AUTODESK. UNIVERSITY

Redefining Project Turnover & Closeout

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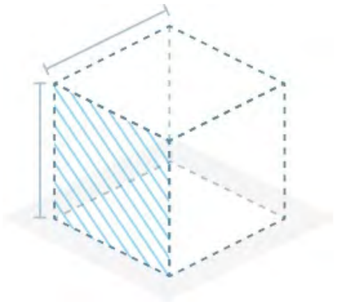
Drive the vision and roadmap for Lifecycle Data Management Group within Autodesk Construction Solutions. Joined Autodesk in 2018 via the PlanGrid acquisition. Currently oversee products such as Asset Management, Data Federation, Project Templates and Project Handover/Closeout. Outside of work enjoy playing tennis and the guitar.

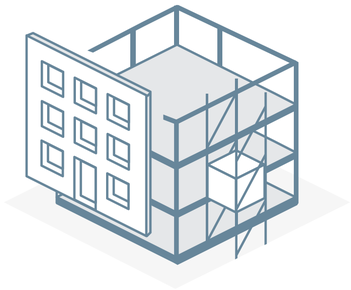
Autodesk Construction Cloud Vision

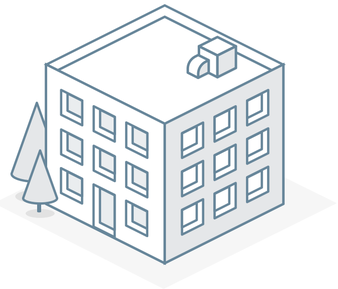
OUR MISSION

To help construction teams meet the world’s rapidly expanding building and infrastructure needs, while making construction more predictable, safe and sustainable.

AUTODESK **CONSTRUCTION CLOUD**™

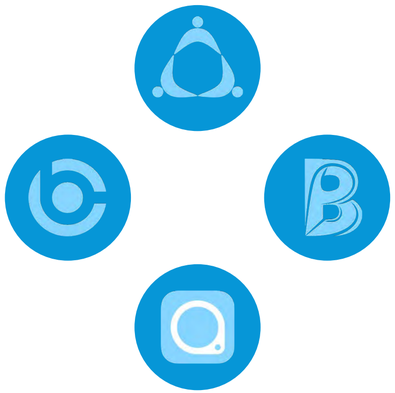






	DESIGN	PLAN	BUILD	OPERATE
Capabilities	•Design Authoring •Design Collaboration	•Model Coordination •Model Conditioning •Quantification •Bid Management •Qualification	•Project Management •Cost Management •Quality •Safety •Project Closeout	•Facilities Maintenance •Asset Lifecycle
Shared Data	**Data** Models · Drawings · Issues · Specifications · RFIs · Cost · Assets · As-Builts			
Insight	**Predictive Analytics & Risk Management** Executive Dashboards · Reports · Construction IQ · Data Connector			
Network	**Builders Network**			

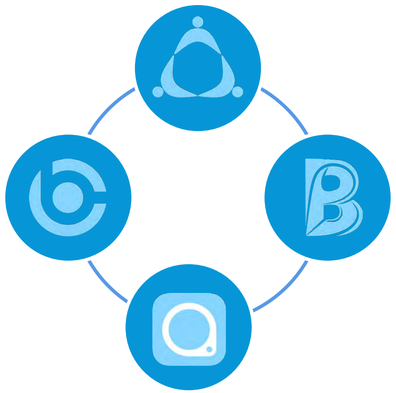
What we told you



Continued Investment

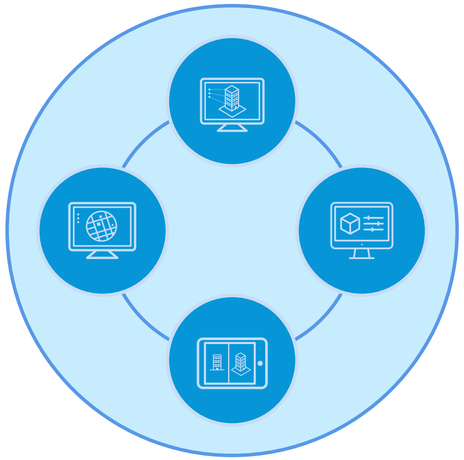
continue building and enhancing the

champion features across all our core products



Meaningful Integrations

create integrations between these products so that they may more effectively be used together



Unification

build a unified platform where all champion features come together under a single log-in for seamless adoption of features across the full digital building lifecycle

AUTODESK **CONSTRUCTION CLOUD**™

AUTODESK
BIM COLLABORATE

AUTODESK
QUANTIFY

AUTODESK
COORDINATE

AUTODESK
BUILD

AUTODESK **DOCS**

Models · Drawings · Issues · Specifications · RFIs · Cost · Assets · As-Builts · Photos · Videos

INSIGHTS

Dashboards · Reports · Construction IQ · Data Connector

ADMINISTRATION

User Management · Autodesk ID · Project Administration

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AUTODESK **CONSTRUCTION CLOUD**™

	AUTODESK **BIM COLLABORATE**	AUTODESK **COORDINATE**	AUTODESK **QUANTIFY**	AUTODESK **BUILD**				
Capabilities	**Design Collaboration**	**Coordination**	**Quantification**	**Project Management**	**Cost Management**	**Quality**	**Safety**	**Project Closeout**
Workflows	• Constructability Review • Change Visualization • Revit Collaboration	• Model Coordination • Constructability Review • Quality Planning • Issue Management	• Scope Analysis • 2D/3D Take Off	• RFIs • Submittals • Meeting Minutes • Daily Reports • Progress Tracking	• Contract Creation / Administration • Change Orders • Payment Applications • Forecasting	• Quality Planning • Quality Checking • Punchlists • Issue/Task Management	• Safety Planning • Safety Training • Safety Observations • Safety Inspections	• Commissioning • Turnover Documentation • Warranty Mgmt. • Final Completion • As-Built Survey
	Document Management	Document Control · Document Versioning · Document Approvals						
Unified Data		Models · Drawings · Documents · Cost Items · Assets · As-Builts · Photos · Videos						
Insights		Dashboards · Reports · Construction IQ · Data Connector						
Admin		Admin Console · Permissions · Project Setup · Templates · Notifications						

Unified Architecture

Unified Framework

Built to contain the best capabilities from BIM 360 and PlanGrid, the common foundation allowed us to leverage existing strengths. The platform is extensible, supporting continued unification and platform expansion.

Built for Execution

This approach allows us to ship product faster now and in the future. It also meant that when we made significant investments in the current platform, they could be quickly ported to the unified products.

Truly Mobile Native

PlanGrid is mobile native. We leverage these strengths in PlanGrid Build and extend the approach to workflows that have previously been desktop bound.

Built for Scale

Leveraging the global Forge platform and deep security investment, the Unified platform scales to support projects of any size

Pervasive Simplicity

Common Foundation standardizes the user experience across products, allowing teams to get to work faster.

Redefining Project Turnover & Closeout

Closeout begins the day
Project Starts!

Redefine Handover by managing critical construction data through the lifecycle of construction projects from Design through Operations

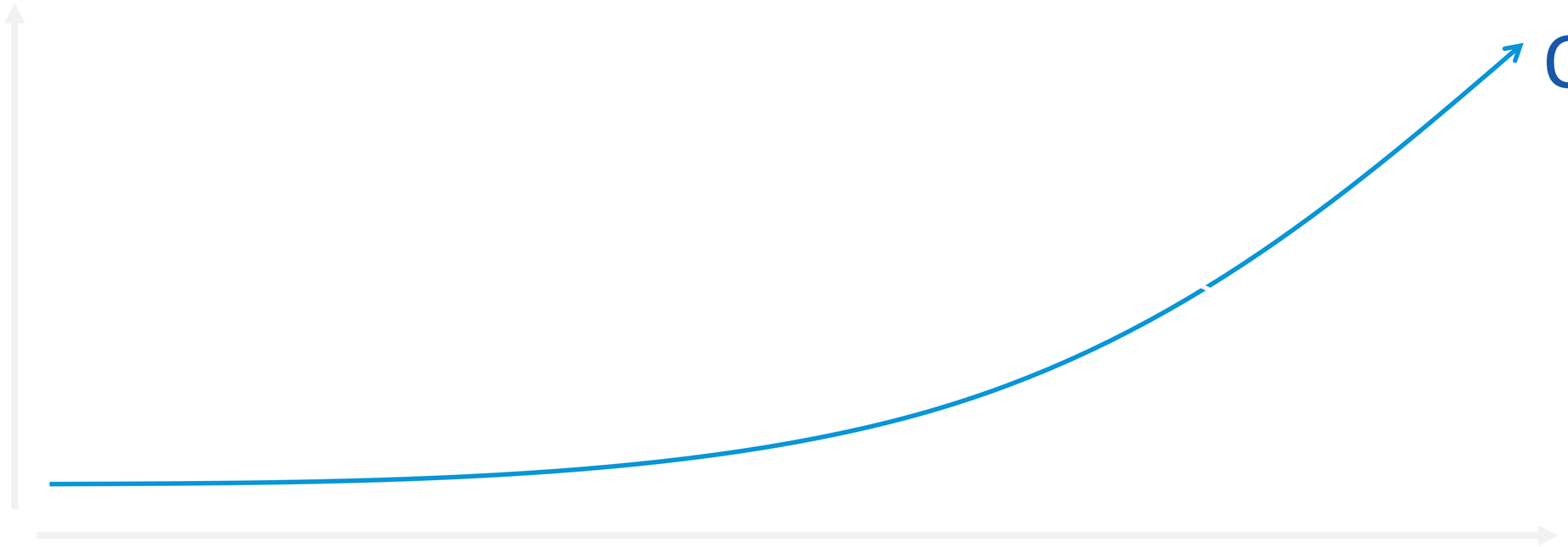
Handover spans the lifecycle of a project

Handover is tied to final payment for GCs and subs

”[Retainage] is a game at the end of the job."

(Large GC)

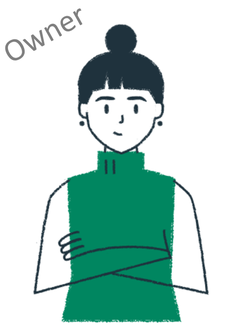
Handover quality can determine cost & time savings for facility operations

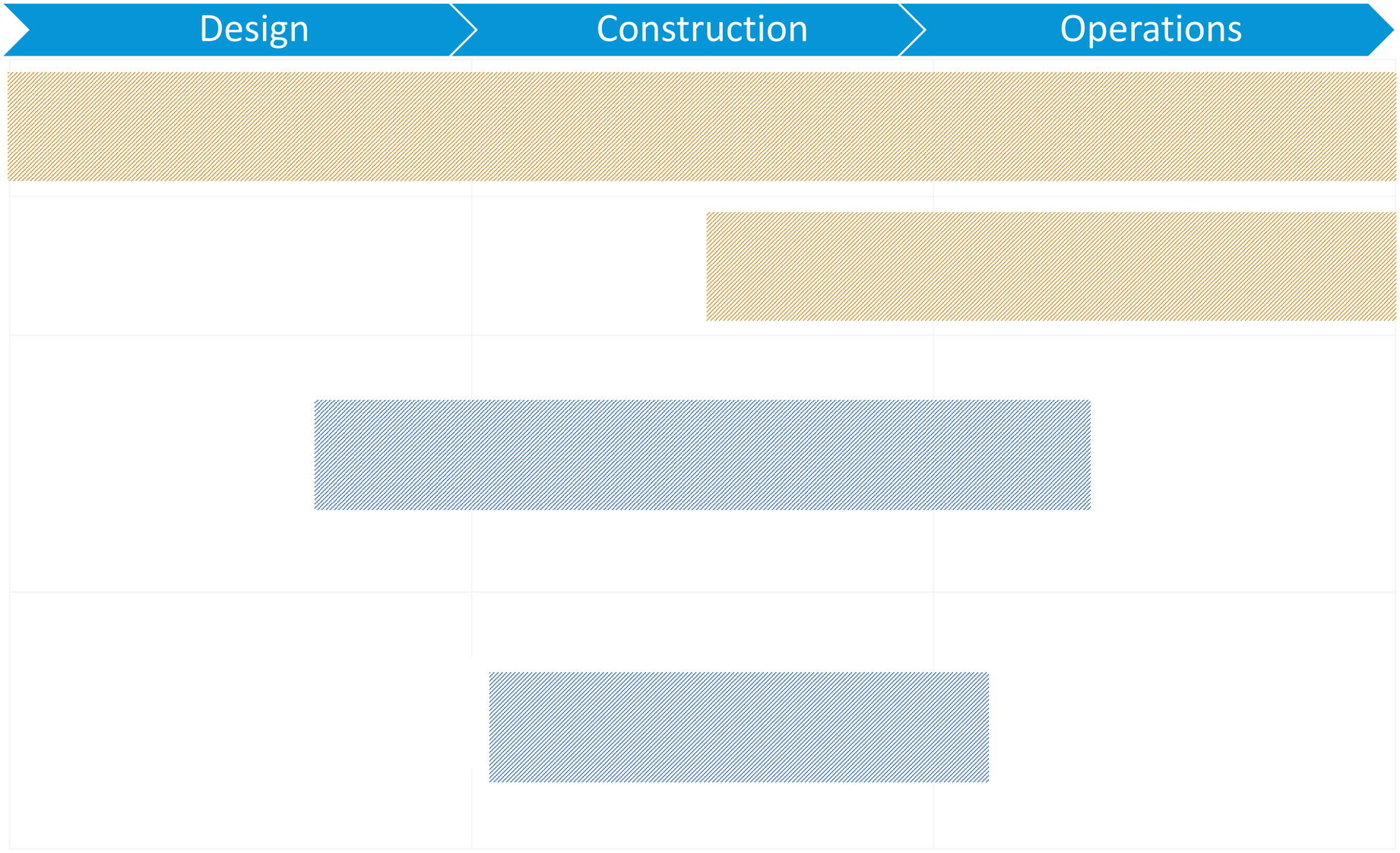


A high-quality handover package can save ~5% in cost in preventative maintenance and time savings over the lifetime of a facility.

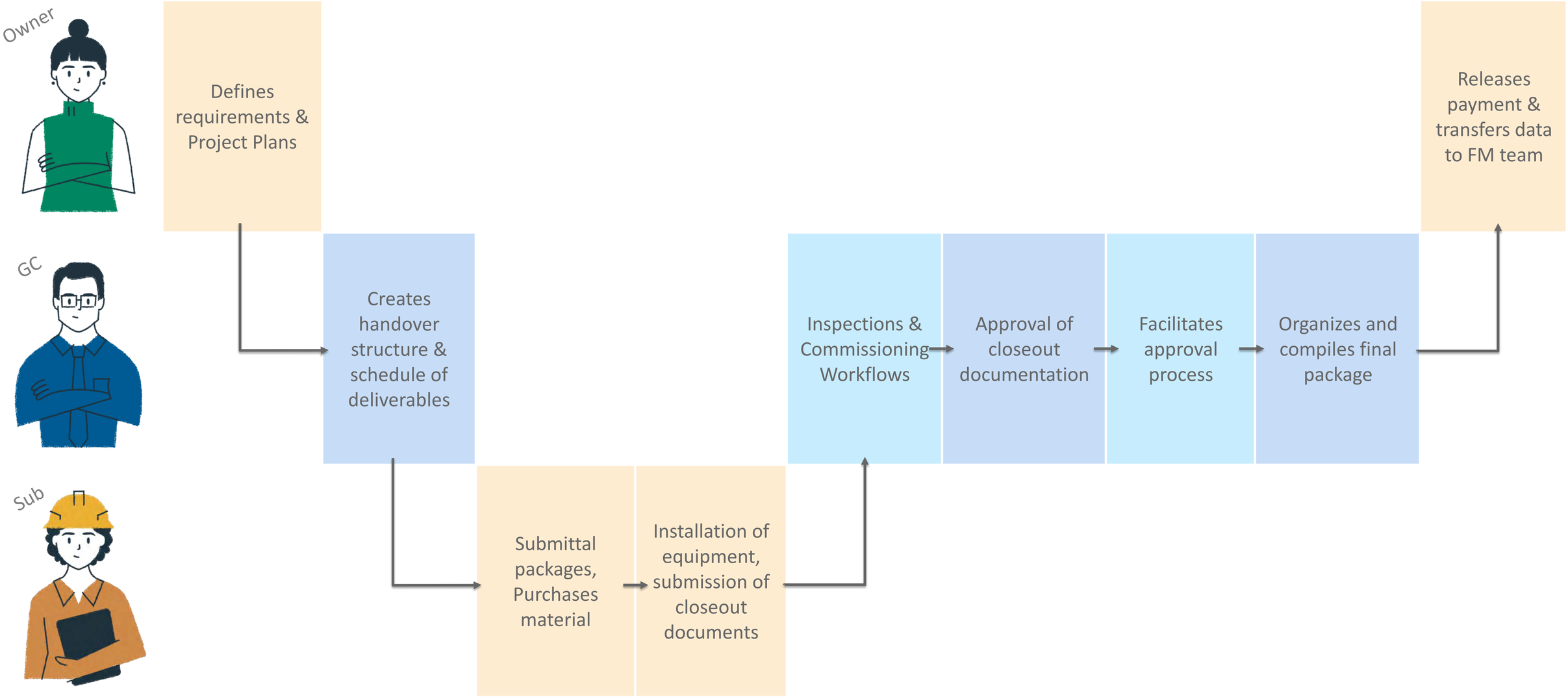
(SWISS - Source)

But it’s a continuous process along the way





Current handover workflow



Major pain points

Owners are often involved only at the very beginning or end of the project to list handover requirements

Owner

Defines requirements & Project Plans

GC

Folder structure & schedule of deliverables

Reviews submitted material → Tracks what has/hasn't been submitted → Facilitates approval process → Organizes and compiles final package

Releases payment & transfers data to FM team

Sub

Locates material → Submits material

General contractors must manually go through spec book to create a handover structure and plan schedule of deliverables

Create Folder structure & schedule of deliverables

- Electrical Services
- Fire Protection Services
- Hydraulic Services
- Integrated Building Systems...gy, Security, Surveillance, AV)
- Mechanical Services
  - As Built Drawings
  - Certificates of Compliance/Certification/Approvals
  - Maintenance Tasks (Schedule)
  - Manufacturers Literature
  - Operating Procedures
  - Schematic Drawings
  - Shop Drawings
  - System Description
  - Testing and Commissioning Reports
  - Warranties
- Vertical Transport Services

*"The people that are flipping through **one page at a time**, a **500-page** spec book"*

Locating, aggregating and sending documentation is a pain for Sub-contractors especially using different tools

Owner

Defines requirements

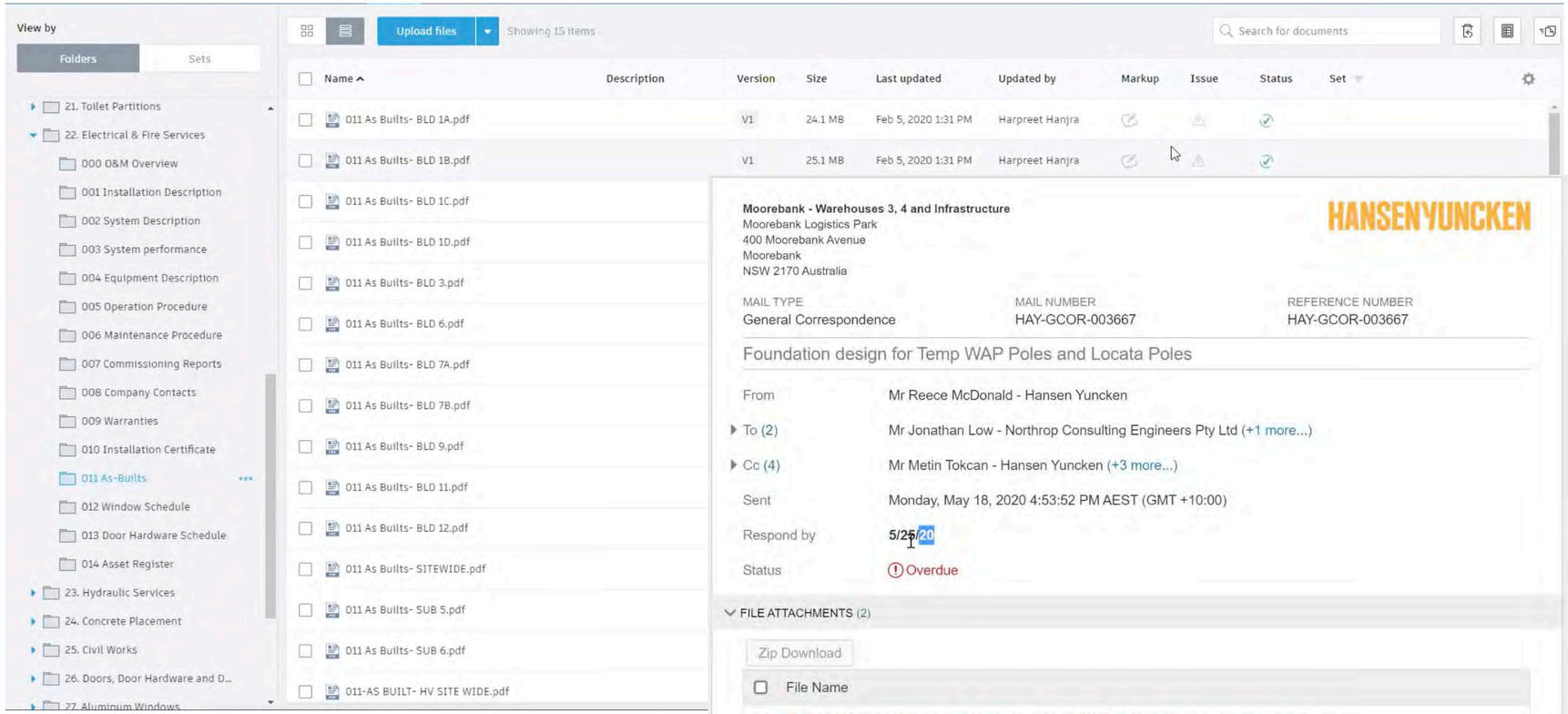
GC

Folder structure & schedule of deliverables

Sub

Purchases & Locates material

Submits material



Lot of back and forth between Subs and GCs, so much so that Subs sometimes leave money on the table

Owner

Defines requirements

GC

Folder structure & schedule of deliverables

Reviews submitted material → Tracks what has/hasn't been submitted → Facilitates approval process → Organizes and compiles final package

Releases payment & transfers data to FM team

Sub

Locates material → Submits material

*"there was like five grand on the line and a [Sub] called and said **'hey, you guys can keep my five grand. You do the close out'**"*

GCs must manually track down documentation from multitude of subs using different software tools

Defines requirements

Folder structure & schedule of deliverables

Locates material → Submits material

Inspection workflows & Approval of closeout Documents → Tracks what has/hasn't been submitted → Facilitates approval process → Organizes and compiles final package

*"Everybody starts a spreadsheet... you've got all your subs down the side and a **check[box] for what all you need to collect... And then people send out emails** that say 'we need to collect this, this, this and this from you.'...a month later when you have 60% of it but there's still 40% of it with stragglers"*

*"When you get towards the end of the project...you end up with **one, poor individual that is stuck**, trying to beat up all the subs, **trying to get all that last stuff**...before they can close it out."*

Facilities/Ops teams typically get involved towards end of the projects and approval process between stakeholders is a manual and tedious process

Compiling the final package for GCs is a manual and tedious process

Defines requirements

Folder structure & schedule of deliverables

Locates material → Submits material

Reviews submitted material → Tracks what has/hasn't been submitted → Facilitates approval process → Organizes and compiles final package → Releases payment & transfers data to FM team

As you can see this is a 4000 page document. And I hate putting it together. We start from scratch, maybe a month before the end of the project and assemble everything one by one. It's a huge time sink. (paraphrased)

Accessibility of handover documentation is a pain for building ops teams post construction

Defines requirements

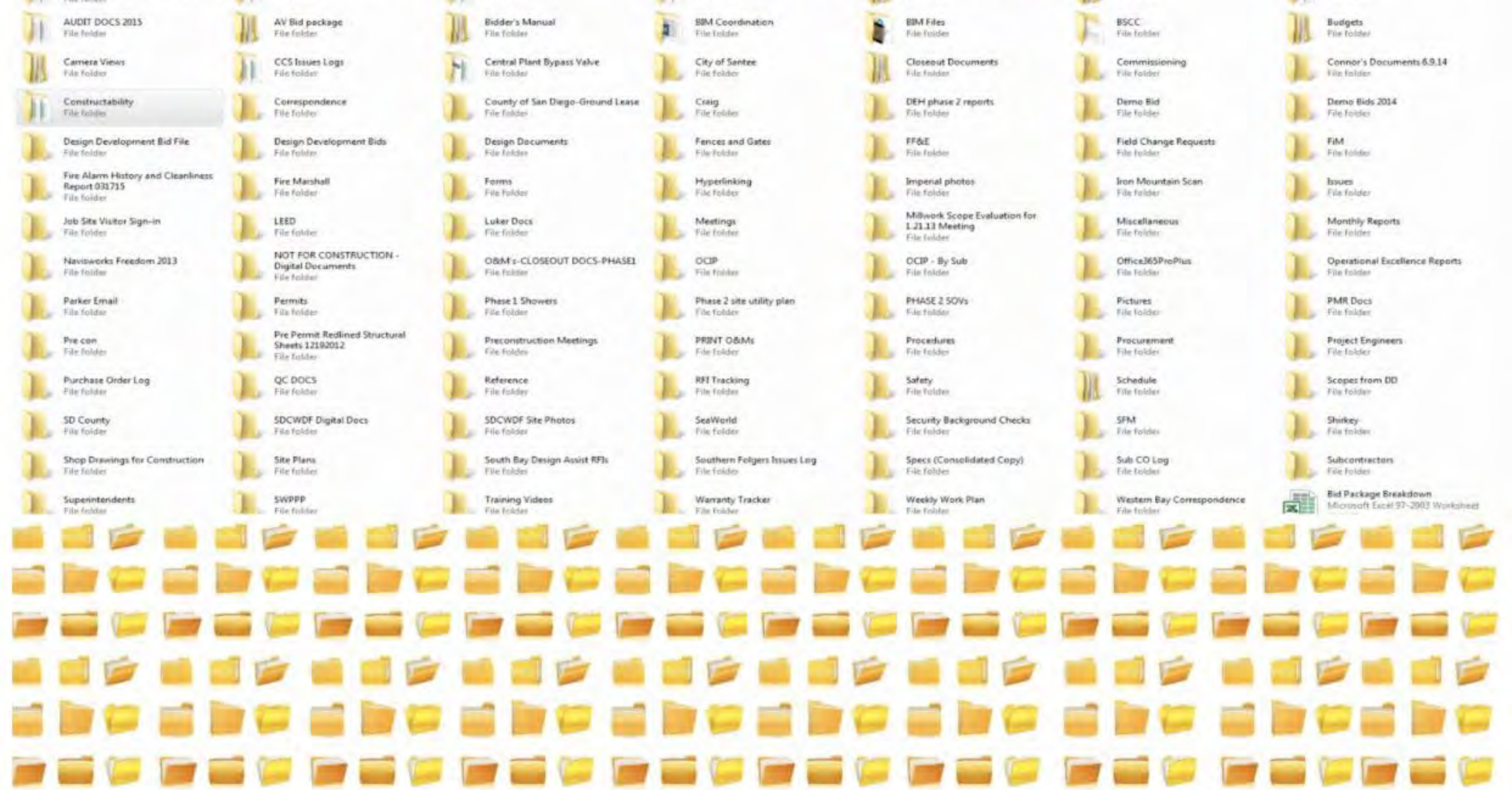
Releases payment & transfers data to FM team

