



PROCESS ANALYSIS 360 UX

OVERVIEW:

CORE SCENARIOS

KEY SCREENS

OTHER FEATURES

MOMENTS OF TRUTH

EXPERIENCE PRINCIPLES

PERSONAS

USER STORY

WIREFRAMES

FIRST EXPERIENCE

BUILD A MODEL

SIMULATION AND COMPARISON

REPORT AND SHARE

CORE SCENARIOS:

THESE ARE THE HIGH-LEVEL, KEY EXPERIENCES THAT CREATE THE CORE OF THE NEW EXPERIENCE. THE KEY EXPERIENCES SHOULD COVER THE PROCESS STEPS OF ***PLAN, DESIGN, COMMISSION, OPERATE.***

KEY SCREENS:

PLAN

DASHBOARD- START NEW PROJECT

PROJECT PAGE- SET UP PROJECT

DESIGN

WORKSPACE- BUILD MODEL/SIMULATION

ASSET BROWSER- SELECT ASSETS

WORKSPACE- RUN SIMULATION

COMMISSION

REPORT PAGE- GENERATE/SEND REPORT/VIDEO

WORKSPACE- CONVERT TO 2D/3D

OPERATE

COMPARISON PAGE- EVALUATE UPGRADE

OTHER FEATURES:

MODEL-2D-3D TRANSITION

MEASURE DISTANCES

AUGMENTED REPORTS/VIDEO

INTEGRATED COMMUNICATIONS

IMPORT IMAGES/DRAWINGS

A/B COMPARISONS

...

“MOMENTS OF TRUTH”:

**FOCUS THE EXPERIENCE ON SEVERAL
“MOMENTS OF TRUTH”, MOMENTS
WHEN THE USER SAYS: “HOLY &*%\$,
THAT WAS AMAZING!”**

MOMENTS OF TRUTH

1. WHEN A USER CONVERTS A BLOCK DIAGRAM TO 2D AND THEN TO 3D, AND VICE-VERSA.
2. WHEN USERS SEND OR RECEIVE A VIDEO AND REPORT OF THE SIMULATED PROCESS.
3. WHEN THE USER HAS ACCESS TO THE FULL WORLD OF ASSETS FROM THEIR OWN FACTORIES, MANUFACTURERS ASSETS OR PUBLICLY AVAILABLE ASSETS.

EXPERIENCE PRINCIPLES

**HIGH-LEVEL PRINCIPLES THAT WILL
GUIDE THE DEVELOPMENT OF
PROCESS ANALYSIS OVER THE
COURSE OF SEVERAL RELEASES.**

EXPERIENCE PRINCIPLES

MATCH THE USER'S NATURAL WORKFLOW
WORKSPACE TABS

ALWAYS GIVE USERS A "SOFT LANDING"
FIRST USE EXPERIENCE

PROVIDE QUICK USE OPTIONS AVAILABLE IN CANVAS
CONTEXTUAL CONFIG MENU

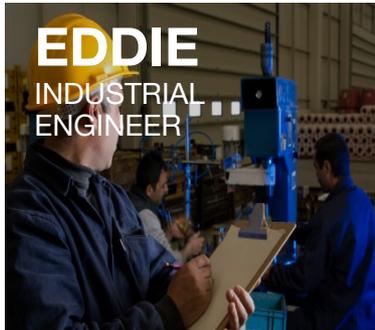
SEAMLESS FLOW FROM BLOCK TO 2D TO 3D
LET USERS START WITH EITHER BLOCK DIAGRAMS, 2D
DRAWINGS OR 3D MODELS AND THEN EASILY CONVERT FROM
ONE FORMAT TO THE OTHER.

PERSONAS/USER STORY

DEVELOP A USER STORY THAT COVERS THE MULTIPLE PERSONAS INVOLVED ACROSS KEY EXPERIENCES.

CURRENTLY THAT WILL INCLUDE AN INDUSTRIAL ENGINEER, A MANUFACTURING ENGINEER AND A PLANT MANAGER.

PERSONAS OVERVIEW



Eddie is less concerned with smaller details. He is heavily involved early on in the process and his involvement tapers off as the project goes on. He is more concerned with overall process. He speaks in terms of throughput, TAKT time, and on time delivery. His informational studies is fed to Manufacturing Engineer.

Refer to MFG ENG Target Personas document for more details.



