel (i.e. ticket costs)
2. Passport, Stamps, & Visa
   - Basic workspace
   - Keeps track of the visas that have been obtained by the Owens Corning Resources
   - Also keeps track of stamps that have been obtained
3. Passport Request and Renewal
   - Basic workspace with workflow
   - Process is used to help Owens Corning resource manage the process of obtaining/renewing their passport.

Time Sheets
As a part of Owens Corning's capital delivery process, they needed a way to understand the amount of effort that resources have put to a particular project. To solve this problem, Owens Corning developed a time tracking workspace.

1. Time Sheets

- Basic workspace
- Each week a record is created for each employee
- Utilizes the grid tab to capture time entries for specific projects
- Allows for Owen's Corning project managers to pull reports on the amount of effort per project.

Worlds Largest Tire Manufacturer

This customer has recently began using Fusion 360 Manage. Their intention are to use the system to help them manage their capital projects associated to their assets within their manufacturing plants. Given the size of this organization and the concerns of adoption by the users, the customer decided that they wanted to beign using the tool by implementing some very simple workflows that would touch a large number of users within the organization. This will allow the users to become familiar and comfortable with the tool while plans are being made to implement the more complicated workflows.

Vault Access
For certain projects, this customer utilizes outside contractors to work on CAD models. This requires the customer to provide their contractors access to their Vault. The customer was having difficulty keeping track of who had access to their Vault and when their access should be removed. To overcome this issue, a single workspace was implemented.

1. Vault Access
   - Basic workspace with Workflow
   - Requestor creates a record to request access for the contractor
   - There is an approval process that the request is required to go through
   - Once approved, the Vault Admin is notified and adjusts the Vault security to allow the contractor access
   - A daily timer begins a countdown to notify the Vault admin to remove the access.

Eventually, this customer would like to automate the process even more by having an integration automically adjust he Vault permission settings once the request has been approved.

Compliance Workflow
This customer has a corporate policy that requires employees on a yearly basis to remove any IP documents from their computers. The customer used to manage this process within a sharepoint workflow but were victims of an IT indicent in which they lost access to this workflow. Customer decided that they would reimplement this workflow within Fusion Manage.

1. Record Retention
   - Basic workspace with Workflow
   - A record is created for every employee
   - Automatically puts them into an out of compliance workflow every year and sends an email notification

By implementing this solution, not only does it help the customer ensure they are staying in compliance with their corporate policy, but it has also allowed users to gain access to the system before they begin utilizing the system for more complex and typical workflows handled by a PLM system.

Shutterfly

Shutterfly has been utilizing the Fusion 360 Manage product for close to 2 years now but within the last 6 months have rolled out the ability to manage their Request for Quotes process.

Request for Quote

A key component of Shutterfly's New Product Introduction process is their Request for Quote (RFQ) workflow. Prior to implementing Fusion Manage, Shutterfly used a combination of Google Sheets and email to create the RFQs and provide the necessary information to their partners. This process required a lot of data duplication and manual entry. To overcome this problem, 2 workspaces were developed

1. RFQ Workspace
   - Basic workspace with Workflow
   - Allows Shutterfly to select what vendors the system will automatically send emails to
   - Provides summary of Partner responses that are gathered in the Partner Quote Workspace
2. Partner Quote workspace
   - Basic workspace with Workflow
   - A record is created for each of the parnters to record their quote information.
   - Via security permissions, partners are not able to see records that are owned by other partners

By creating this process withing Fusion Manage, Shutterfly was able to bring all of the necessary information into one location and eliminate the need for ducplication of data. It also allowed the Shutterfly team to become more efficient in their RFQ process by being able to send the RFQ to the partners directly from the system, utilizing an email template, and also being abel to compare the responses of the partners with a single click.

Useful Links

About the Speaker

[LinkedIn](#)

About IMAGINiT

Who is [IMAGINiT](#)
The [PLM Team](#)

PLM Case Studies

[ASI](#)
[Superior Essex](#)
[Boa Technolgoy](#)

Hold on to Your Assets: How to Use Fusion 360 Manage to Manage Your Molds

[Autodesk University 2021](#) – Scott Hoover and David Clifton

Invite Your Suppliers to the RFQ Party with Fusion 360

[Autodesk University 2021](#) – Jeremy Smith