Folder structure & schedule of deliverables

Reviews submitted material → Tracks what has/hasn't been submitted → Facilitates approval process → Organizes and compiles final package

Locates material → Submits material

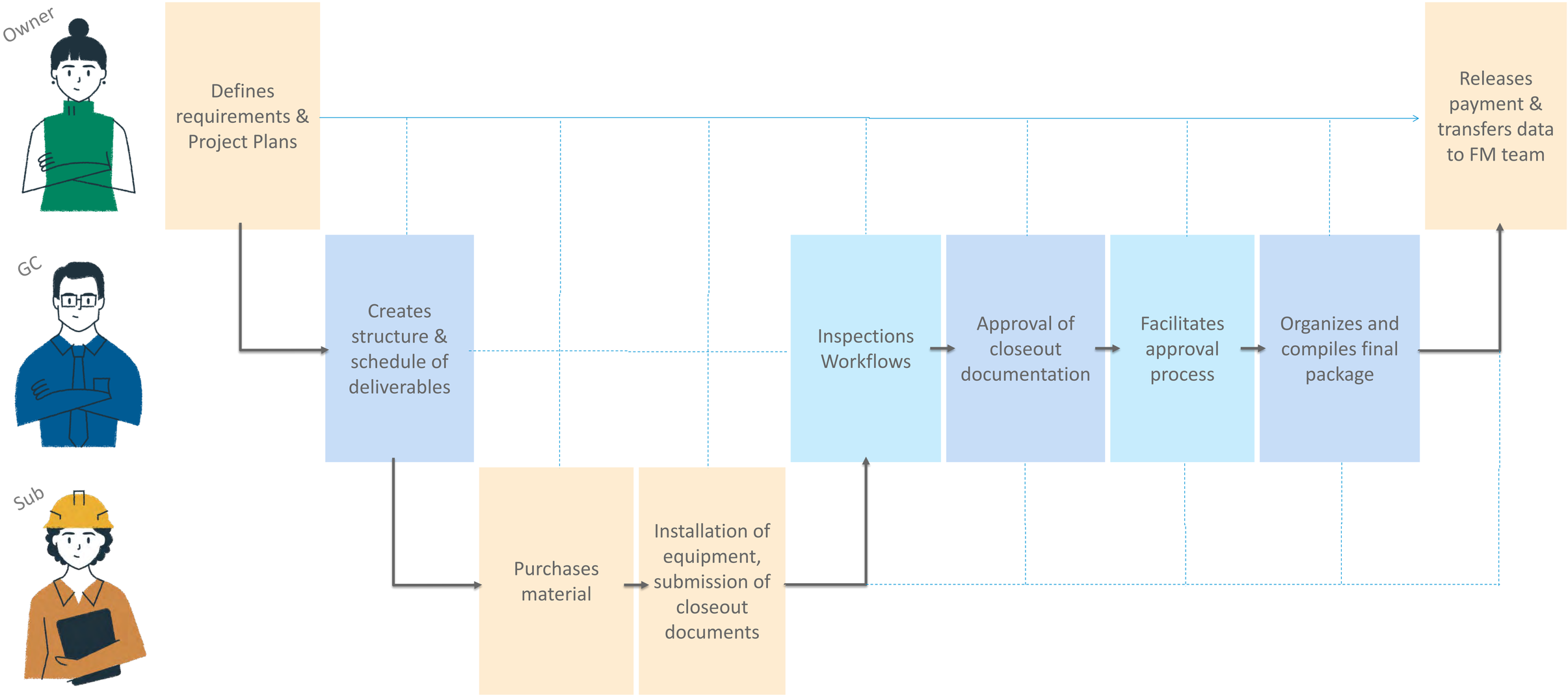
"[You have] a building manager who is going to be different in a year… and it's not your owner's rep… So you've got these random people... You're just literally handing them stuff."



FM teams trying to access handover data

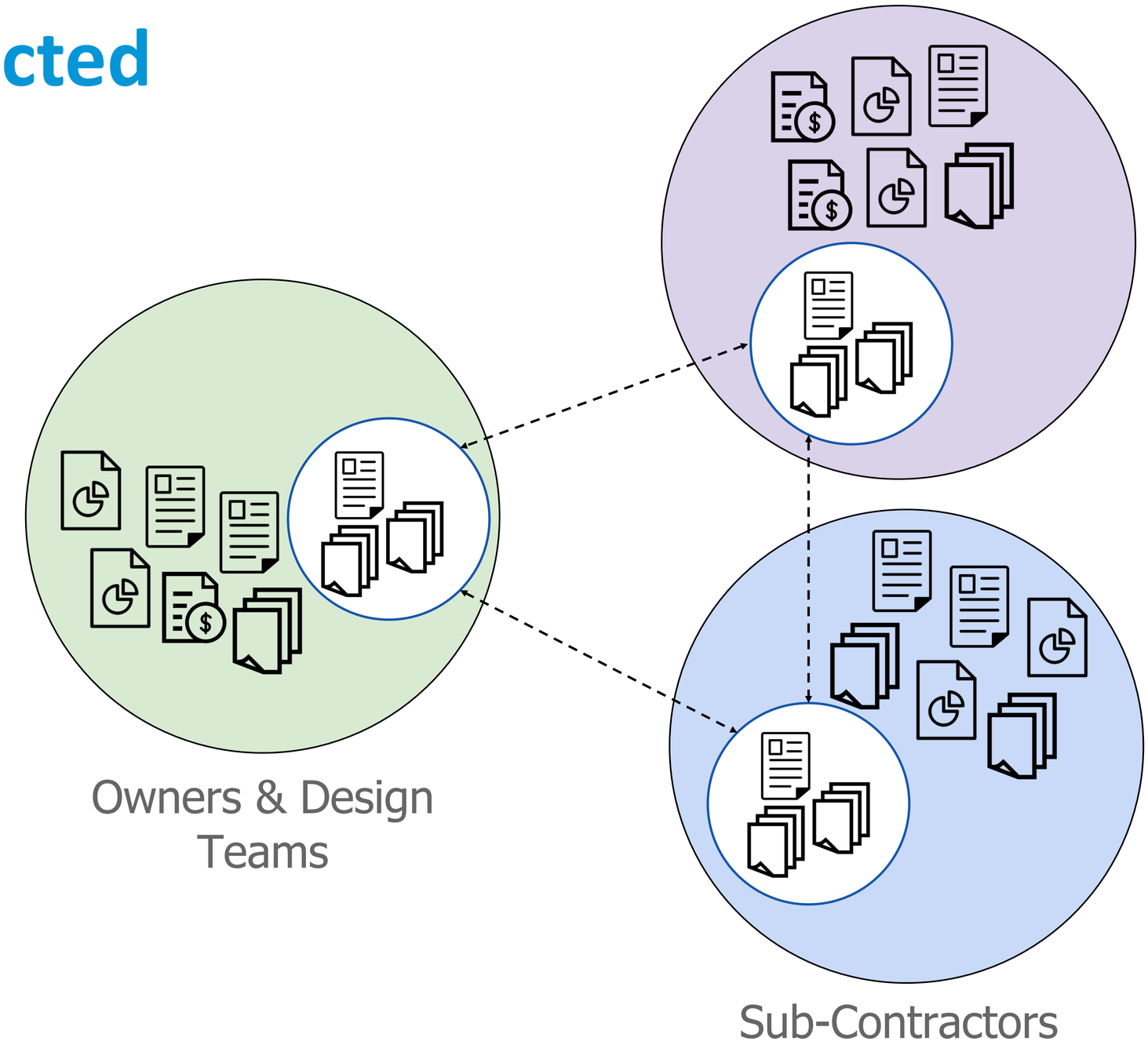
Redefining Handover with Lifecycle Data Management

Future Connected handover workflow



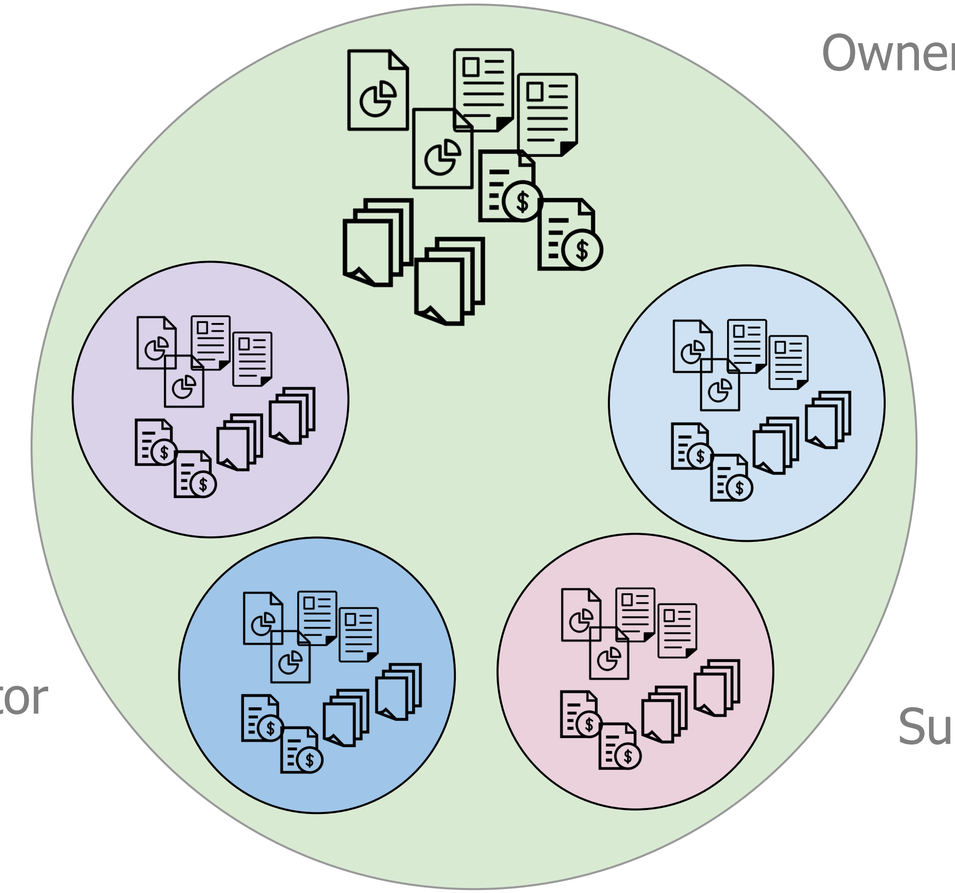
Core pillars of Connected Handover Workflow

1. Distributed Data Ownership & On-Demand collaboration
2. Standardized Workflows
3. Asset tracking through Lifecycle of project



On-Demand Collaboration & Distributed data ownership

Construction Software today



Owner

Architect

Mechanical subcontractor

Drywall Subcontractor

Electrical Subcontractor

General Contractor

Single Software Account/Hub Owner

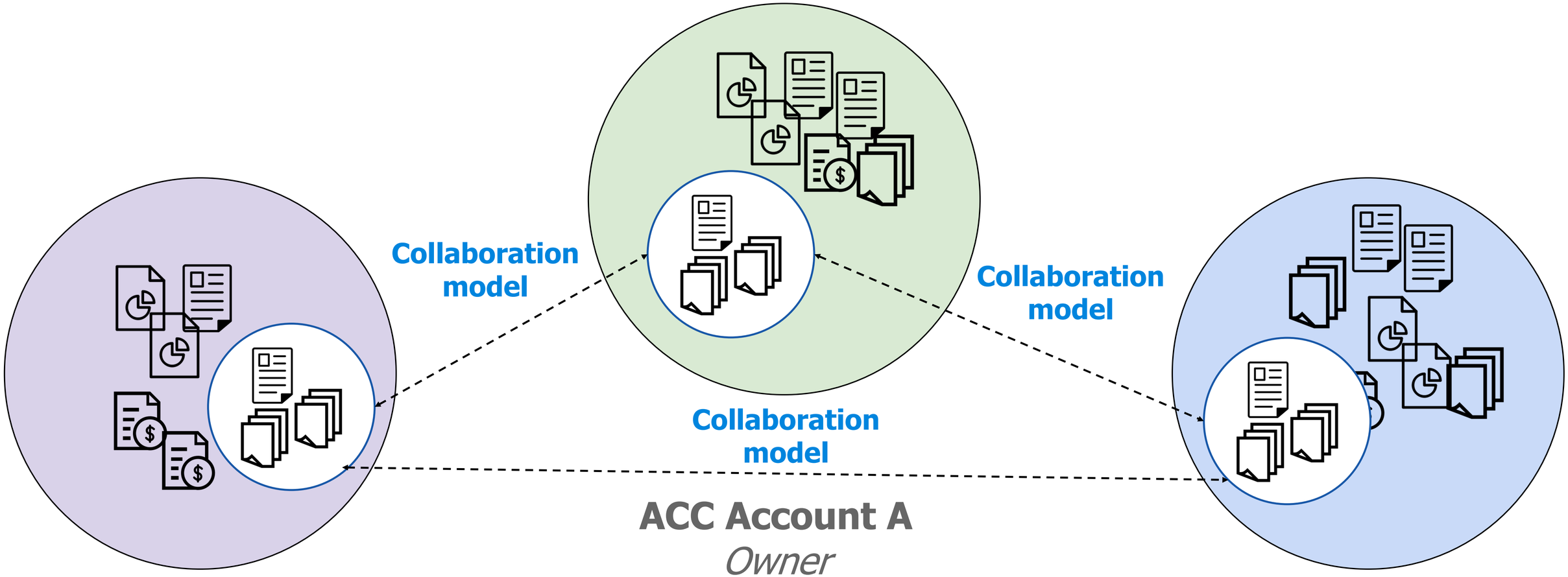
Stakeholder pain points

- Account/Hub owning company owns/manages
  - Construction documentation
  - Data Structures, Standards and Workflows
  - Users, access & permissions
- As a result due to privacy concerns stakeholders keep sensitive documents in separate project or software, compounding the problem

What is Data Federation?

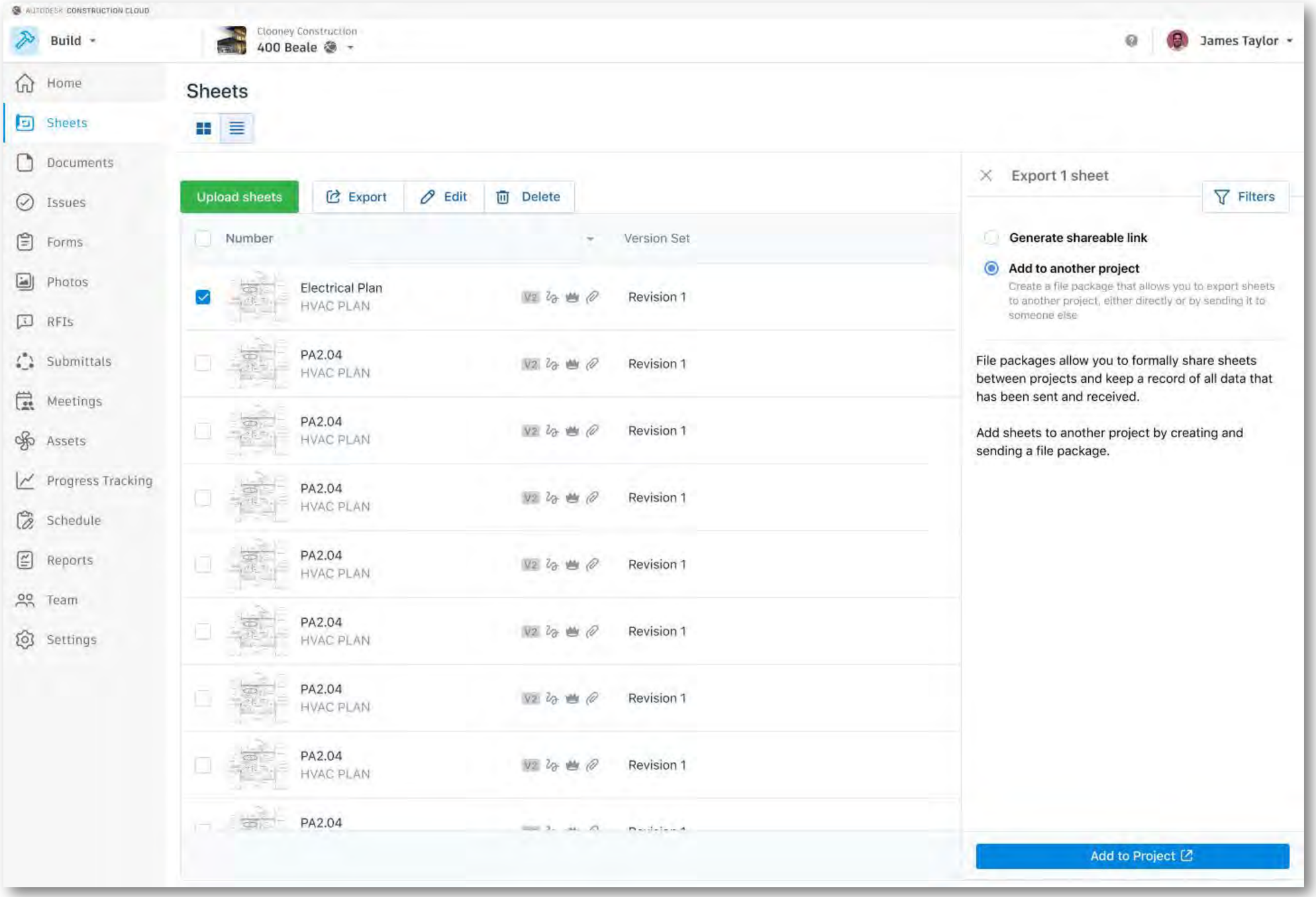
A means by which customers can send construction information such as sheets & documents between two or more Autodesk Construction Cloud projects while keeping the information synchronized and updated.

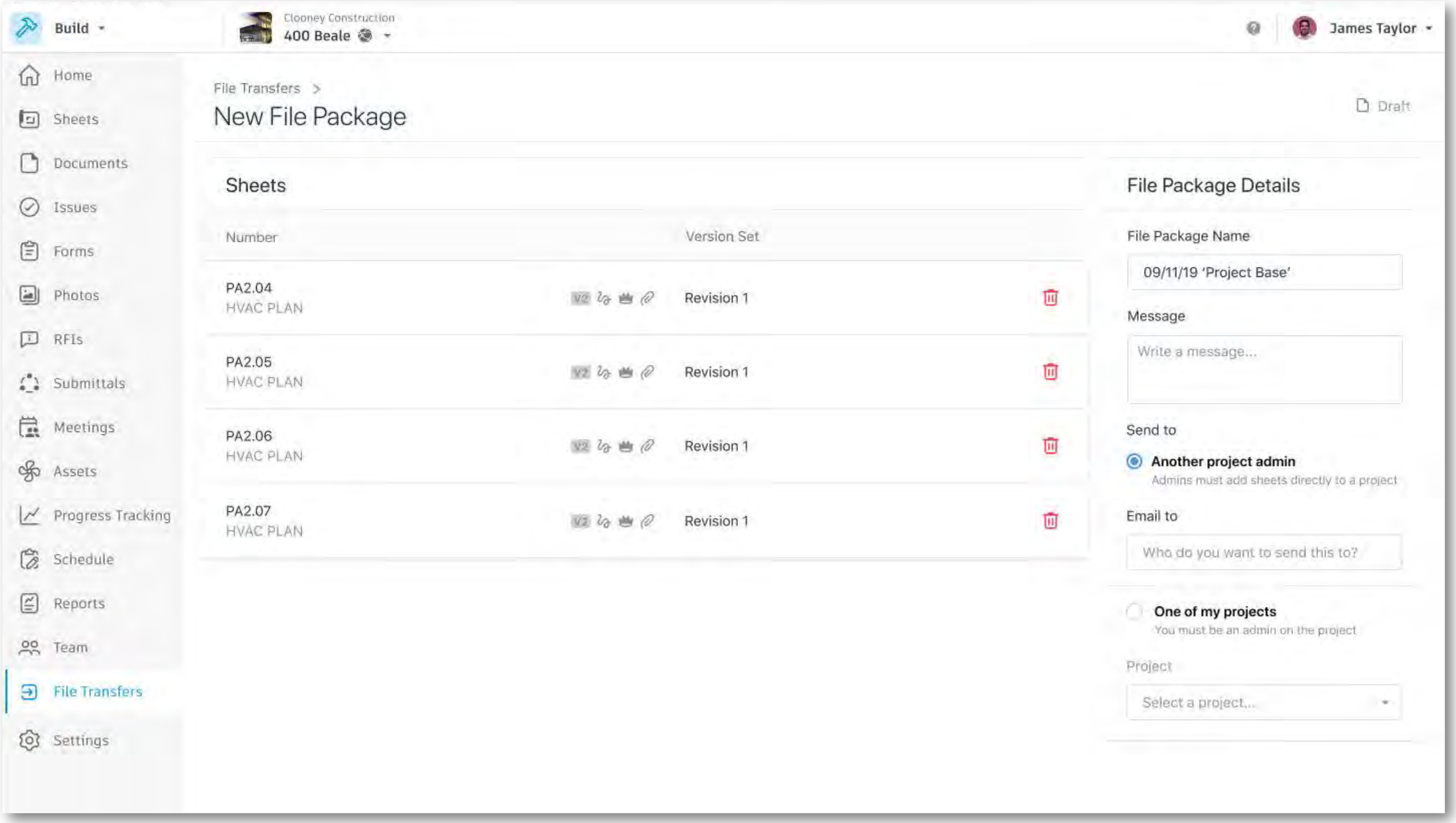
Conceptual model



Why is this important?

- Data portability
- Data ownership and privacy
- Standardizing workflows and data capture


AUTODESK CONSTRUCTION CLOUD
Build
Clooney Construction
400 Beale
James Taylor
Home
Sheets
Documents
Issues
Forms
Photos
RFIs
Submittals
Meetings
Assets
Progress Tracking
Schedule
Reports
Team
Settings
Sheets
Upload sheets
Export
Edit
Delete
Number
Version Set
Electrical Plan
HVAC PLAN
Revision 1
PA2.04
HVAC PLAN
Revision 1
Export 1 sheet
Filters
Generate shareable link
Add to another project
Create a file package that allows you to export sheets to another project, either directly or by sending it to someone else
File packages allow you to formally share sheets between projects and keep a record of all data that has been sent and received.
Add sheets to another project by creating and sending a file package.
Add to Project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Reports
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Settings
File Transfers >
New File Package
Draft
Sheets
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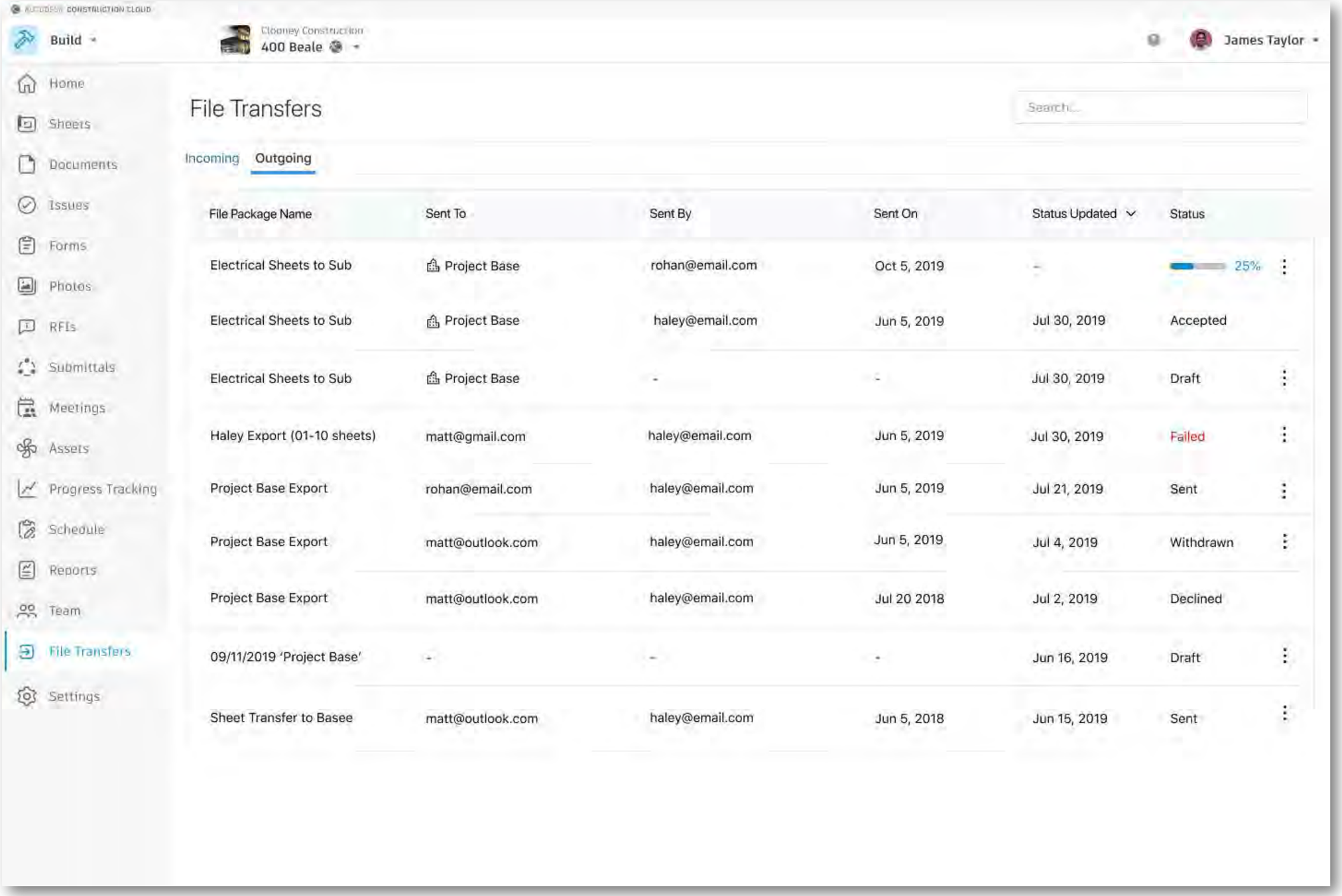
Version Set
PA2.04
HVAC PLAN
Revision 1
PA2.05
HVAC PLAN
Revision 1
PA2.06
HVAC PLAN
Revision 1
PA2.07
HVAC PLAN
Revision 1
File Package Details
File Package Name
09/11/19 'Project Base'
Message
Write a message...
Send to
Another project admin
Admins must add sheets directly to a project
Email to
Who do you want to send this to?
One of my projects
You must be an admin on the project
Project
Select a project...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Progress Tracking
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Reports
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File Transfers
Settings
File Transfers
Search...
Incoming
Outgoing
File Package Name
Sent To
Sent By
Sent On
Status Updated
Status
Electrical Sheets to Sub
Project Base
rohan@email.com
Oct 5, 2019
-
25%
Electrical Sheets to Sub
Project Base
haley@email.com
Jun 5, 2019
Jul 30, 2019
Accepted
Electrical Sheets to Sub
Project Base
-
-
Jul 30, 2019
Draft
Haley Export (01-10 sheets)
matt@gmail.com
haley@email.com
Jun 5, 2019
Jul 30, 2019
Failed
Project Base Export
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haley@email.com
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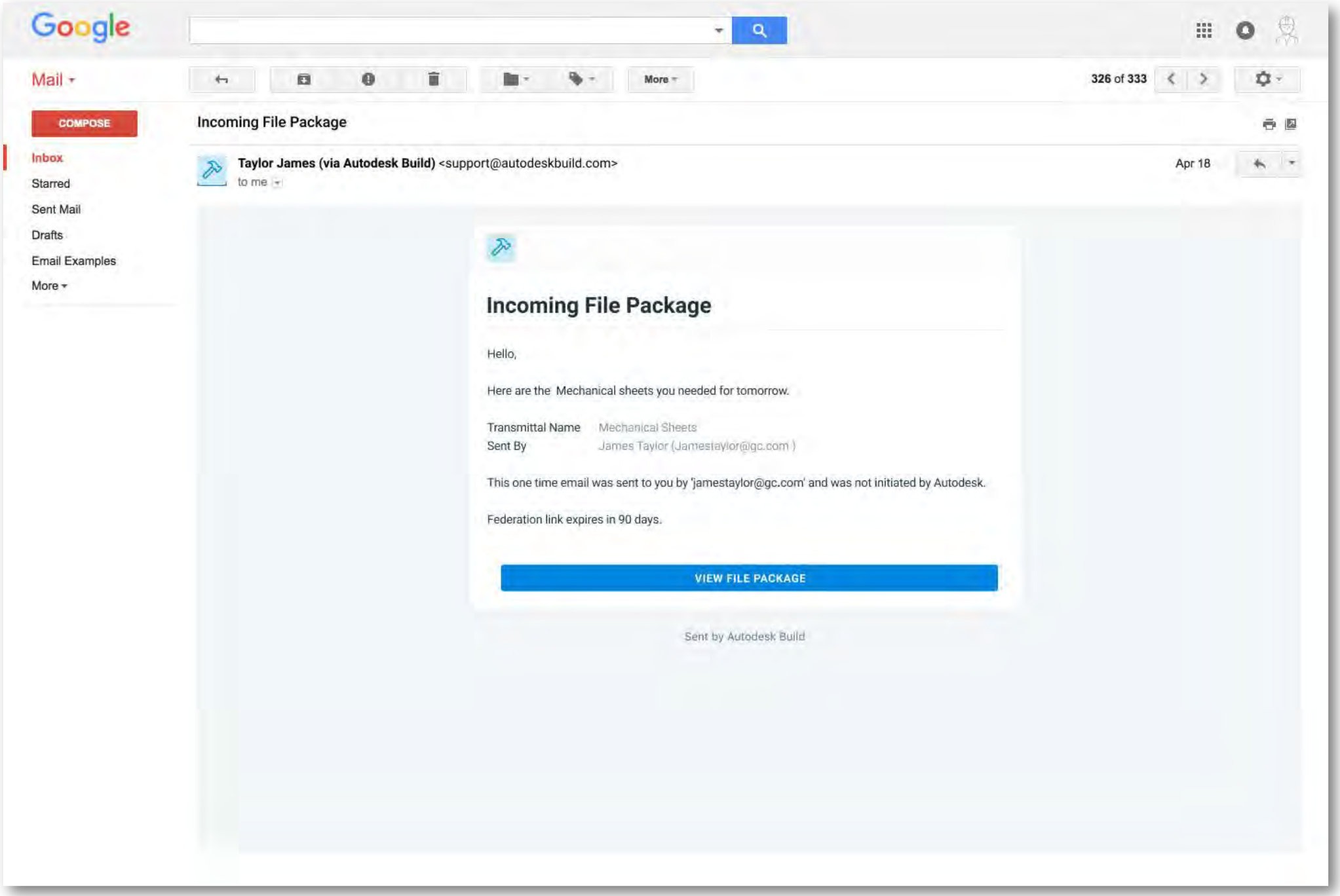
haley@email.com
Jun 5, 2019
Jul 4, 2019
Withdrawn
Project Base Export
matt@outlook.com
haley@email.com
Jul 20 2018
Jul 2, 2019
Declined
09/11/2019 'Project Base'
-
-
-
Jun 16, 2019
Draft
Sheet Transfer to Basee
matt@outlook.com
haley@email.com
Jun 5, 2018
Jun 15, 2019
Sent


Google
Mail
More
326 of 333
COMPOSE
Inbox
Starred
Sent Mail
Drafts
Email Examples
More
Incoming File Package
Taylor James (via Autodesk Build) <support@autodeskbuild.com>
to me
Apr 18
Incoming File Package
Hello,
Here are the Mechanical sheets you needed for tomorrow.
Transmittal Name Mechanical Sheets
Sent By James Taylor (Jamestaylor@gc.com)
This one time email was sent to you by 'jamestaylor@gc.com' and was not initiated by Autodesk.
Federation link expires in 90 days.
VIEW FILE PACKAGE
Sent by Autodesk Build

AUTODESK CONSTRUCTION CLOUD

Incoming File Package

Sheets

Number	Version Set
PA2.04 HVAC PLAN	Revision 1
PA2.05 HVAC PLAN	Revision 1
PA2.06 HVAC PLAN	Revision 1
PA2.07 HVAC PLAN	Revision 1

File package details

File package Name
Mechanical Sheets to Sub

Message
The sheets you needed for tomorrow.

Sent by
james.taylor@gc.com

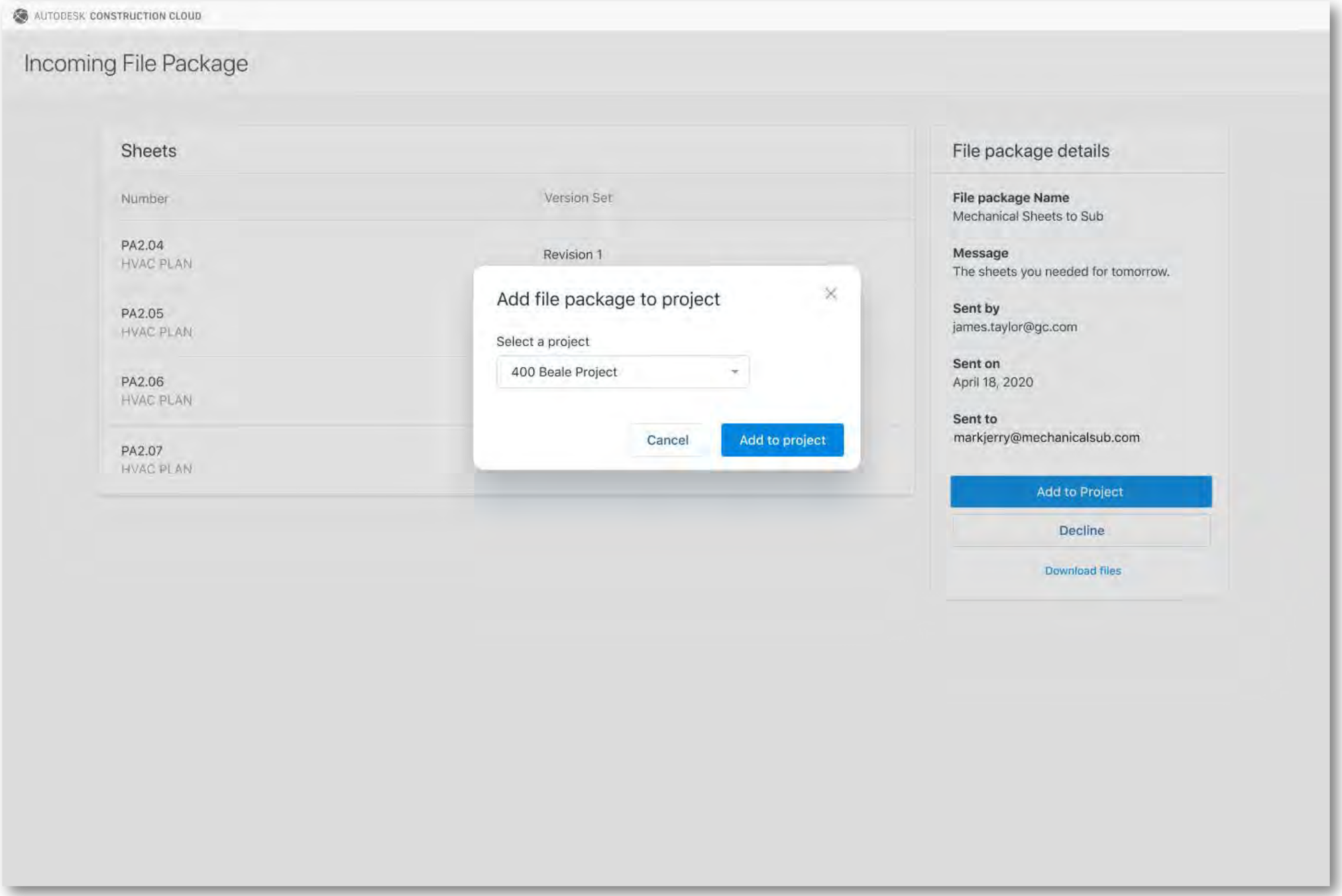
Sent on
April 18, 2020

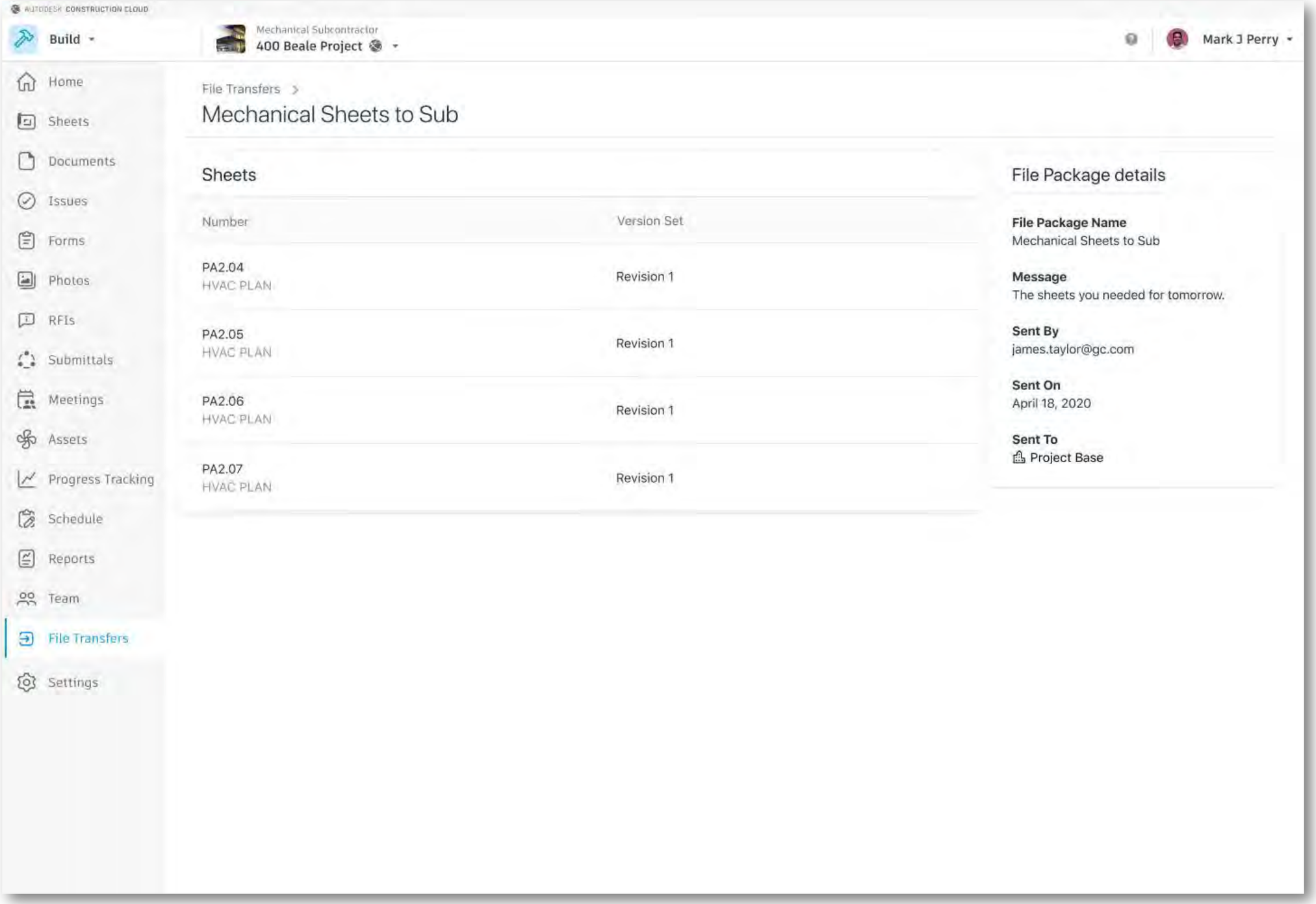
Sent to
markjerry@mechnicalsub.com

Add to Project

Decline

Download files


AUTODESK CONSTRUCTION CLOUD
Incoming File Package
Sheets
Number
Version Set
PA2.04
HVAC PLAN
Revision 1
PA2.05
HVAC PLAN
PA2.06
HVAC PLAN
PA2.07
HVAC PLAN
Add file package to project
Select a project
400 Beale Project
Cancel
Add to project
File package details
File package Name
Mechanical Sheets to Sub
Message
The sheets you needed for tomorrow.
Sent by
james.taylor@gc.com
Sent on
April 18, 2020
Sent to
markjerry@mechanicalsub.com
Add to Project
Decline
Download files


AUTODESK CONSTRUCTION CLOUD
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Mechanical Subcontractor
400 Beale Project
Mark J Perry
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RFIs
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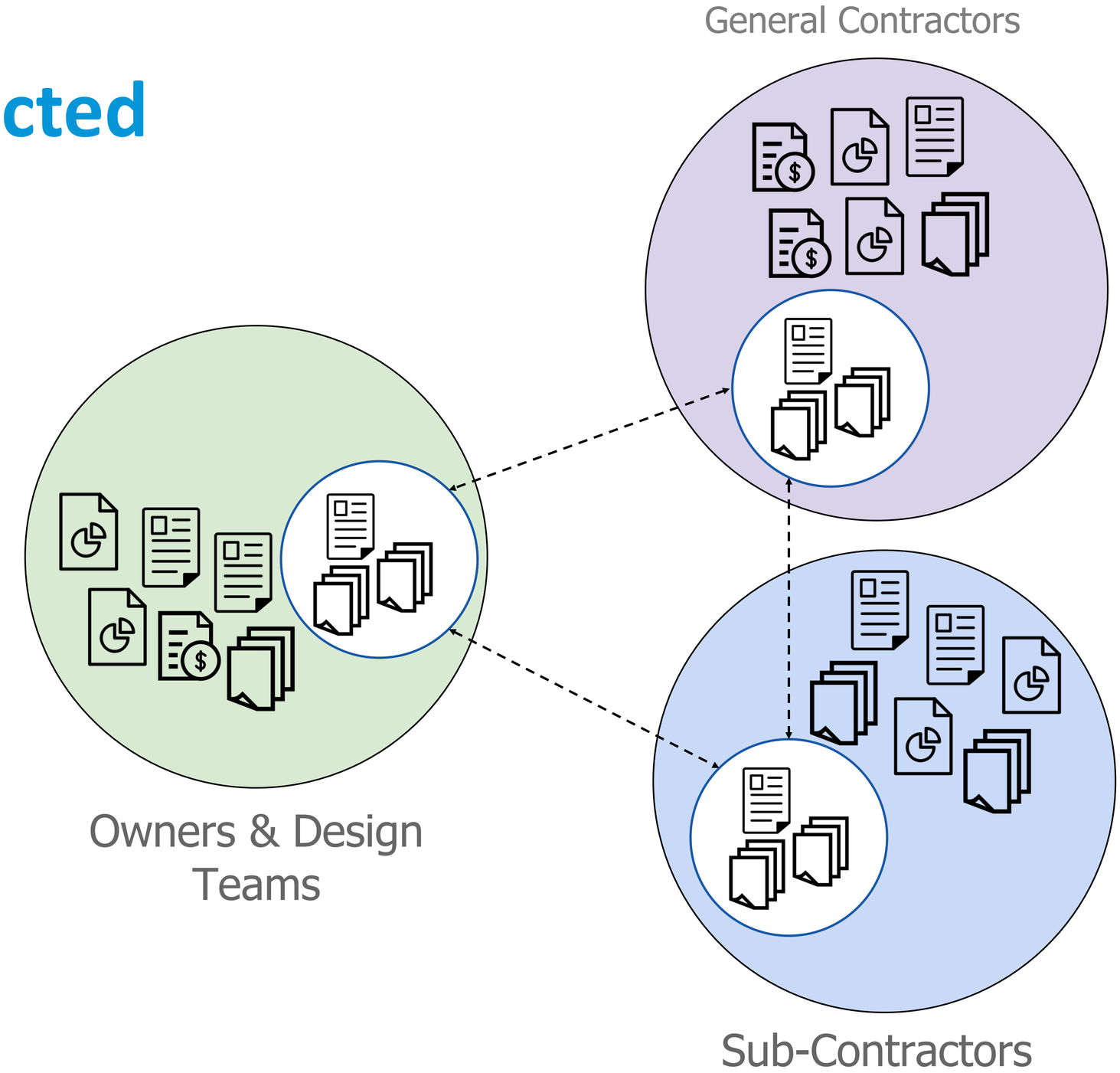
Assets
Progress Tracking
Schedule
Reports
Team
File Transfers
Settings
File Transfers >
Mechanical Sheets to Sub
Sheets
Number
Version Set
PA2.04
HVAC PLAN
Revision 1
PA2.05
HVAC PLAN
Revision 1
PA2.06
HVAC PLAN
Revision 1
PA2.07
HVAC PLAN
Revision 1
File Package details
File Package Name
Mechanical Sheets to Sub
Message
The sheets you needed for tomorrow.
Sent By
james.taylor@gc.com
Sent On
April 18, 2020
Sent To
Project Base

Outcomes

- Send construction documentation to multiple stakeholders in one easy step enabling on-demand collaboration
- Documentation is always updated and in sync
- Each stakeholder owns the data within their ACC accounts
- Enable construction companies to deploy individual standards and workflows
- Data integrity to get holistic and comprehensive insights

Core pillars of Connected Handover Workflow

1. Distributed Data Ownership & On-Demand collaboration
2. **Standardized Workflows**
3. Asset tracking through Lifecycle of project



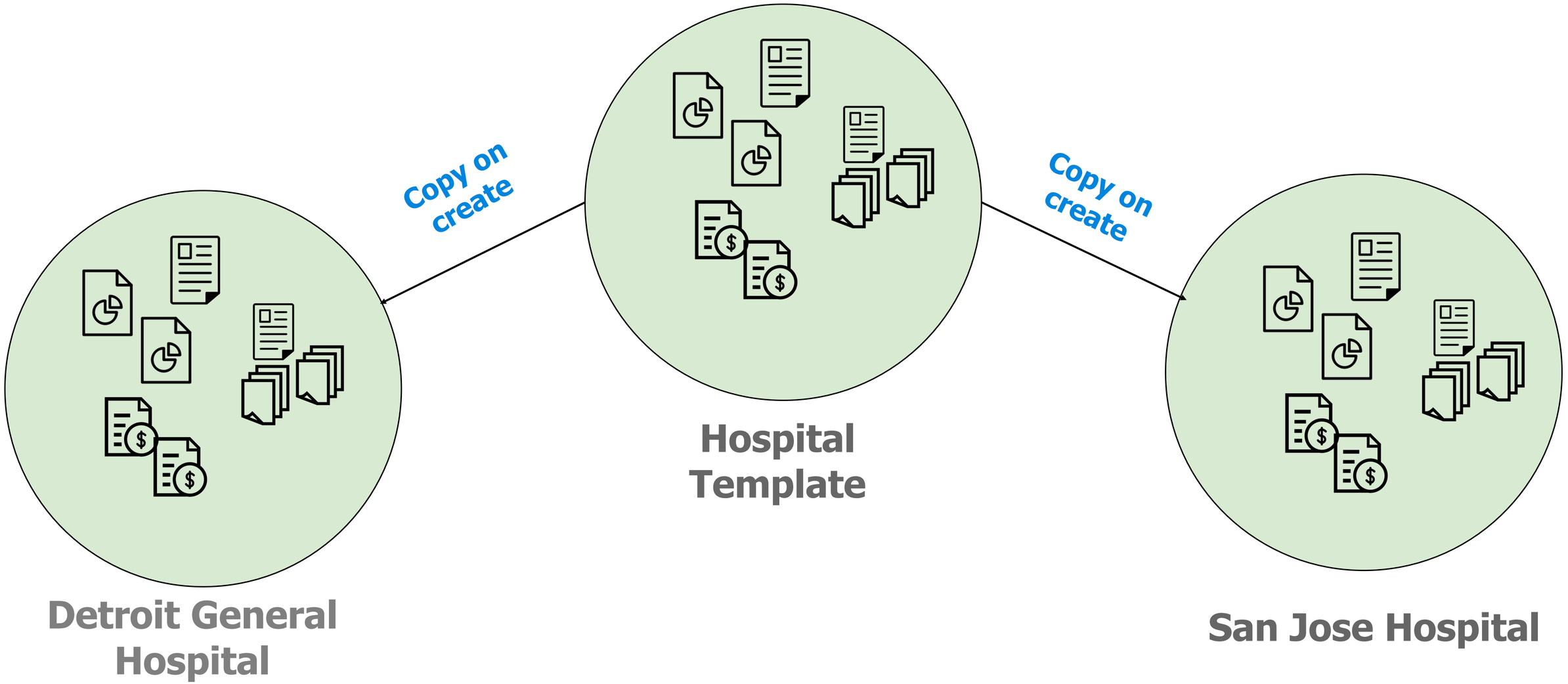
Standardizing Workflows

Components & Project Templates

What are Project Templates?

Project Templates are fundamentally a means by which users can create and duplicate standards, workflows and content for a construction project

Project Templates



Why is this important?

- Standardize data capture across all projects
- Derive project insights
- Increase efficiency

James Taylor

Project List

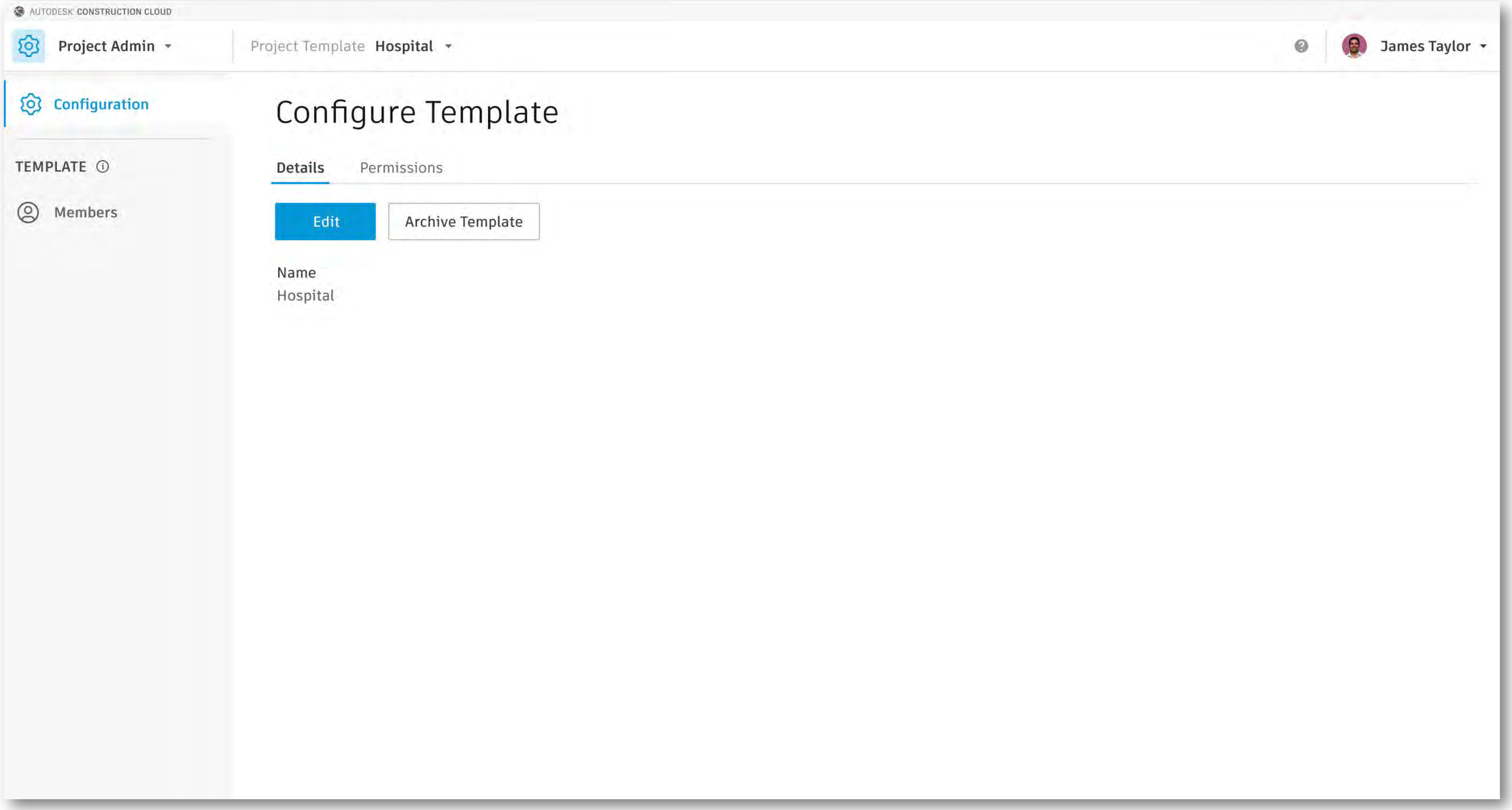
View PlanGrid projects

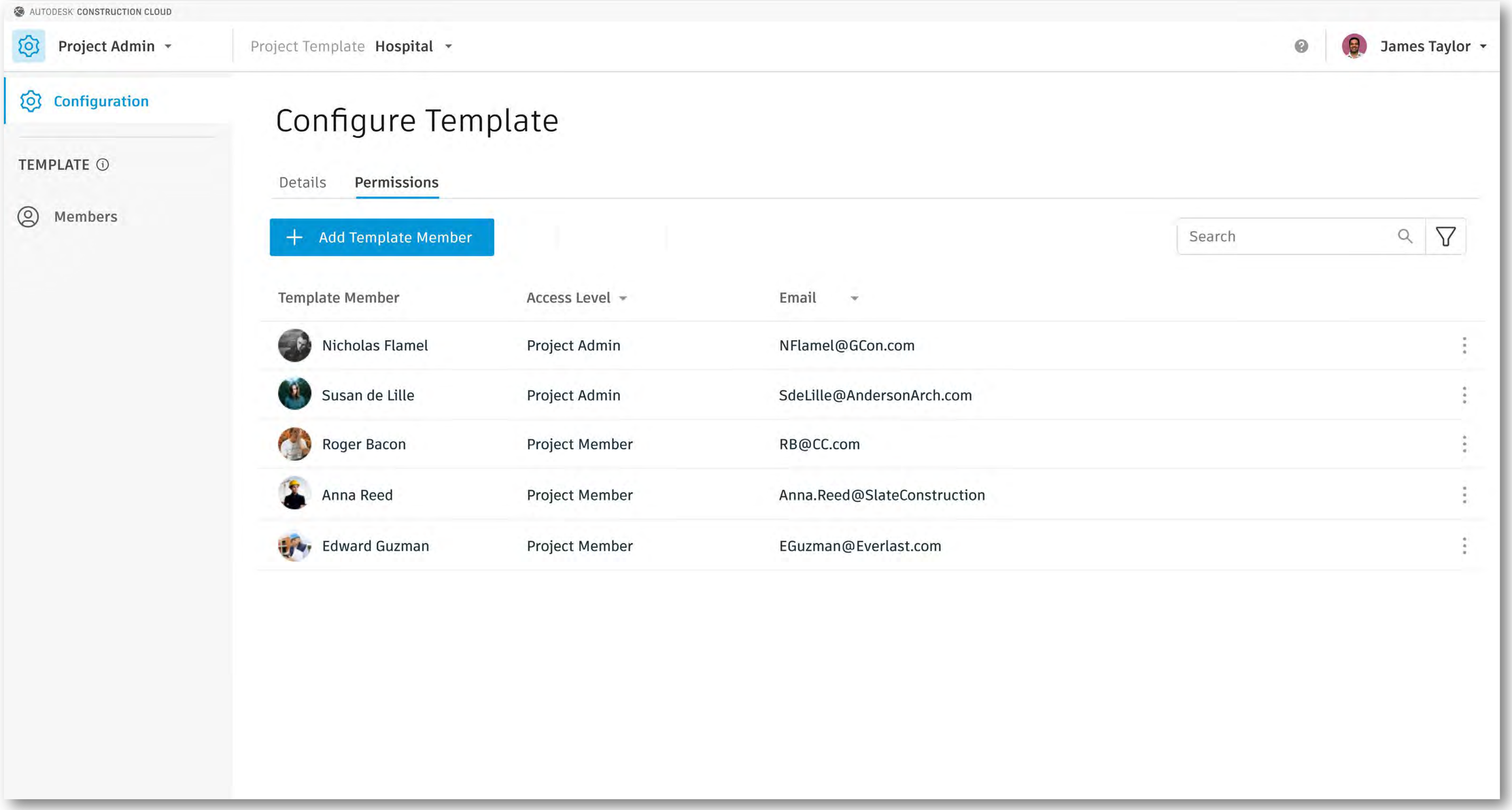
Projects | **Project Templates**

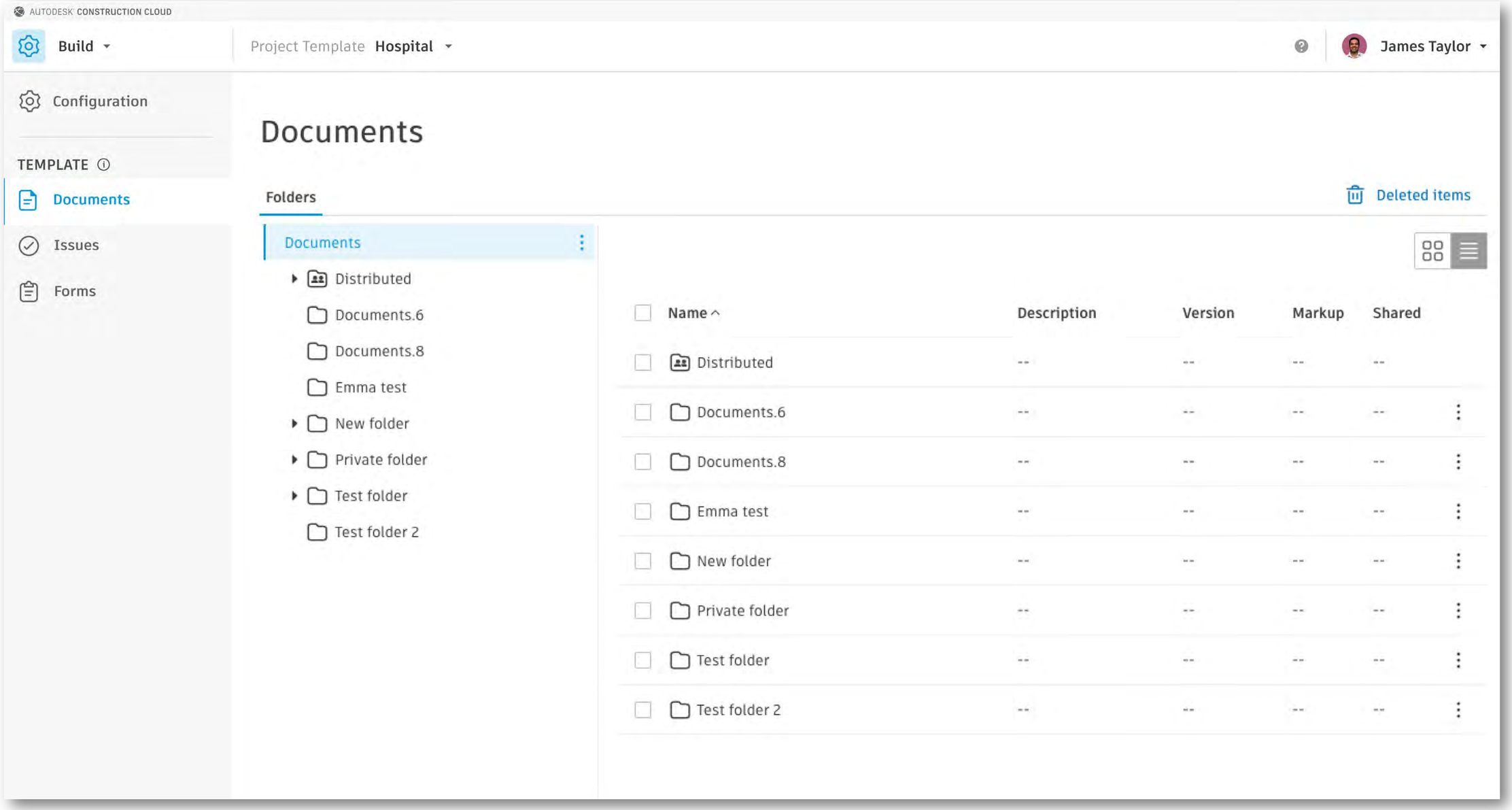
+ Create Project Template

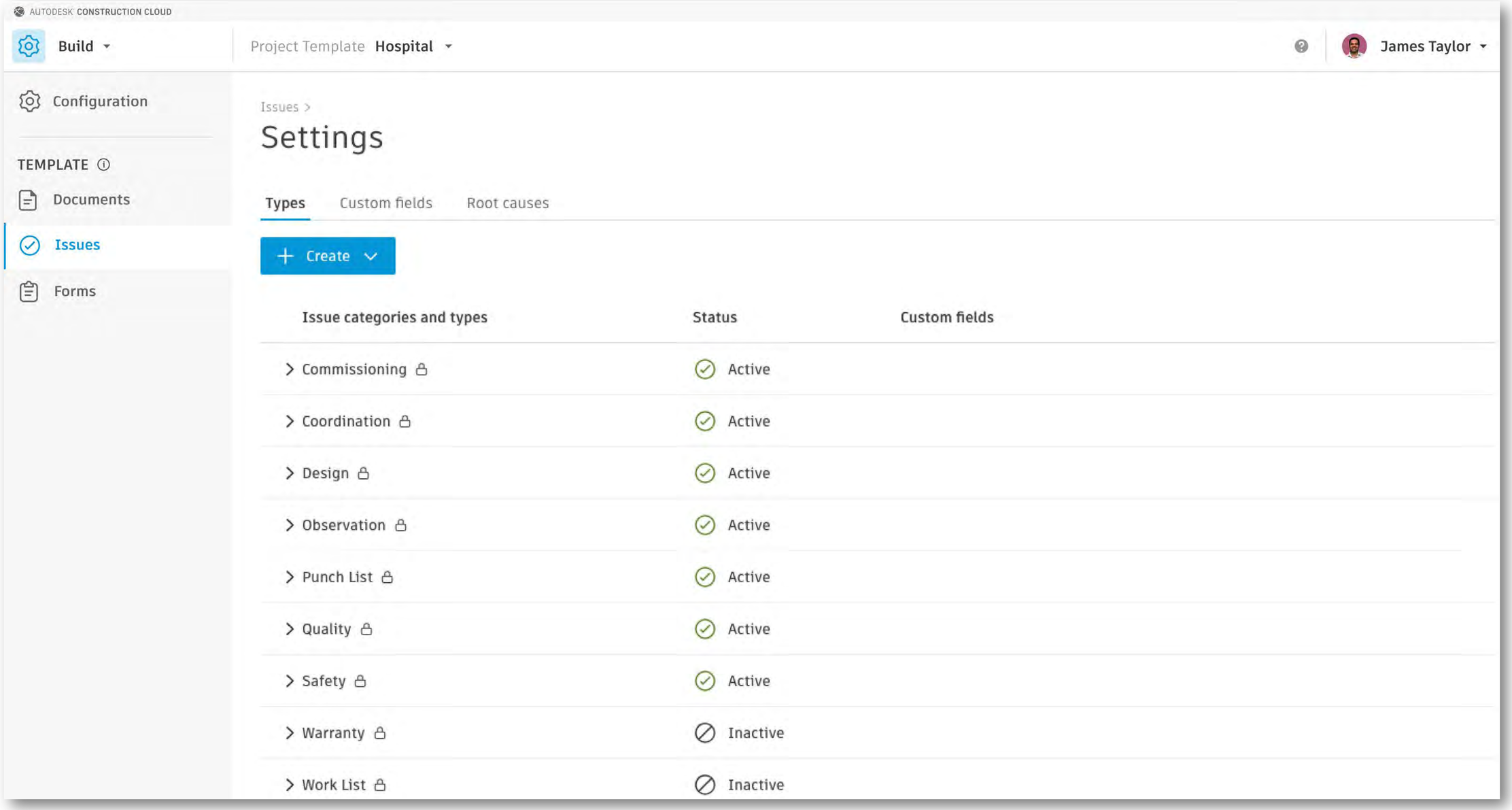
Search project template name

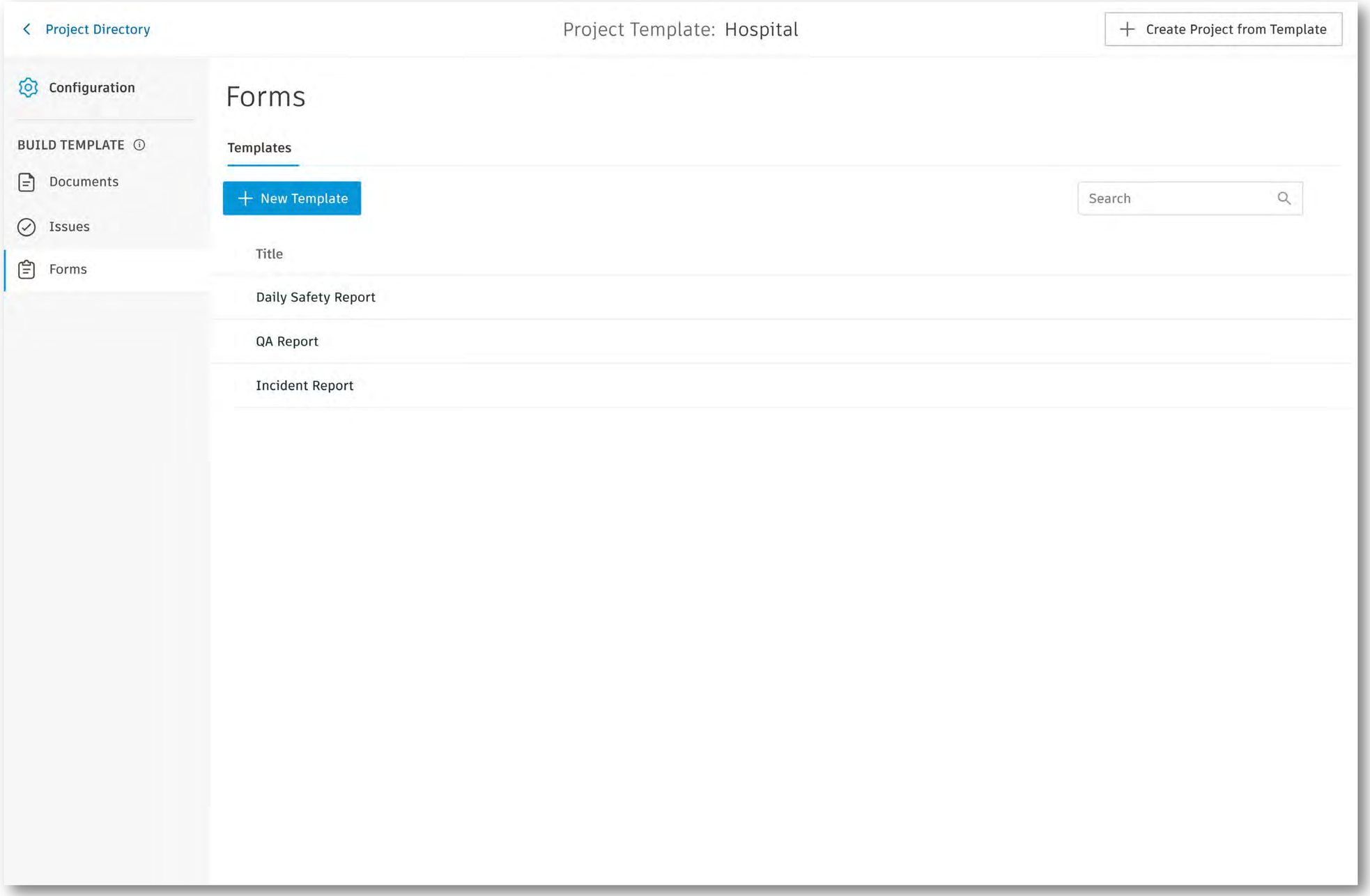
Template Name	Created On
Hospital	6 hours ago
Office buildings	Feb 10, 2019
Schools	Nov 24, 2018


AUTODESK CONSTRUCTION CLOUD
Project Admin
Project Template Hospital
James Taylor
Configuration
TEMPLATE
Members
Configure Template
Details
Permissions
Edit
Archive Template
Name
Hospital


AUTODESK CONSTRUCTION CLOUD
Project Admin
Project Template Hospital
James Taylor
Configuration
TEMPLATE
Members
Configure Template
Details
Permissions
Add Template Member
Search
Template Member
Access Level
Email
Nicholas Flamel
Project Admin
NFlamel@GCon.com
Susan de Lille
Project Admin
SdeLille@AndersonArch.com
Roger Bacon
Project Member
RB@CC.com
Anna Reed
Project Member
Anna.Reed@SlateConstruction
Edward Guzman
Project Member
EGuzman@Everlast.com


AUTODESK CONSTRUCTION CLOUD
Build
Project Template Hospital
James Taylor
Configuration
TEMPLATE
Documents
Issues
Forms
Documents
Folders
Deleted items
Documents
Distributed
Documents.6
Documents.8
Emma test
New folder
Private folder
Test folder
Test folder 2
Name
Description
Version
Markup
Shared
Distributed -- -- -- --
Documents.6 -- -- -- --
Documents.8 -- -- -- --
Emma test -- -- -- --
New folder -- -- -- --
Private folder -- -- -- --
Test folder -- -- -- --
Test folder 2 -- -- -- --


AUTODESK CONSTRUCTION CLOUD
Build
Project Template Hospital
James Taylor
Configuration
TEMPLATE
Documents
Issues
Forms
Issues >
Settings
Types
Custom fields
Root causes
Create
Issue categories and types
Status
Custom fields
Commissioning
Active
Coordination
Active
Design
Active
Observation
Active
Punch List
Active
Quality
Active
Safety
Active
Warranty
Inactive
Work List
Inactive


Project Directory
Project Template: Hospital
Create Project from Template
Configuration
BUILD TEMPLATE
Documents
Issues
Forms
Forms
Templates
New Template
Search
Title
Daily Safety Report
QA Report
Incident Report

What are Components?

Components are a means by which users can centrally create, publish and update a small piece of content across multiple projects for example checklists, safety documents, RFI workflows, etc.

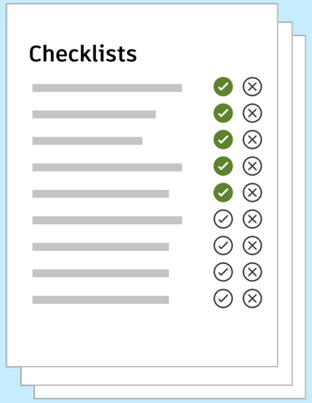
Components allow centralized updates to multiple in progress projects.

Concept: Component Library

Company Admin

Component Library

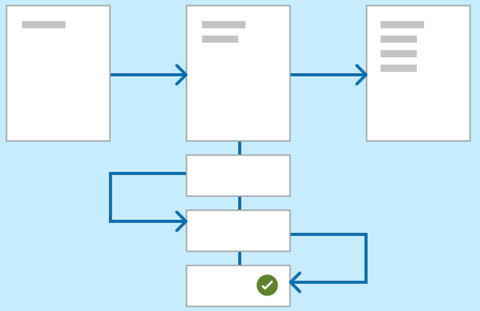
Folder structure components



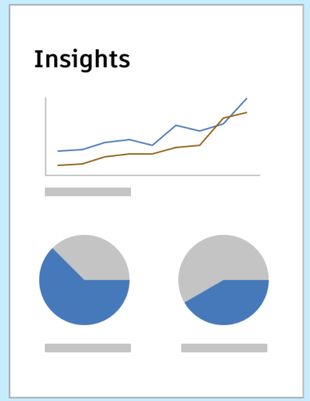
Checklist components

Report components

Cost components

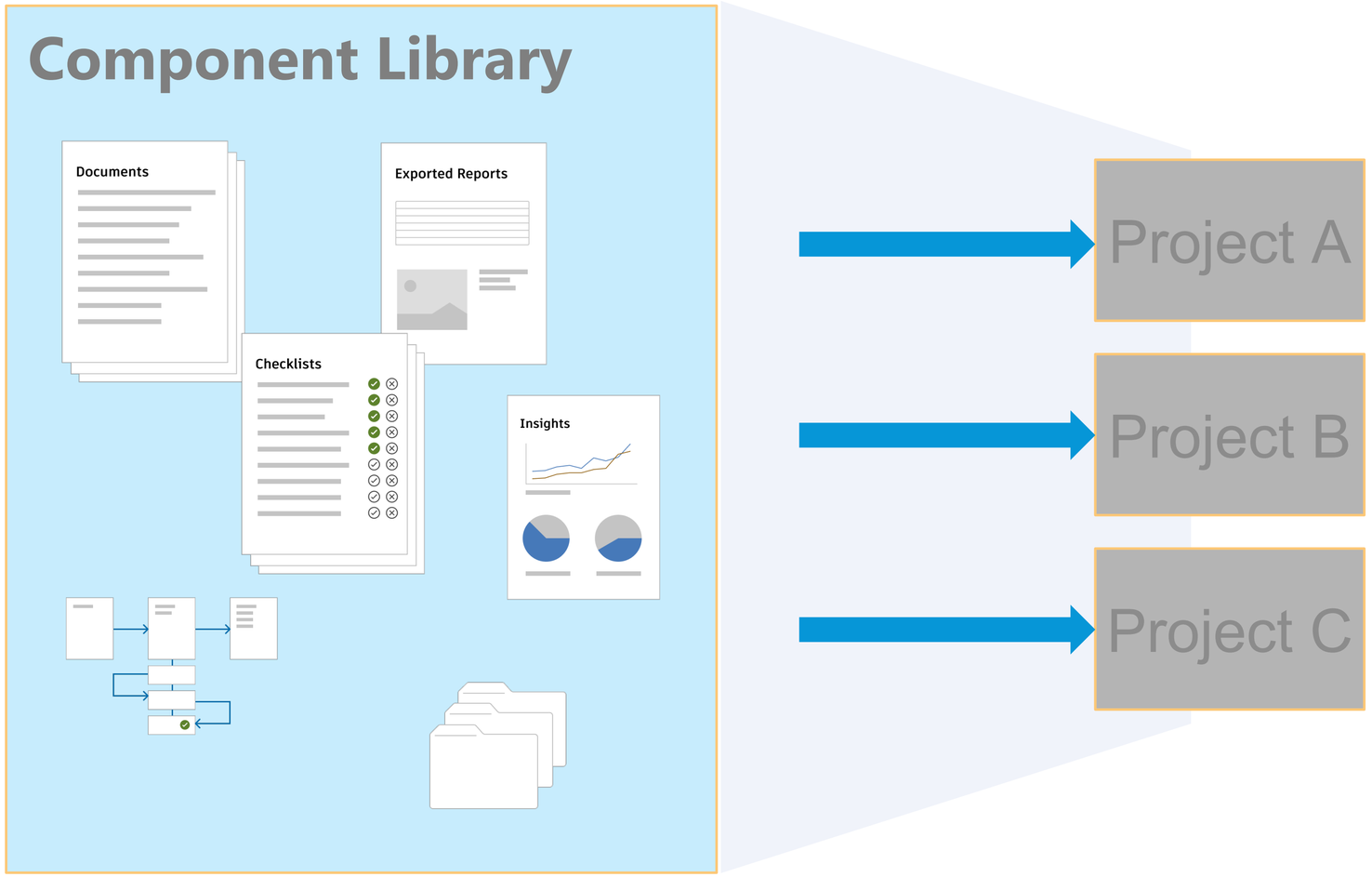


Workflow components



Insights components

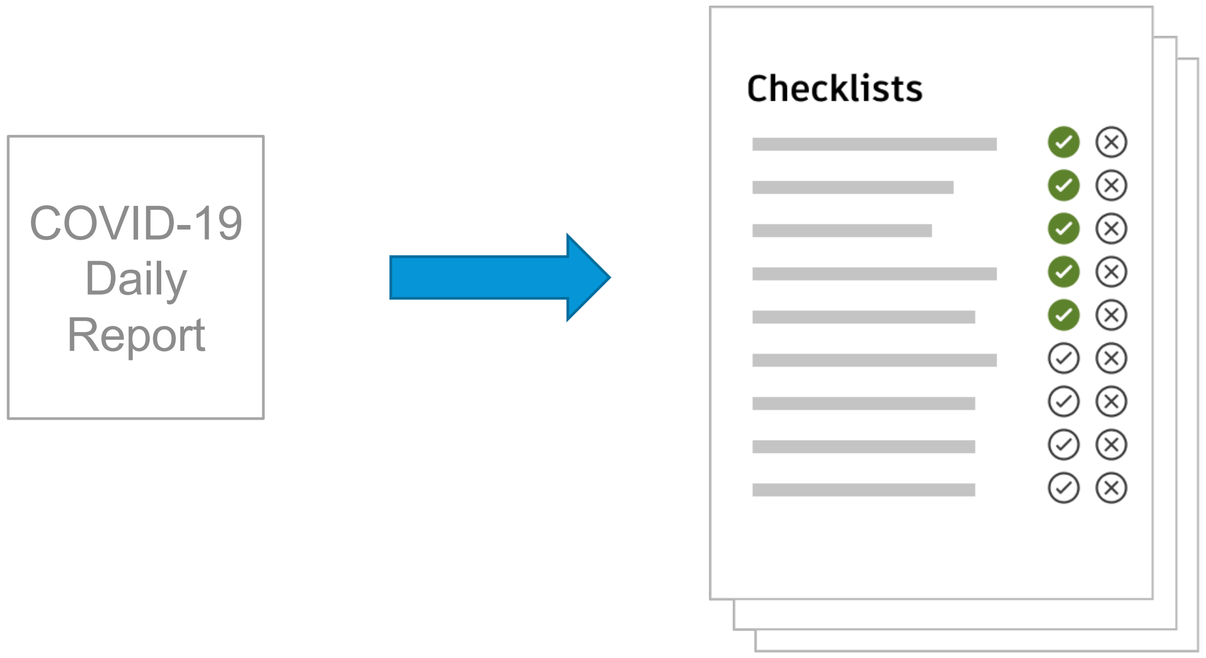
Creating projects



Scenario

Managing updates

Scenario: A new practice is now enforced by a government agency. This involves a process update that needs to be rolled out across existing projects. A Daily report process needs to be updated.

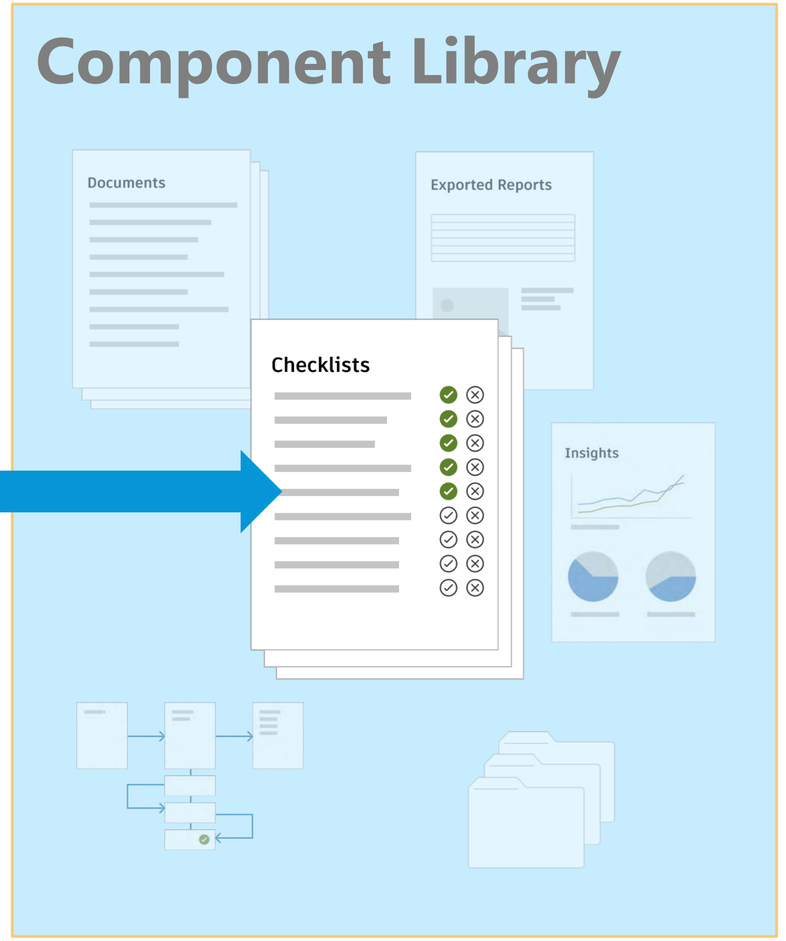


Update the Component Library

Company Admin

NEW

COVID-19 Daily Report



GG All Projects

James Taylor

- All Projects
- Templates
- Components

All Projects Overview

Overview | Projects List | Settings

Assigned to you

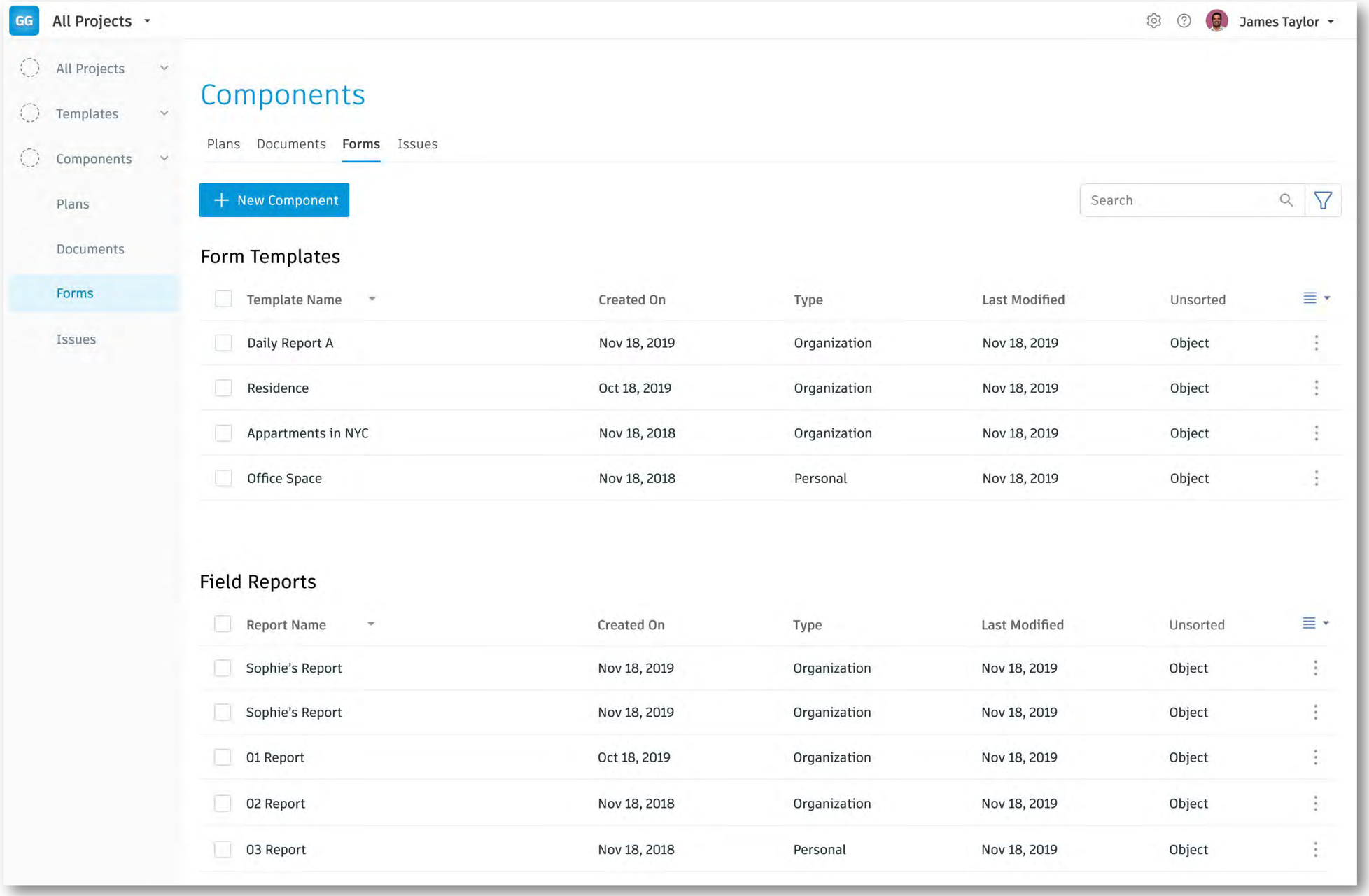
- 3 overdue RFIs
- 11 overdue Changes
- 1 overdue Tasks
- 6 ongoing Tasks
- 6 ongoing Submittals

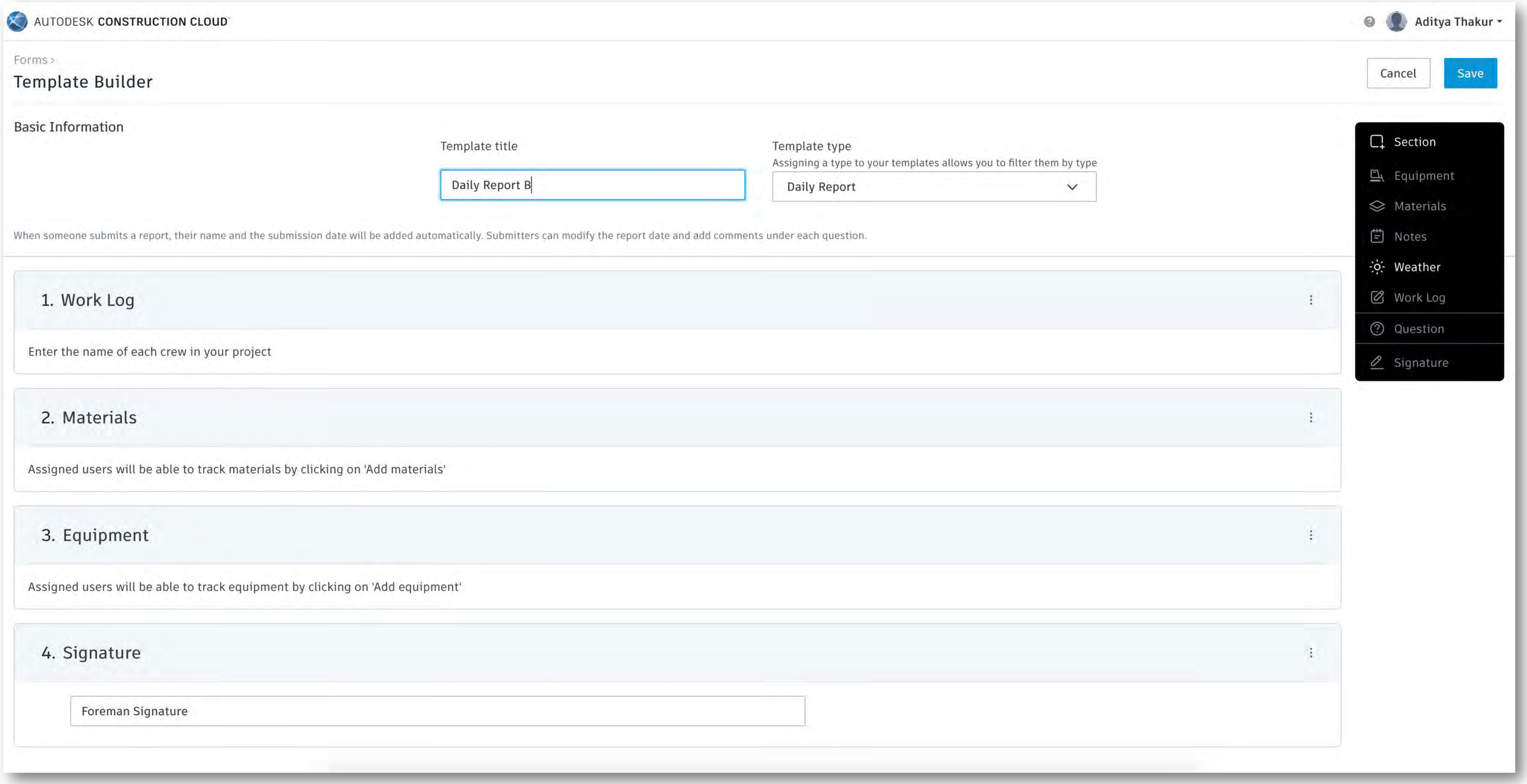
Daily log submissions across projects

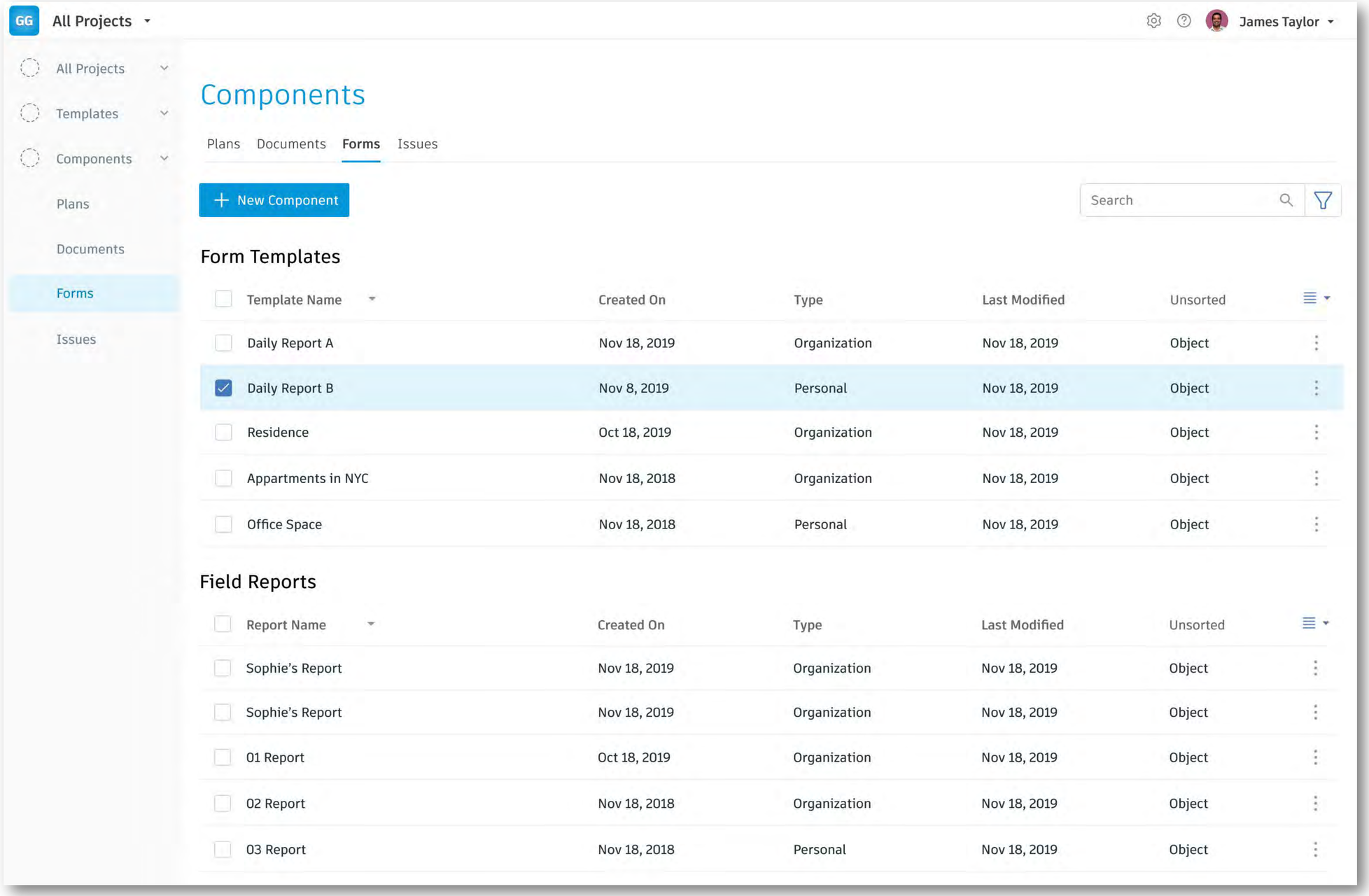
Open RFIs across projects

Recent Projects

Project name	Members	Sheets	Start date	Due date
Park Mead Conference Center	23 members	236 sheets	8/20/2019	5/02/2020
Keystone Apartments	76 members	122 sheets	6/07/2019	11/15/2019
326 Pine St	45 members	59 sheets	1/13/2018	2/03/2020
Franklin Square Apartments	32 members	421 sheets	4/29/2018	6/07/2020


GG
All Projects
James Taylor
All Projects
Templates
Components
Plans
Documents
Forms
Issues
Components
Plans
Documents
Forms
Issues
New Component
Search
Form Templates
Template Name
Created On
Type
Last Modified
Unsorted
Daily Report A
Nov 18, 2019
Organization
Nov 18, 2019
Object
Residence
Oct 18, 2019
Organization
Nov 18, 2019
Object
Appartments in NYC
Nov 18, 2018
Organization
Nov 18, 2019
Object
Office Space
Nov 18, 2018
Personal
Nov 18, 2019
Object
Field Reports
Report Name
Created On
Type
Last Modified
Unsorted
Sophie's Report
Nov 18, 2019
Organization
Nov 18, 2019
Object
Sophie's Report
Nov 18, 2019
Organization
Nov 18, 2019
Object
01 Report
Oct 18, 2019
Organization
Nov 18, 2019
Object
02 Report
Nov 18, 2018
Organization
Nov 18, 2019
Object
03 Report
Nov 18, 2018
Personal
Nov 18, 2019
Object


AUTODESK CONSTRUCTION CLOUD
Aditya Thakur
Forms ›
Template Builder
Cancel
Save
Basic Information
Template title
Daily Report B
Template type
Assigning a type to your templates allows you to filter them by type
Daily Report
When someone submits a report, their name and the submission date will be added automatically. Submitters can modify the report date and add comments under each question.
1. Work Log
Enter the name of each crew in your project
2. Materials
Assigned users will be able to track materials by clicking on 'Add materials'
3. Equipment
Assigned users will be able to track equipment by clicking on 'Add equipment'
4. Signature
Foreman Signature
Section
Equipment
Materials
Notes
Weather
Work Log
Question
Signature


GG
All Projects
James Taylor
All Projects
Templates
Components
Plans
Documents
Forms
Issues
Components
Plans
Documents
Forms
Issues
New Component
Search
Form Templates
Template Name
Created On
Type
Last Modified
Unsorted
Daily Report A
Nov 18, 2019
Organization
Nov 18, 2019
Object
Daily Report B
Nov 8, 2019
Personal
Nov 18, 2019
Object
Residence
Oct 18, 2019
Organization
Nov 18, 2019
Object
Appartments in NYC
Nov 18, 2018
Organization
Nov 18, 2019
Object
Office Space
Nov 18, 2018
Personal
Nov 18, 2019
Object
Field Reports
Report Name
Created On
Type
Last Modified
Unsorted
Sophie's Report
Nov 18, 2019
Organization
Nov 18, 2019
Object
Sophie's Report
Nov 18, 2019
Organization
Nov 18, 2019
Object
01 Report
Oct 18, 2019
Organization
Nov 18, 2019
Object
02 Report
Nov 18, 2018
Organization
Nov 18, 2019
Object
03 Report
Nov 18, 2018
Personal
Nov 18, 2019
Object

Update Component?

'Daily Report B' will be updated in your Forms Components.

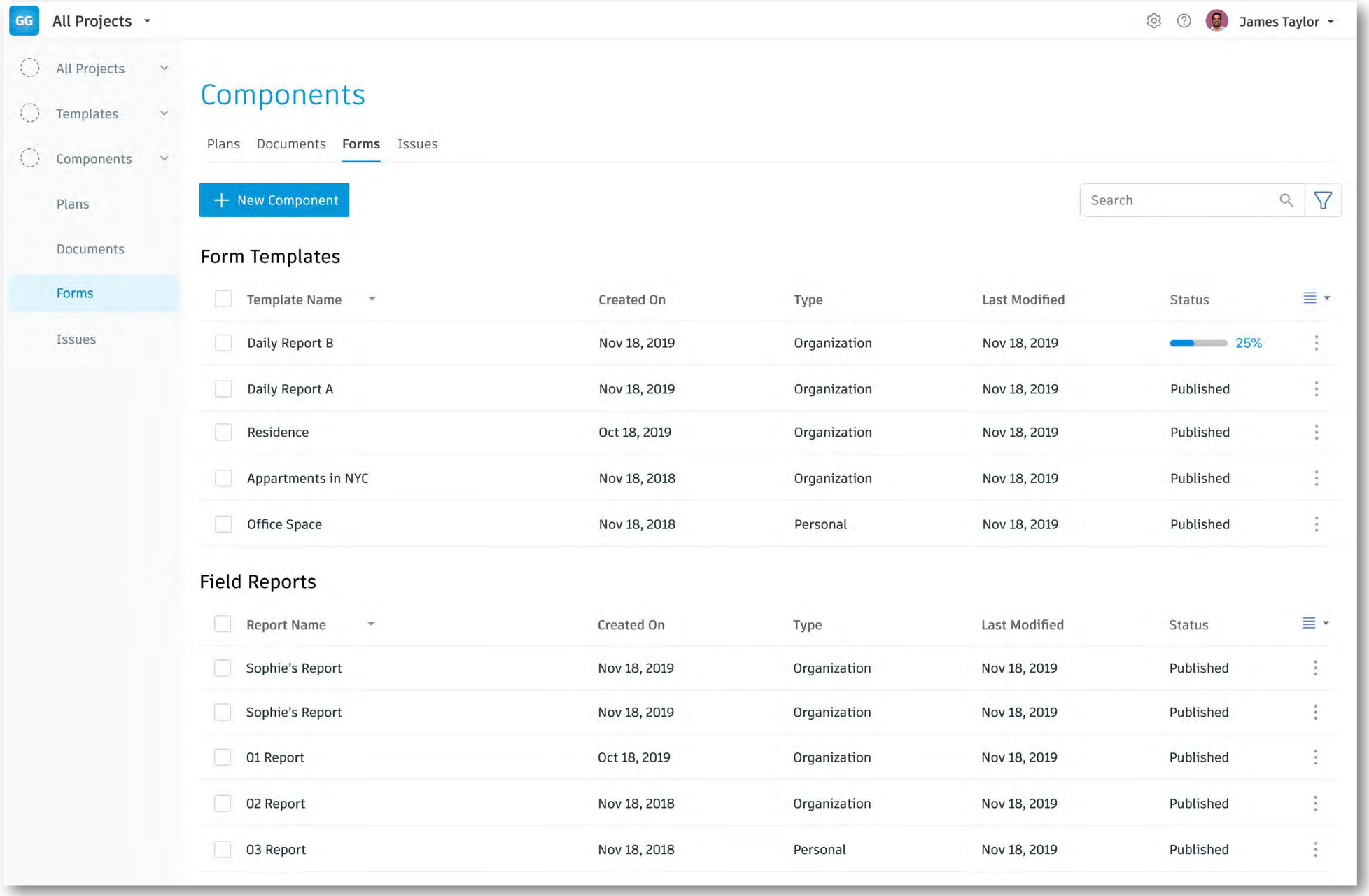
Update selected projects

- [x] Project name
- [x] Park Mead Conference Center
- [x] SF MOMA Center

Update selected templates

- [x] Template name
- [x] Art Museum

Back | Update

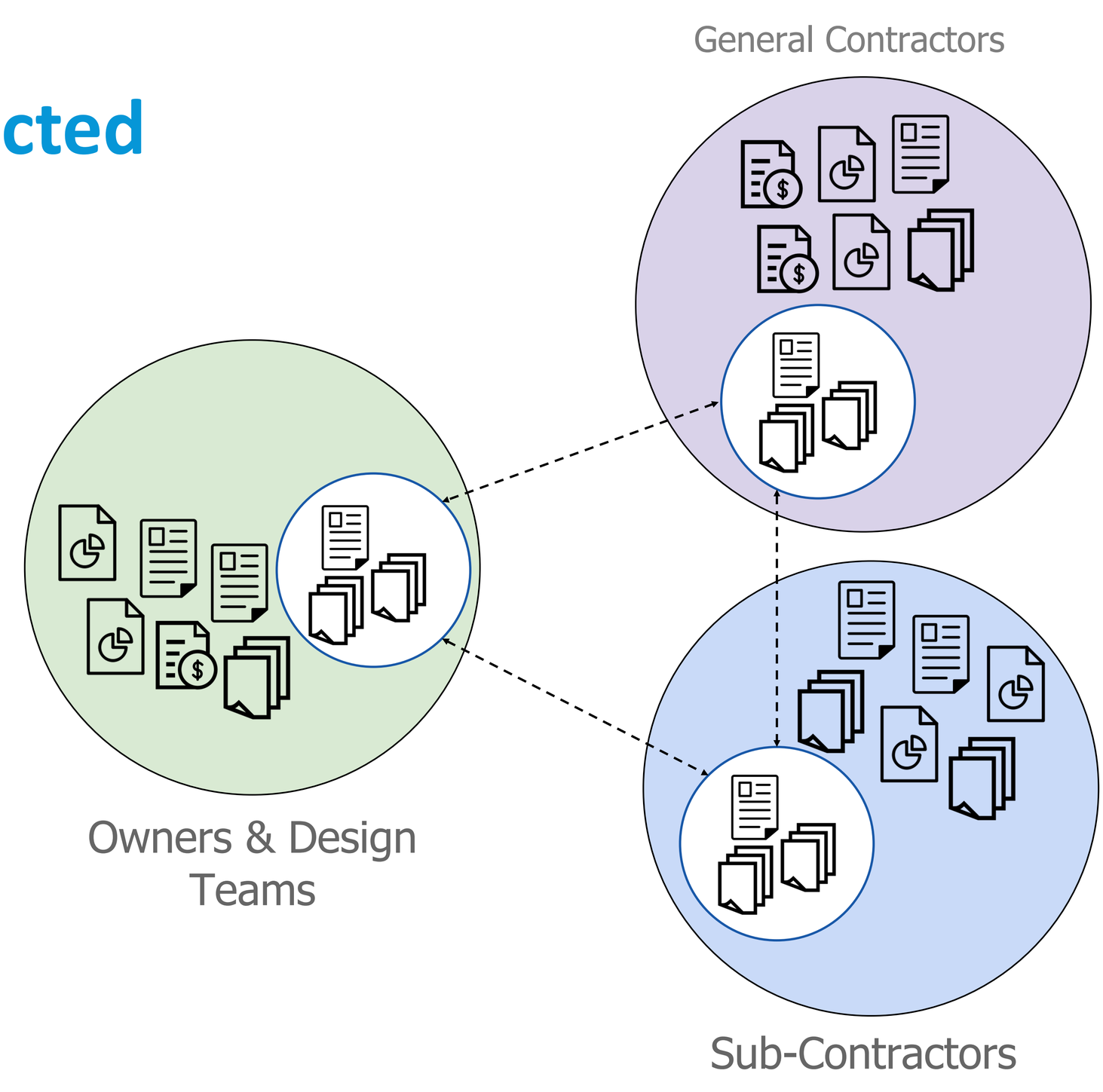

GG
All Projects
James Taylor
All Projects
Templates
Components
Plans
Documents
Forms
Issues
Components
Plans
Documents
Forms
Issues
New Component
Search
Form Templates
Template Name
Created On
Type
Last Modified
Status
Daily Report B
Nov 18, 2019
Organization
Nov 18, 2019
25%
Daily Report A
Nov 18, 2019
Organization
Nov 18, 2019
Published
Residence
Oct 18, 2019
Organization
Nov 18, 2019
Published
Appartments in NYC
Nov 18, 2018
Organization
Nov 18, 2019
Published
Office Space
Nov 18, 2018
Personal
Nov 18, 2019
Published
Field Reports
Report Name
Created On
Type
Last Modified
Status
Sophie's Report
Nov 18, 2019
Organization
Nov 18, 2019
Published
Sophie's Report
Nov 18, 2019
Organization
Nov 18, 2019
Published
01 Report
Oct 18, 2019
Organization
Nov 18, 2019
Published
02 Report
Nov 18, 2018
Organization
Nov 18, 2019
Published
03 Report
Nov 18, 2018
Personal
Nov 18, 2019
Published

Outcomes

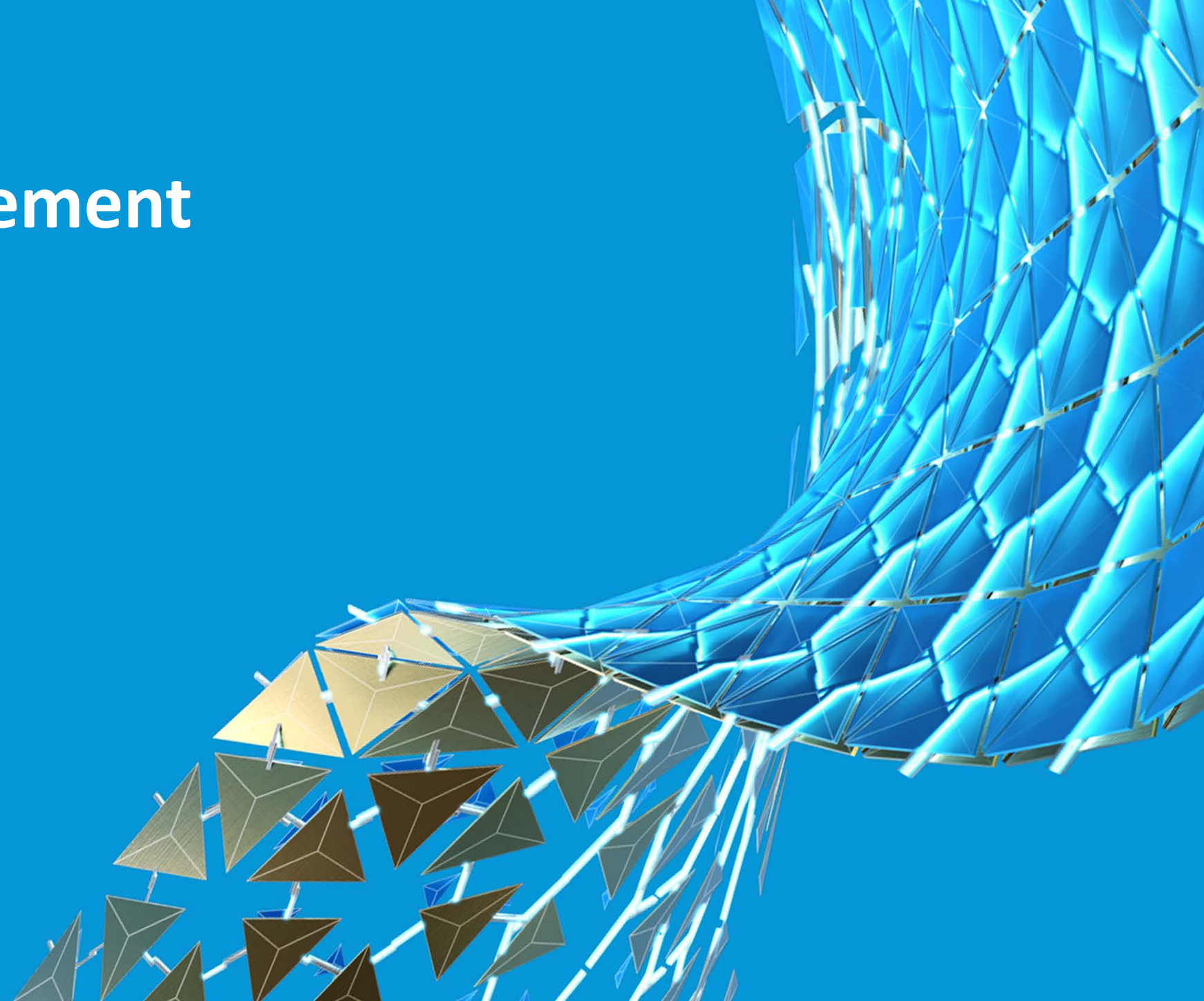
- Construction companies standardize data capture across projects
- Ability to create a single workflow component such as Checklists, Daily logs, Issues
- Ability to create a project template from components
- Ability to update a single workflow component across multiple existing and new projects
- Updating existing project templates with new components

Core pillars of Connected Handover Workflow

1. Distributed Data Ownership & On-Demand collaboration
2. Standardized Workflows
3. **Asset tracking through Lifecycle of project**



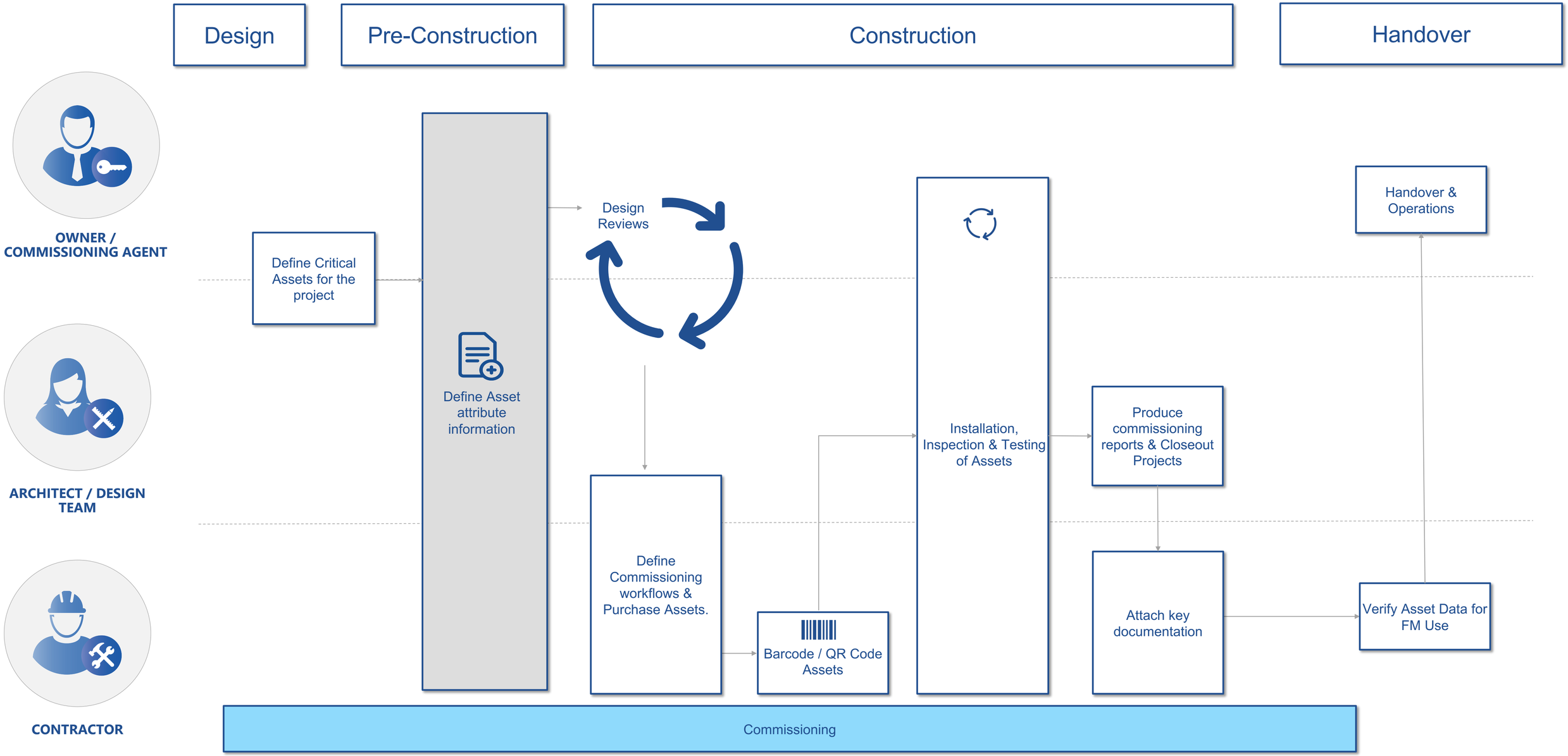
Asset Management

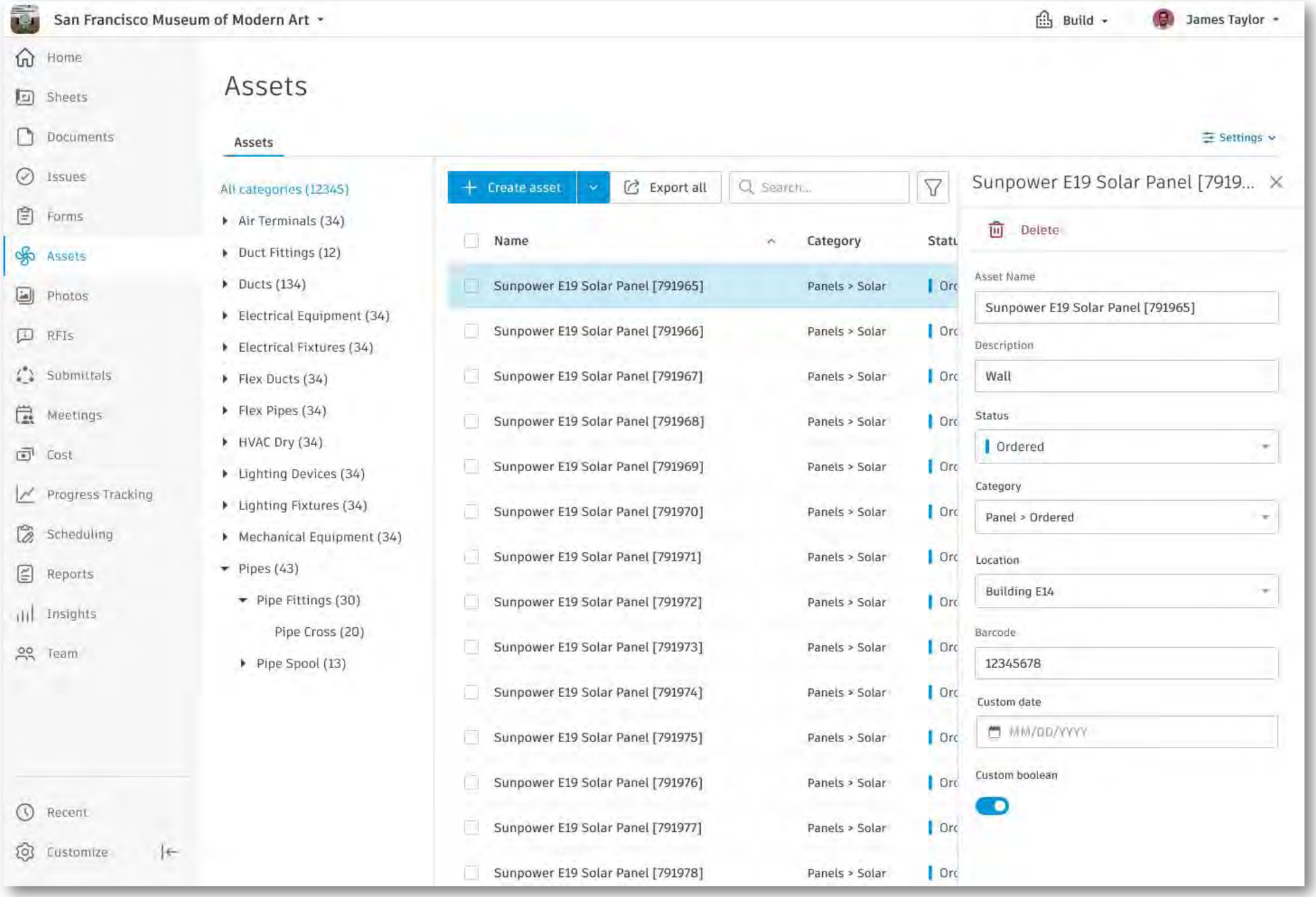


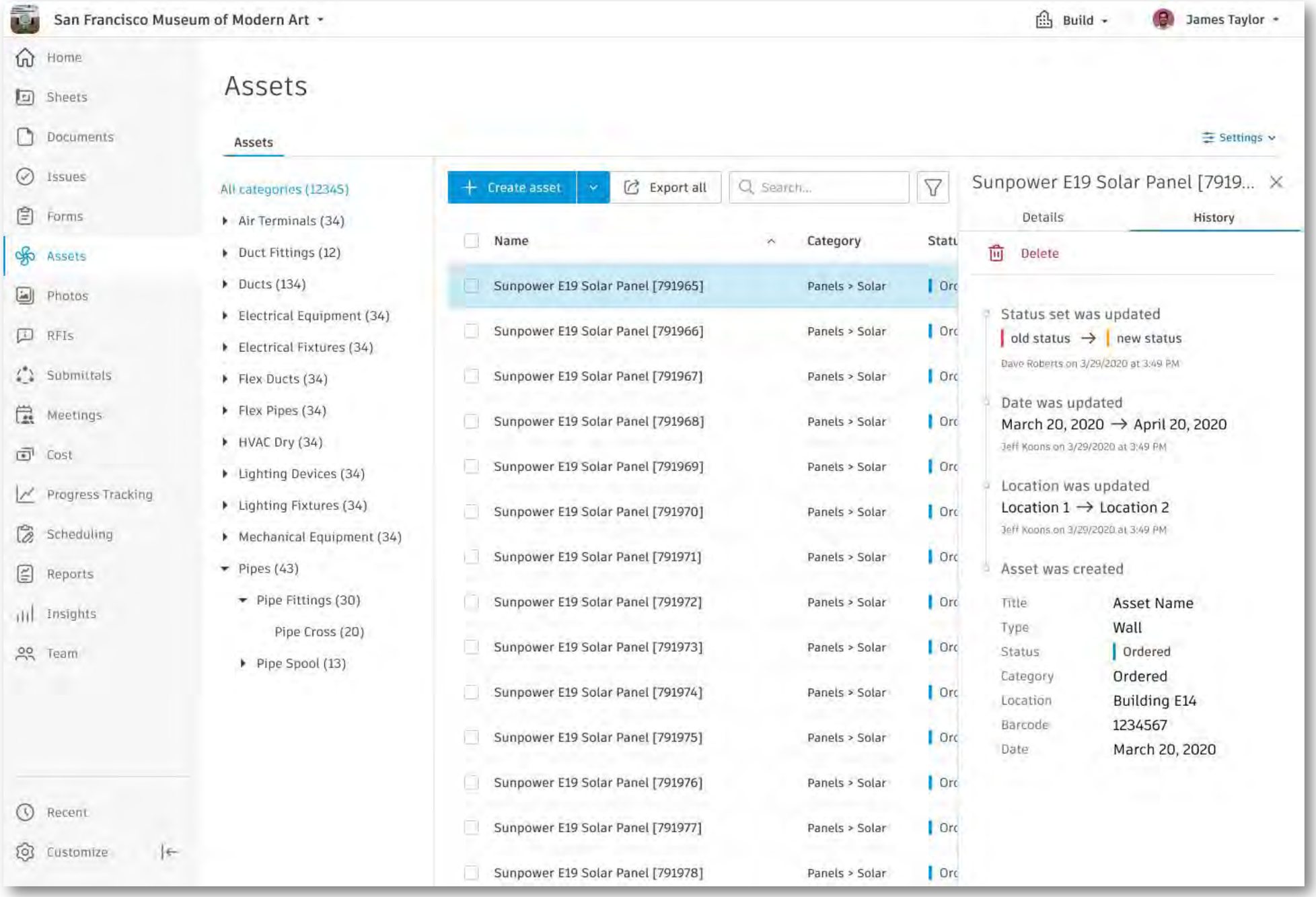
What is Asset Management?

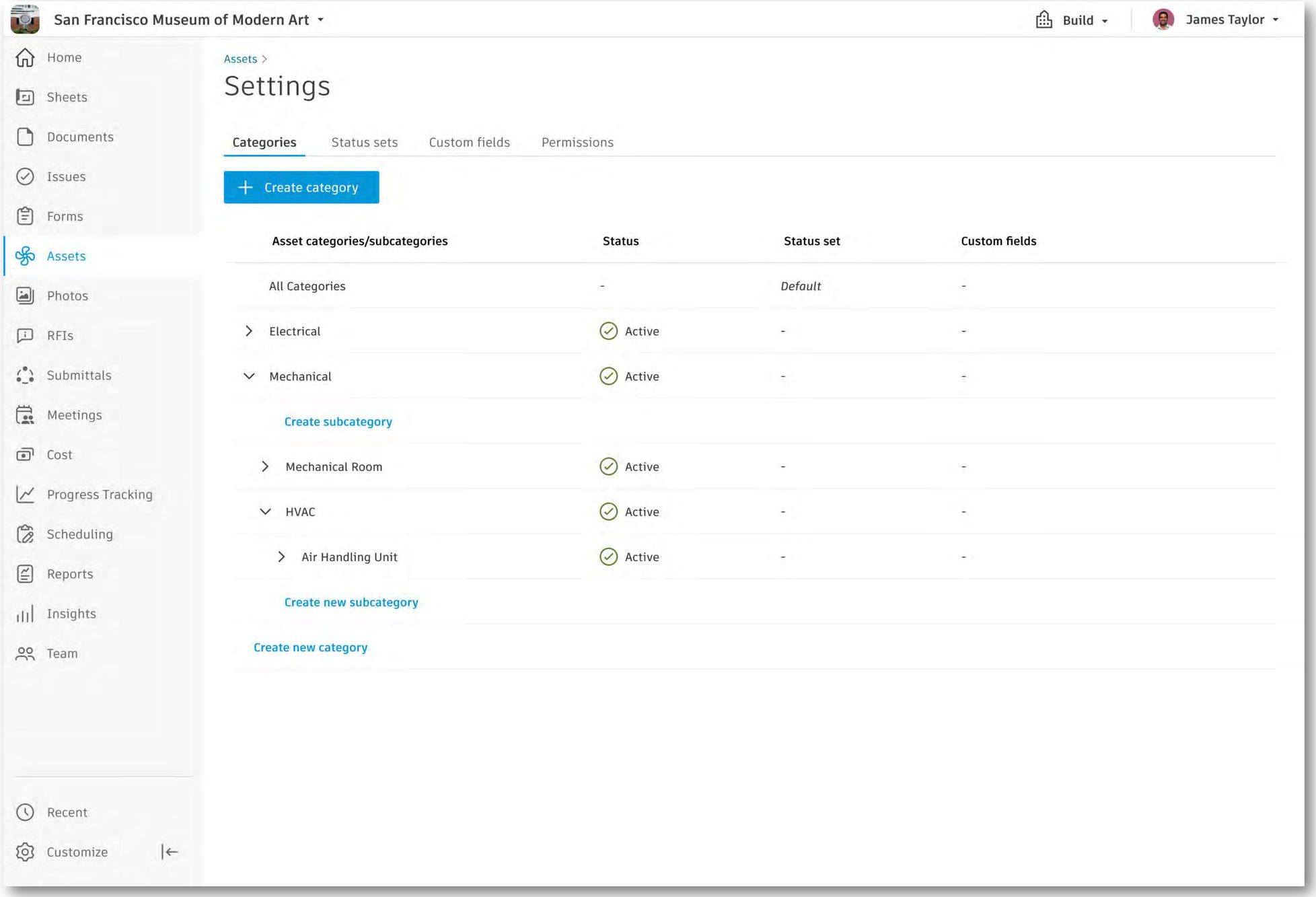
Tracking of critical construction Assets such as equipment and material from design through handover phase of a construction project

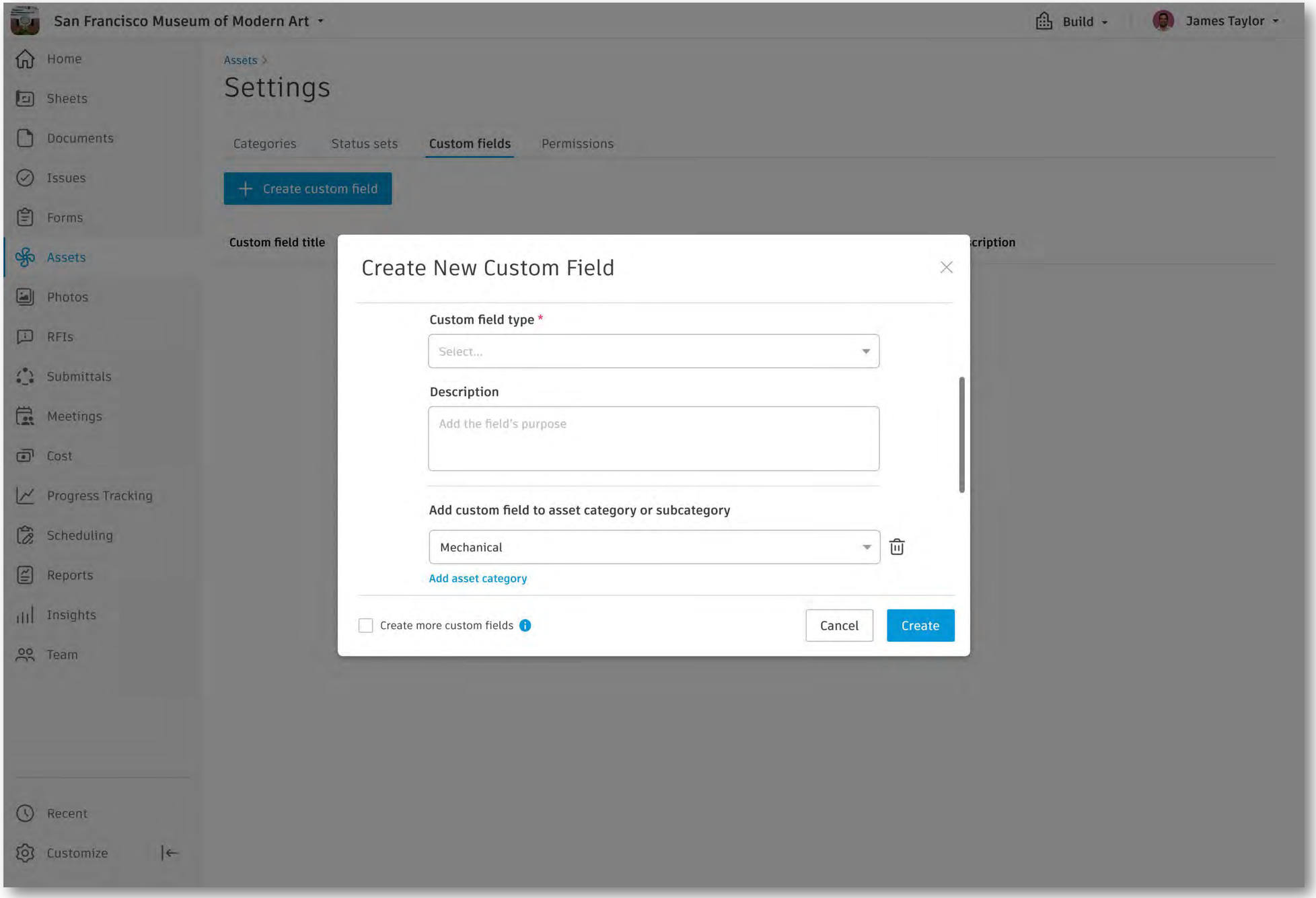
Asset Lifecycle




San Francisco Museum of Modern Art
Build
James Taylor
Home
Sheets
Documents
Issues
Forms
Assets
Photos
RFIs
Submittals
Meetings
Cost
Progress Tracking
Scheduling
Reports
Insights
Team
Recent
Customize
Assets
Assets
Settings
All categories (12345)
Air Terminals (34)
Duct Fittings (12)
Ducts (134)
Electrical Equipment (34)
Electrical Fixtures (34)
Flex Ducts (34)
Flex Pipes (34)
HVAC Dry (34)
Lighting Devices (34)
Lighting Fixtures (34)
Mechanical Equipment (34)
Pipes (43)
Pipe Fittings (30)
Pipe Cross (20)
Pipe Spool (13)
Create asset
Export all
Search...
Name
Category
Statu
Sunpower E19 Solar Panel [791965]
Sunpower E19 Solar Panel [791966]
Sunpower E19 Solar Panel [791967]
Sunpower E19 Solar Panel [791968]
Sunpower E19 Solar Panel [791969]
Sunpower E19 Solar Panel [791970]
Sunpower E19 Solar Panel [791971]
Sunpower E19 Solar Panel [791972]
Sunpower E19 Solar Panel [791973]
Sunpower E19 Solar Panel [791974]
Sunpower E19 Solar Panel [791975]
Sunpower E19 Solar Panel [791976]
Sunpower E19 Solar Panel [791977]
Sunpower E19 Solar Panel [791978]
Panels > Solar
Orc
Sunpower E19 Solar Panel [7919...
Delete
Asset Name
Sunpower E19 Solar Panel [791965]
Description
Wall
Status
Ordered
Category
Panel > Ordered
Location
Building E14
Barcode
12345678
Custom date
MM/DD/YYYY
Custom boolean


San Francisco Museum of Modern Art
Build
James Taylor
Home
Sheets
Documents
Issues
Forms
Assets
Photos
RFIs
Submittals
Meetings
Cost
Progress Tracking
Scheduling
Reports
Insights
Team
Recent
Customize
Assets
Assets
Settings
All categories (12345)
Air Terminals (34)
Duct Fittings (12)
Ducts (134)
Electrical Equipment (34)
Electrical Fixtures (34)
Flex Ducts (34)
Flex Pipes (34)
HVAC Dry (34)
Lighting Devices (34)
Lighting Fixtures (34)
Mechanical Equipment (34)
Pipes (43)
Pipe Fittings (30)
Pipe Cross (20)
Pipe Spool (13)
Create asset
Export all
Search...
Name
Category
Statu
Sunpower E19 Solar Panel [791965]
Sunpower E19 Solar Panel [791966]
Sunpower E19 Solar Panel [791967]
Sunpower E19 Solar Panel [791968]
Sunpower E19 Solar Panel [791969]
Sunpower E19 Solar Panel [791970]
Sunpower E19 Solar Panel [791971]
Sunpower E19 Solar Panel [791972]
Sunpower E19 Solar Panel [791973]
Sunpower E19 Solar Panel [791974]
Sunpower E19 Solar Panel [791975]
Sunpower E19 Solar Panel [791976]
Sunpower E19 Solar Panel [791977]
Sunpower E19 Solar Panel [791978]
Panels > Solar
Sunpower E19 Solar Panel [7919...
Details
History
Delete
Status set was updated
old status → new status
Dave Roberts on 3/29/2020 at 3:49 PM
Date was updated
March 20, 2020 → April 20, 2020
Jeff Koons on 3/29/2020 at 3:49 PM
Location was updated
Location 1 → Location 2
Jeff Koons on 3/29/2020 at 3:49 PM
Asset was created
Title Asset Name
Type Wall
Status Ordered
Category Ordered
Location Building E14
Barcode 1234567
Date March 20, 2020


San Francisco Museum of Modern Art
Build
James Taylor
Home
Sheets
Documents
Issues
Forms
Assets
Photos
RFIs
Submittals
Meetings
Cost
Progress Tracking
Scheduling
Reports
Insights
Team
Recent
Customize
Assets >
Settings
Categories
Status sets
Custom fields
Permissions
Create category
Asset categories/subcategories
Status
Status set
Custom fields
All Categories
-
Default
-
Electrical
Active
-
-
Mechanical
Active
-
-
Create subcategory
Mechanical Room
Active
-
-
HVAC
Active
-
-
Air Handling Unit
Active
-
-
Create new subcategory
Create new category


San Francisco Museum of Modern Art
Build
James Taylor
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Sheets
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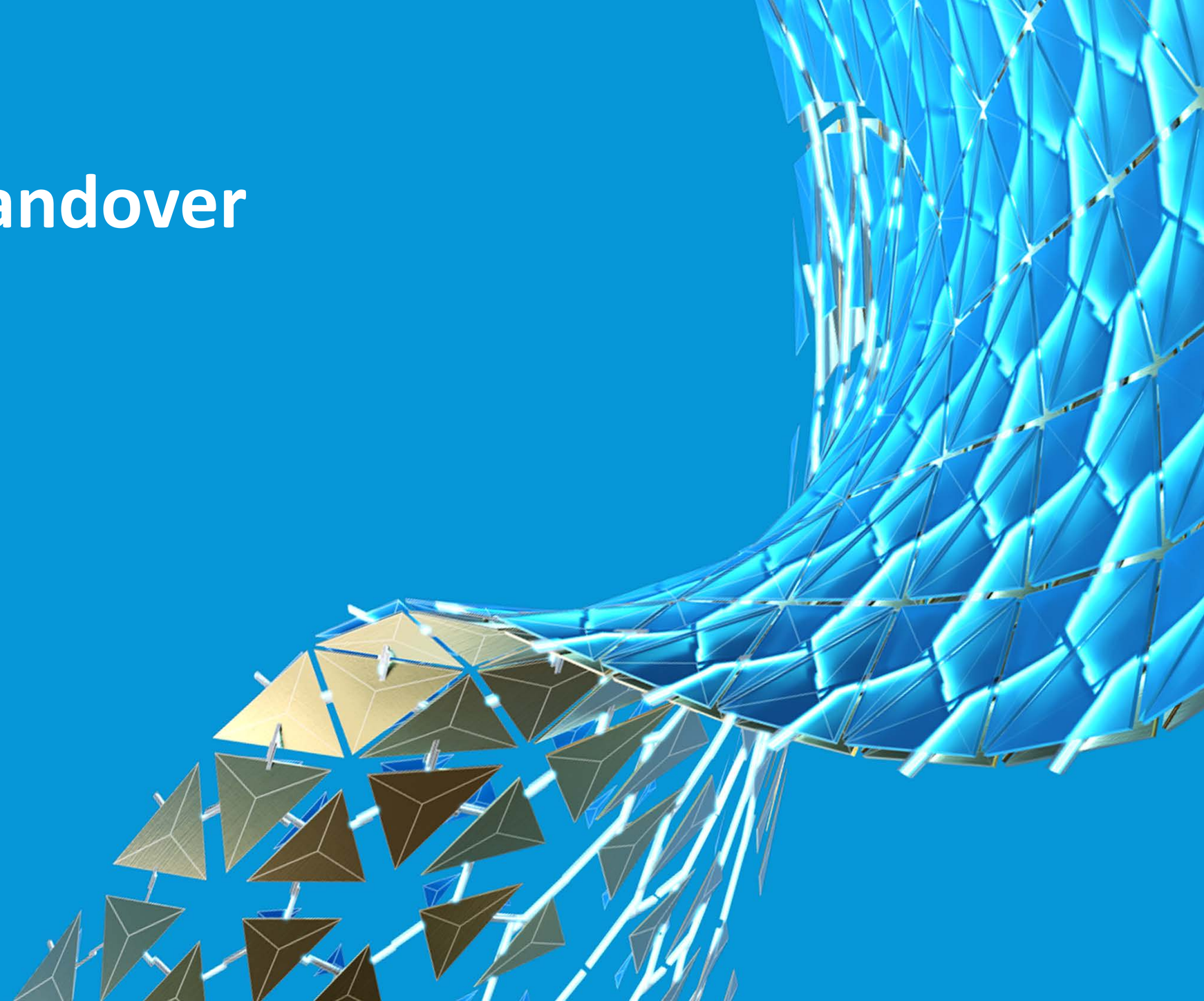
Assets
Photos
RFIs
Submittals
Meetings
Cost
Progress Tracking
Scheduling
Reports
Insights
Team
Recent
Customize
Assets >
Settings
Categories
Status sets
Custom fields
Permissions
Create custom field
Custom field title
Create New Custom Field
Custom field type *
Select...
Description
Add the field's purpose
Add custom field to asset category or subcategory
Mechanical
Add asset category
Create more custom fields
Cancel
Create

Outcomes

- Track critical assets starting in the design phase
- Setup commissioning workflows specific to Asset categories such as Mechanical, Electrical and Plumbing
- Attach relevant information such as checklists, warranties, O&M manuals directly to an Asset through the project lifecycle

Redefining Handover

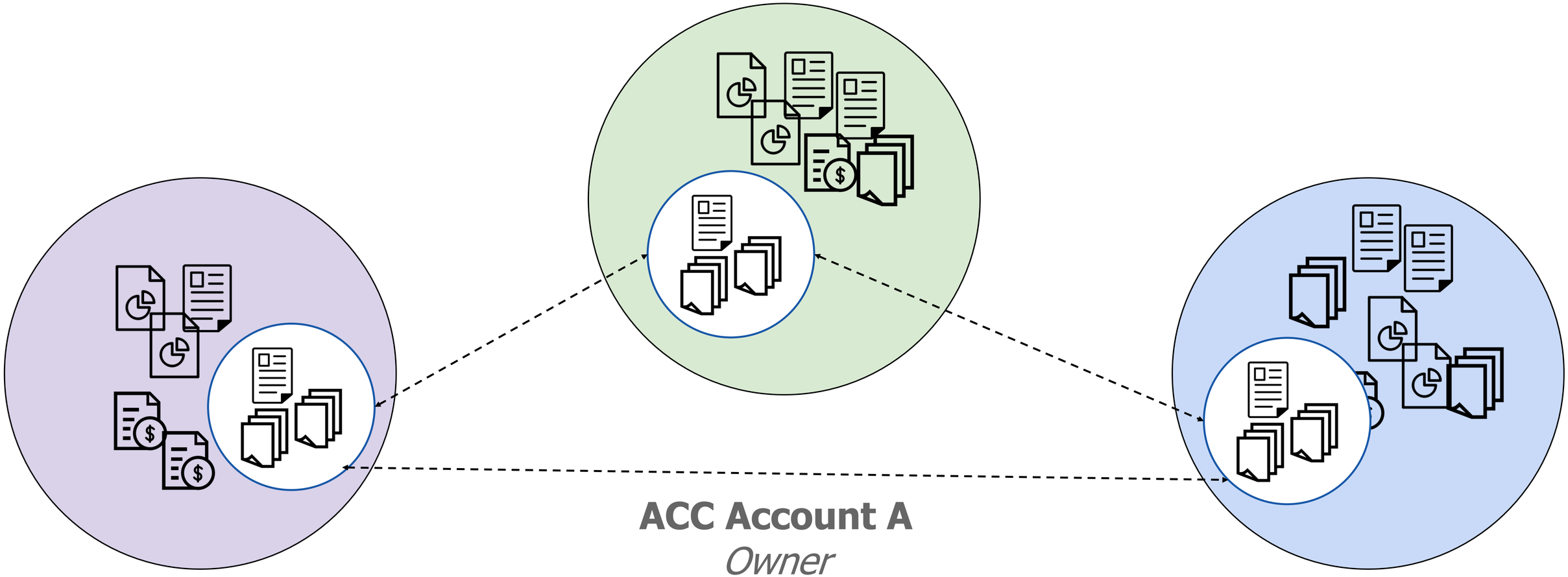


Handover is a continuous process and not a point-in-time activity.

Leveraging tools such as Data Federation, Templates, Components & Assets will provide a more holistic and proactive approach to Handover

Scenario

Connected Handover Workflow



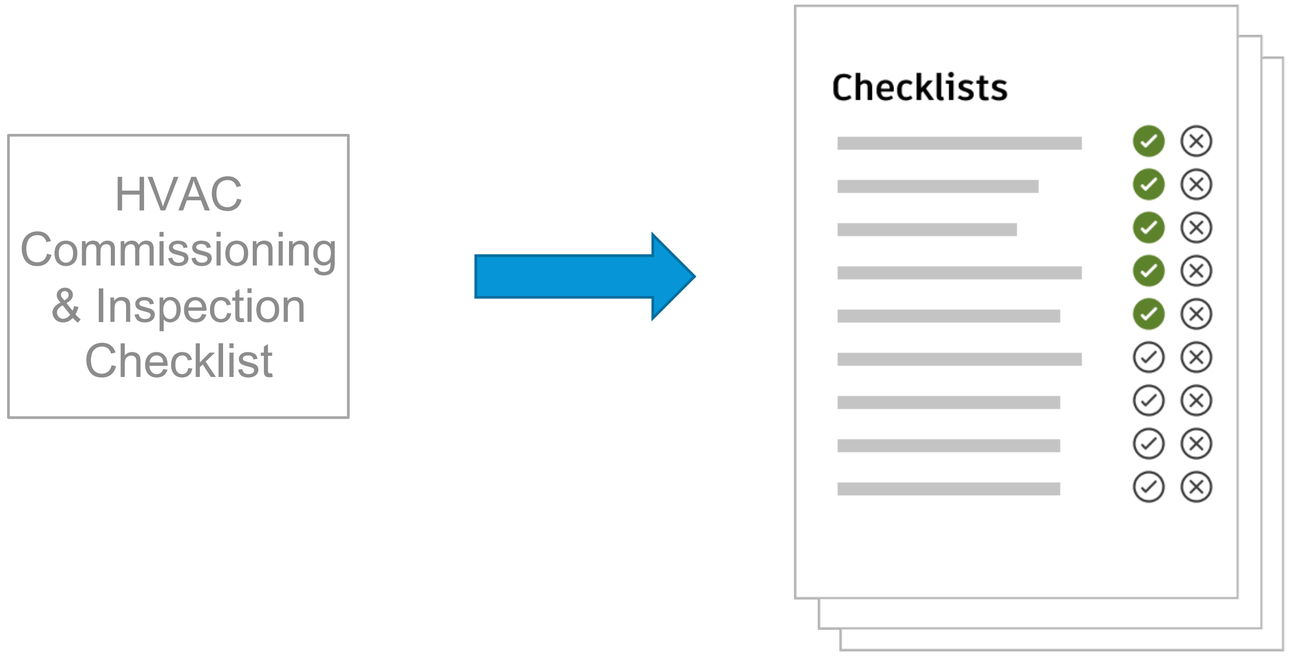
ACC Account A
Owner

ACC Account C
Mechanical Sub

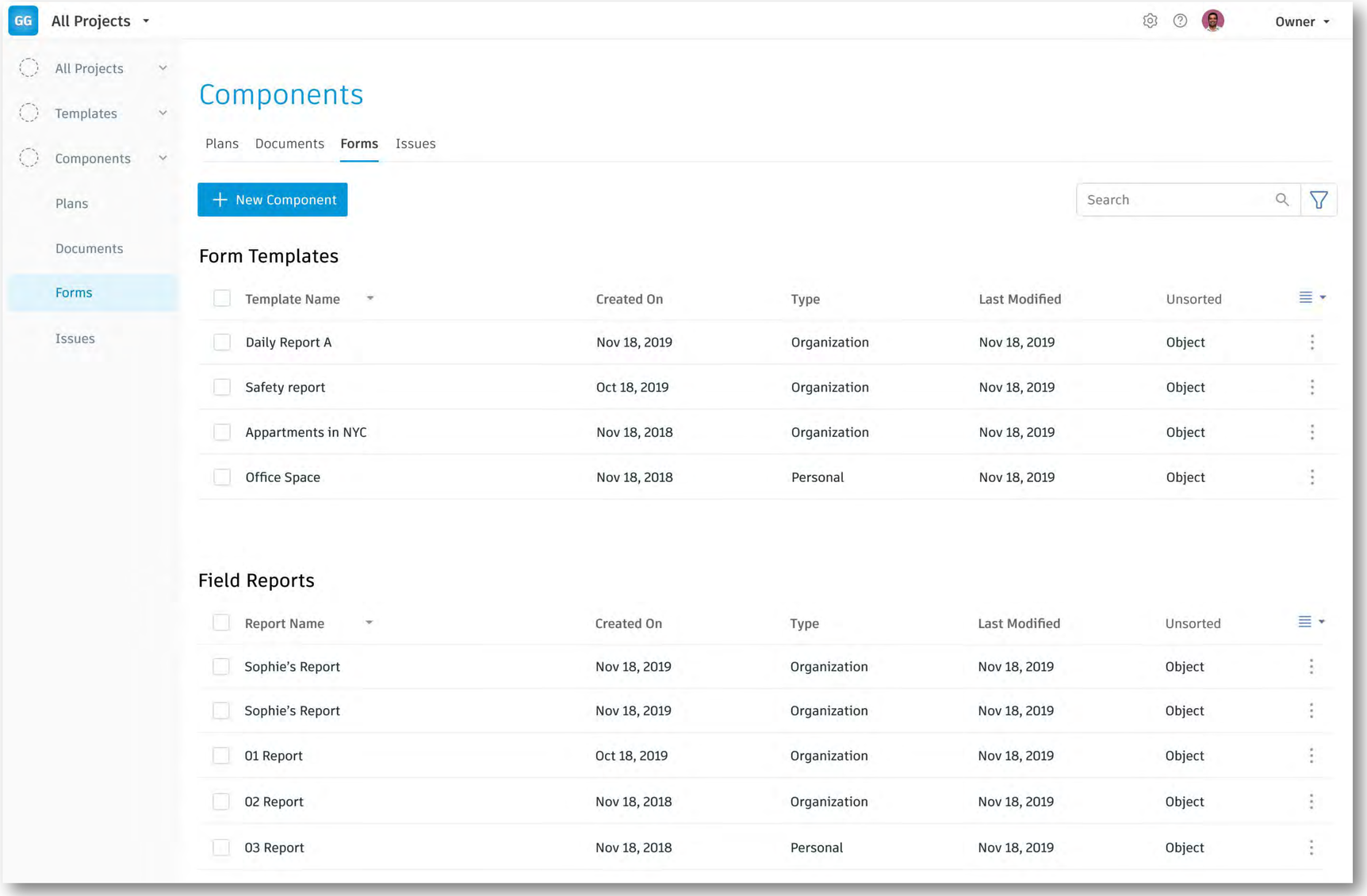
ACC Account B
General Conctractor

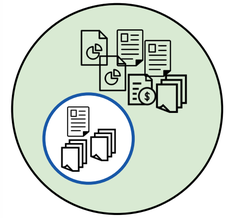
Tracking Commission workflow as part of Handover

Scenario: A new hotel project is coming up and the Owner wants to track the commissioning & inspection details related to the HVAC Air Handling Units in a specific format to be later used by Facilities team.



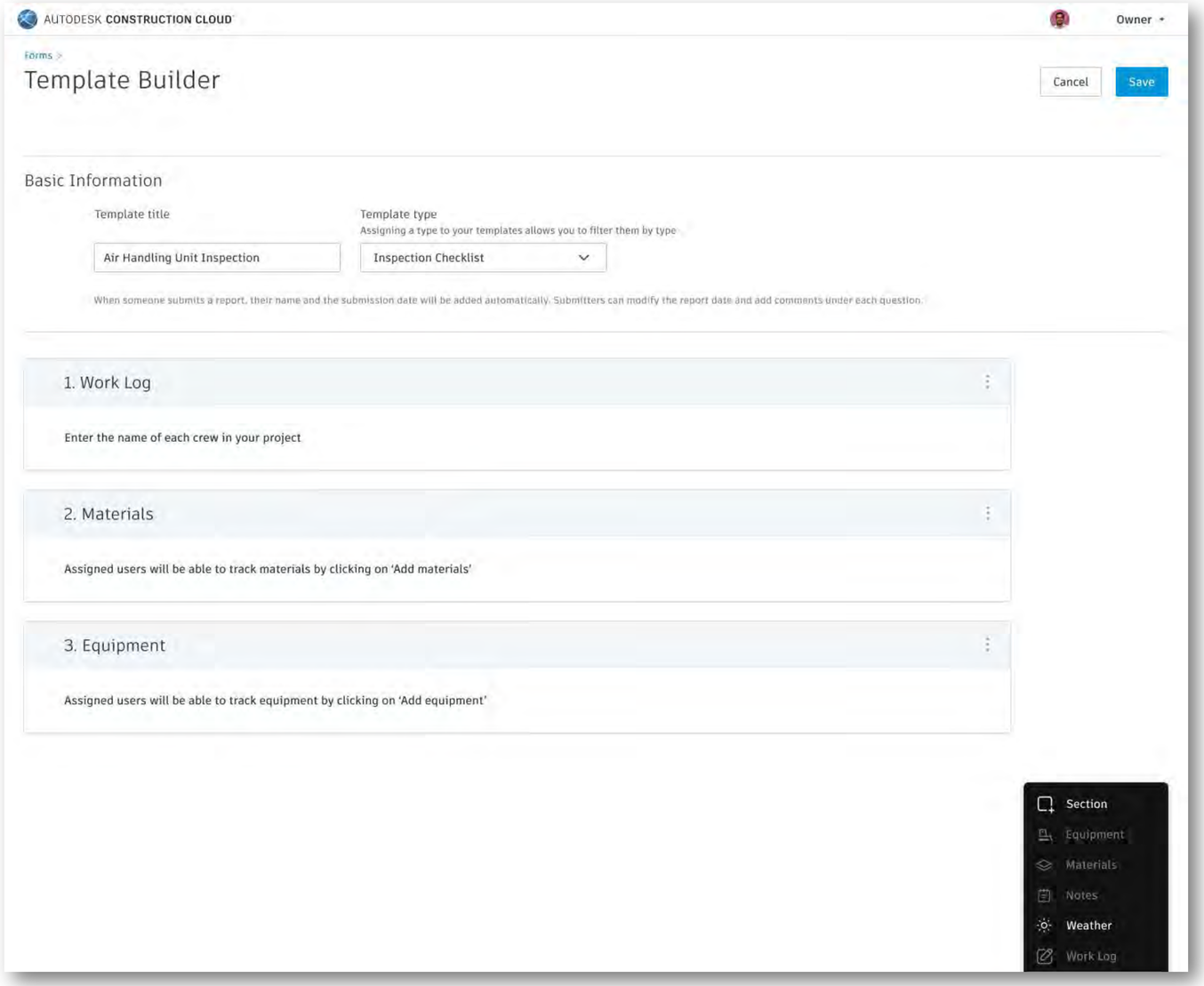
Step 1: Owner creates Checklist component in their ACC account

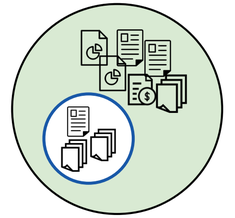




ACC Account A
Owner

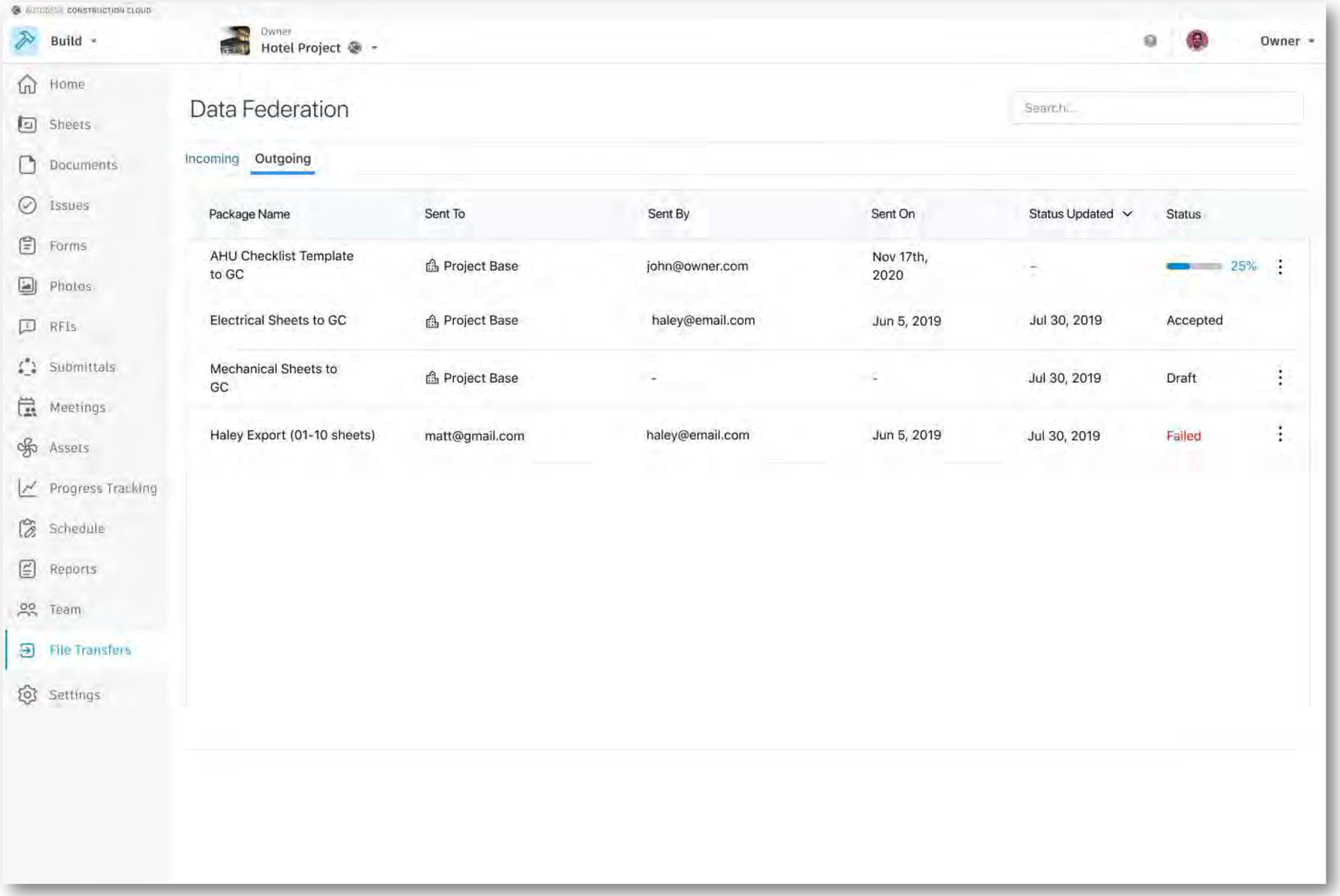
Step 1: Owner creates Checklist template in their ACC account

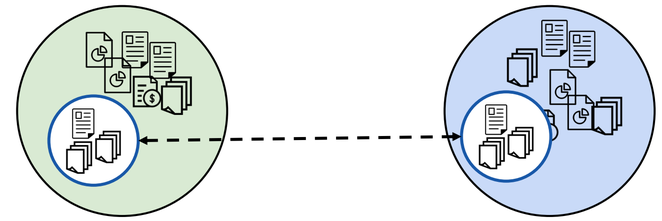




ACC Account A
Owner

Step 2: Owner shares the checklist template with GC via Data Federation

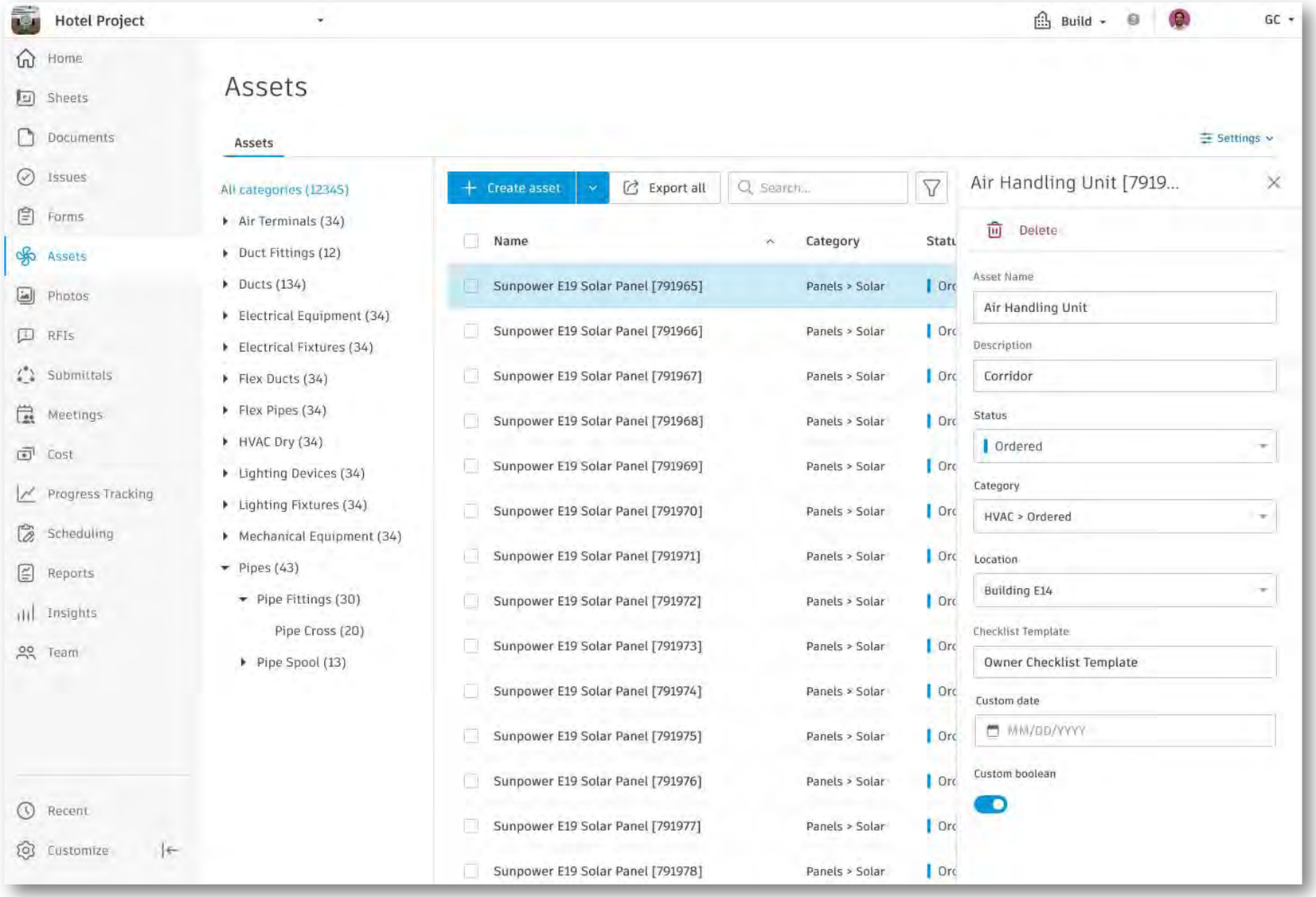


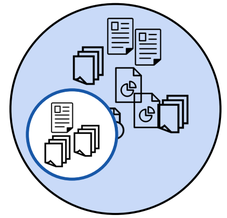


ACC Account A
Owner

ACC Account B
GC

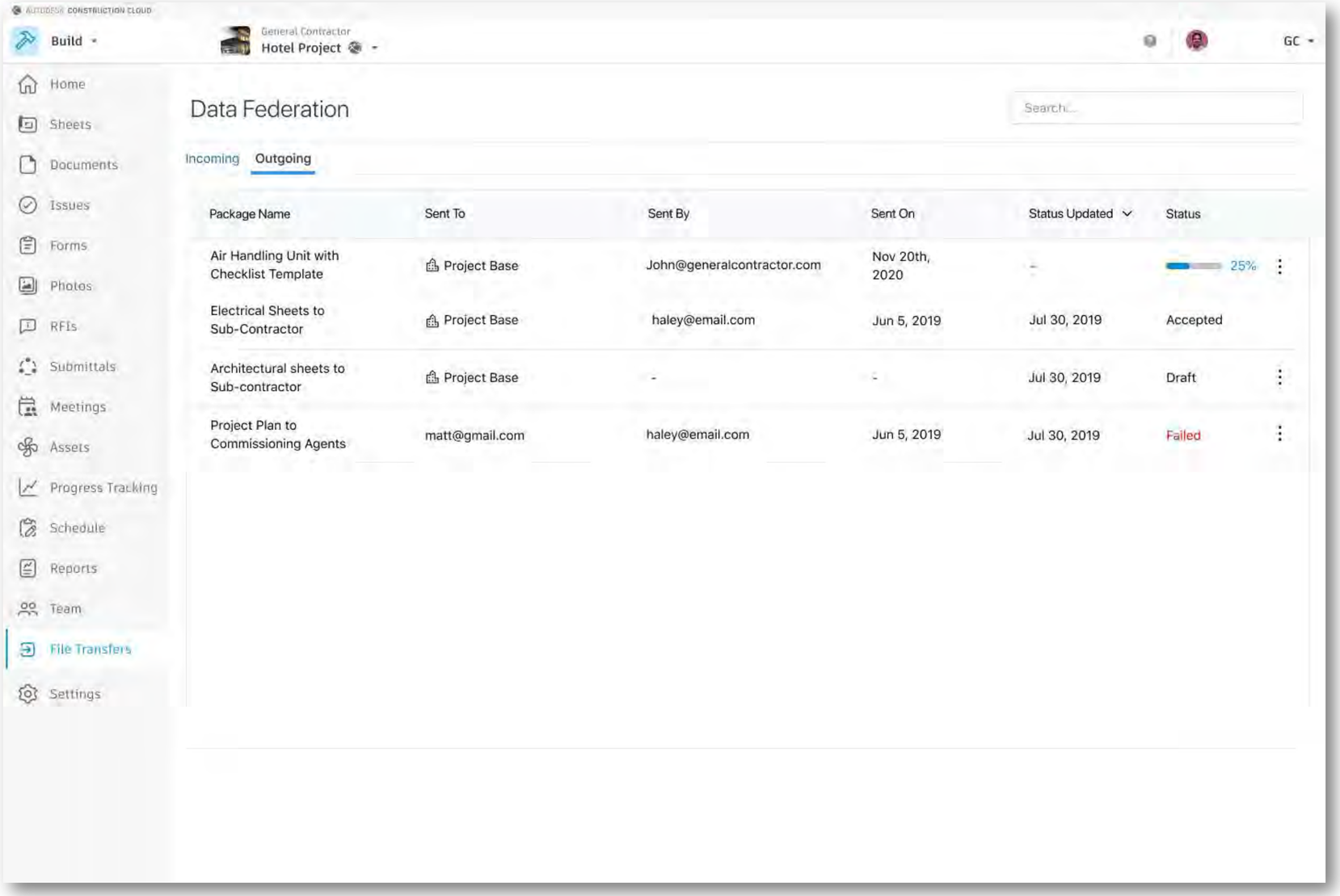
Step 3: GC creates the Assets and links the checklist template shared by Owner

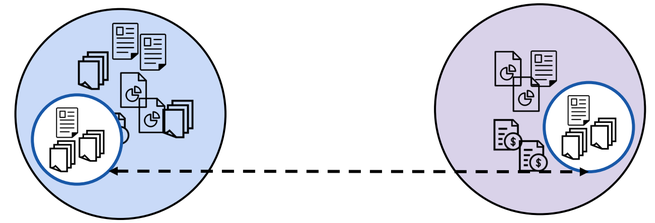




ACC Account B
GC

Step 4: GC shares Asset (w checklist) with Mechanical Sub via Data Federation

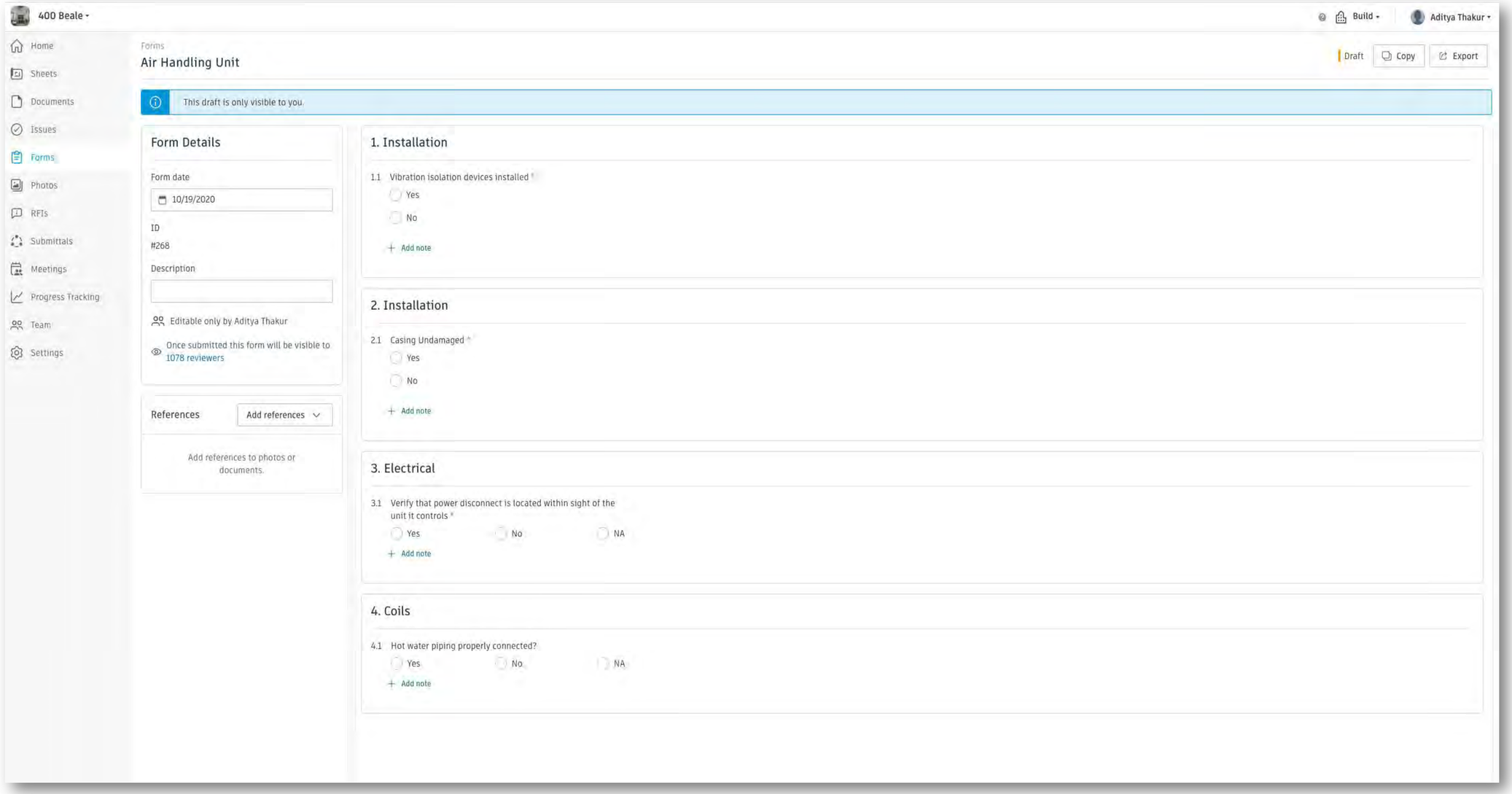


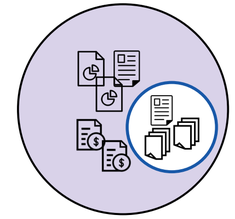


ACC Account B
GC

ACC Account C
Mechanical Sub

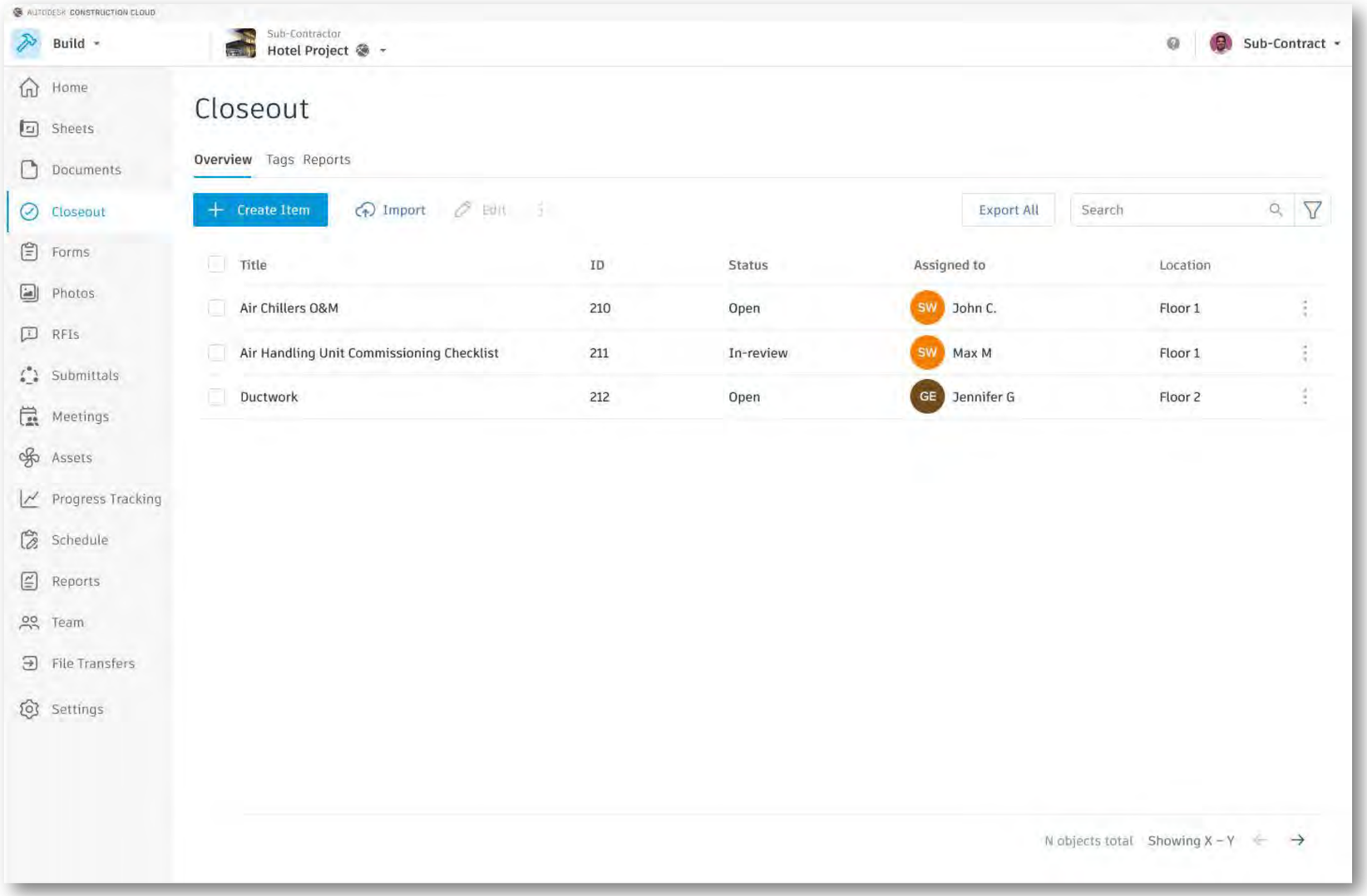
Step 5: Sub installs the Air Handling unit using the owner created checklist

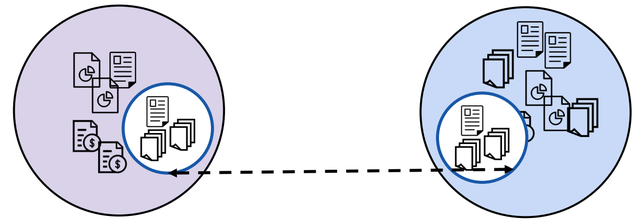




ACC Account C
Mechanical Sub

Step 6: Sub completes checklist and adds it to closeout documentation for GC

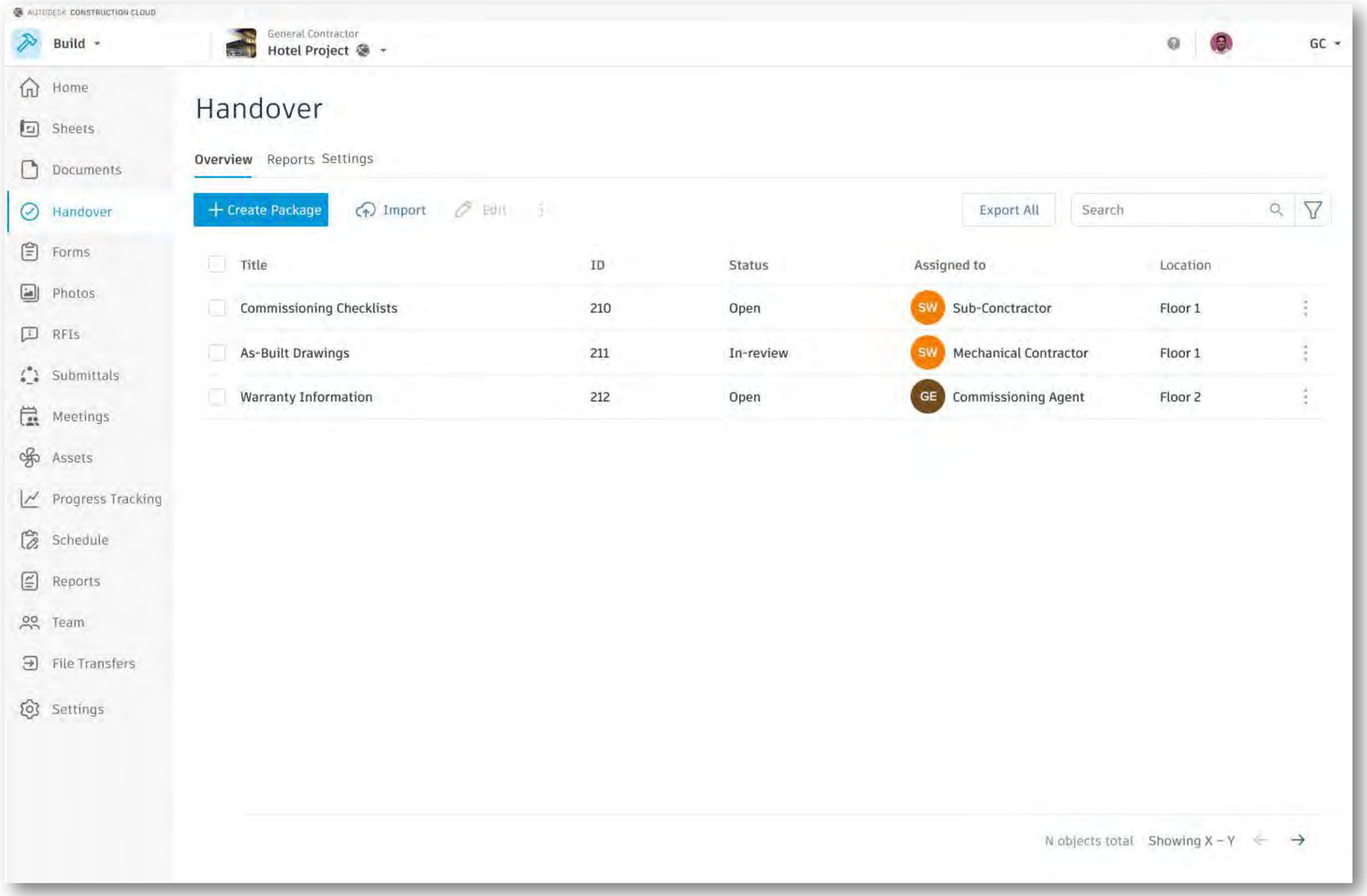


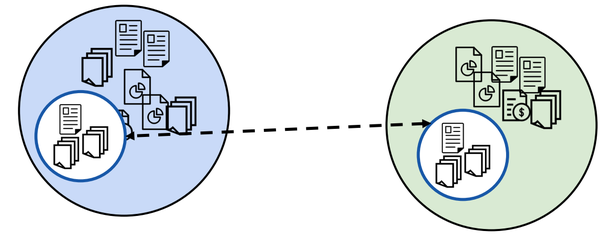


ACC Account C
Mechanical Sub

ACC Account B
GC

Step 7: GC verifies checklist and adds data as part of Handover package

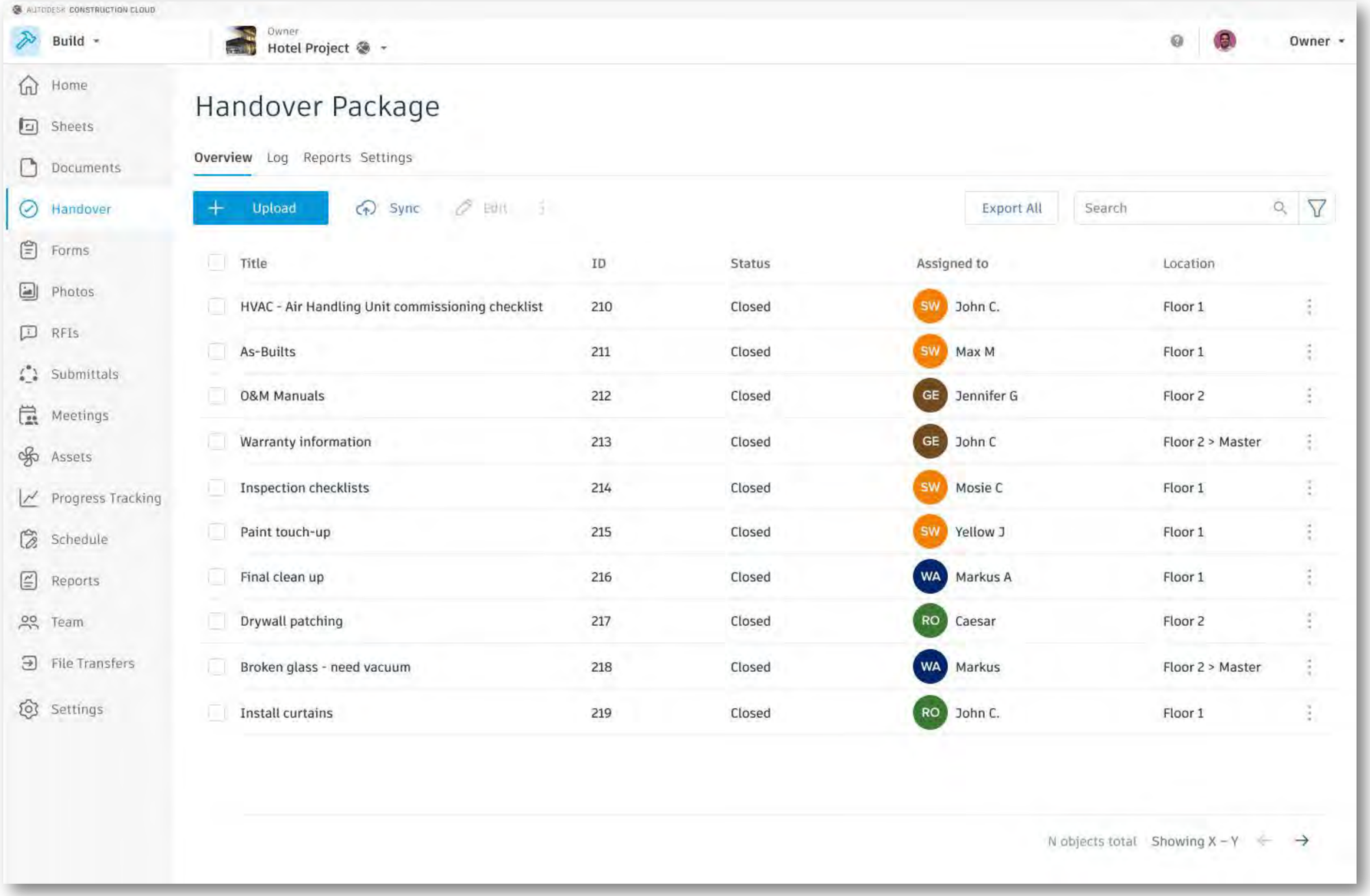


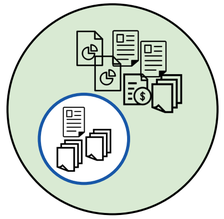


ACC Account B
GC

ACC Account A
Owner

Step 8: Owner has access to a live Handover package





ACC Account A
Owner

Outcomes

- Handover items are identified and tracked through the lifecycle of the project
- Owners can share handover specific templates with GCs
- GCs & Subs able to maintain privacy and own the data specific to the project
- Easy for Subs to closeout projects
- Seamless experience for GC to compile final package
- Owner have access to project data along with relevant audit records for future reference

Scalability

- Drawings with markups
- Documents
- Submittals
- RFIs
- As-builts
- Warranty and Insurance documents
- O&Ms

Team Collaboration

Connected Workflows

Predictable Outcomes

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