Manny is responsible for ensuring efficiency of the manufacturing process. He plays a role similar to a Project Manager. He coordinates the maintenance and repair of machines to avoid delays in the production process, coordinates between the supplies to communicate requirements and changes in design, takes care of the costing processes, reports the status to the management, standardizes repeatable processes, maintains records etc. Layout Engineers report to him. Manny's biggest pain point is that all of the above tasks are executed manually.

Refer to MFG ENG Target Personas document for more details.



Pam is an experienced Plant Manager. She reads through data to obtain valuable information that helps her in decision making. However, she does not always have time to filter through relevant data and prefers to obtain only high level information.

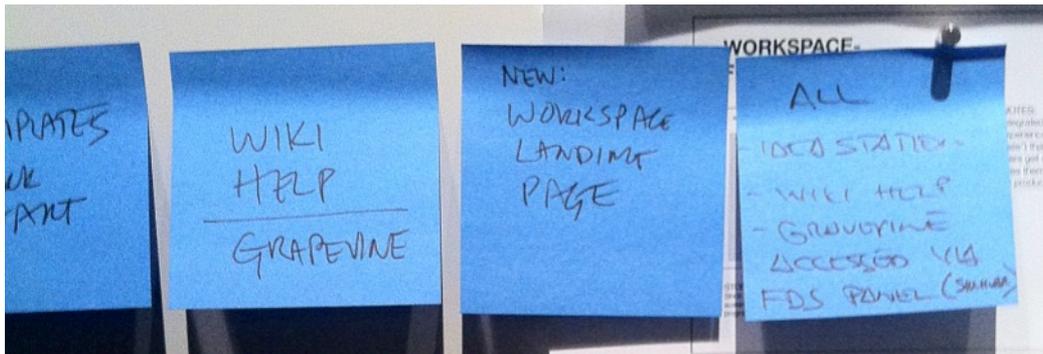
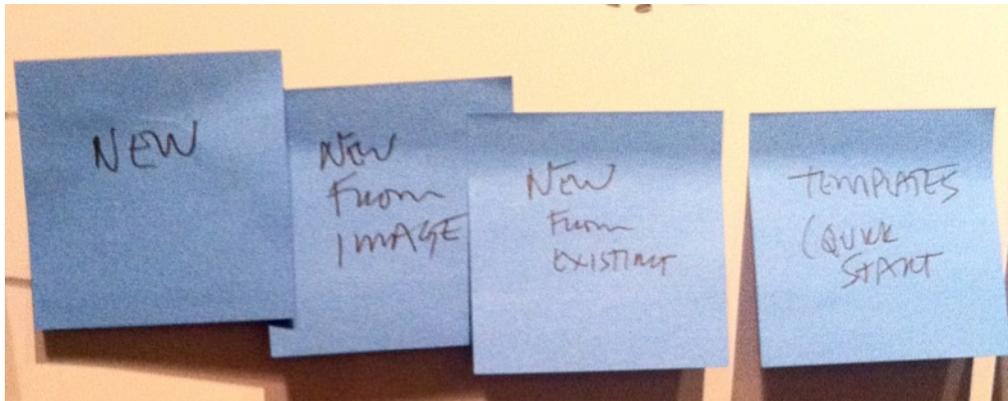
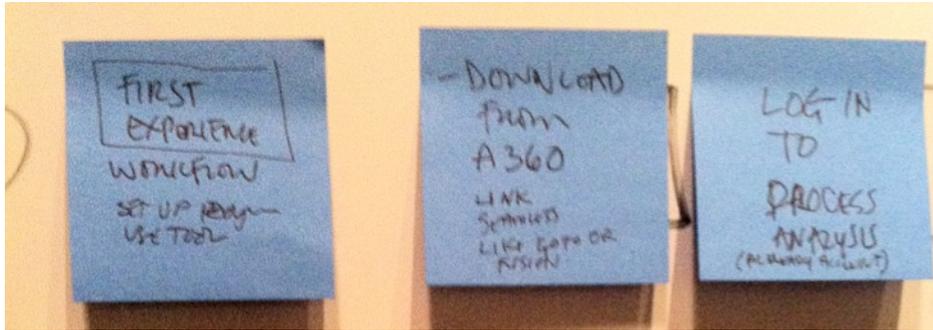
Refer to MFG ENG Target Personas document for more details.

USER STORY OVERVIEW

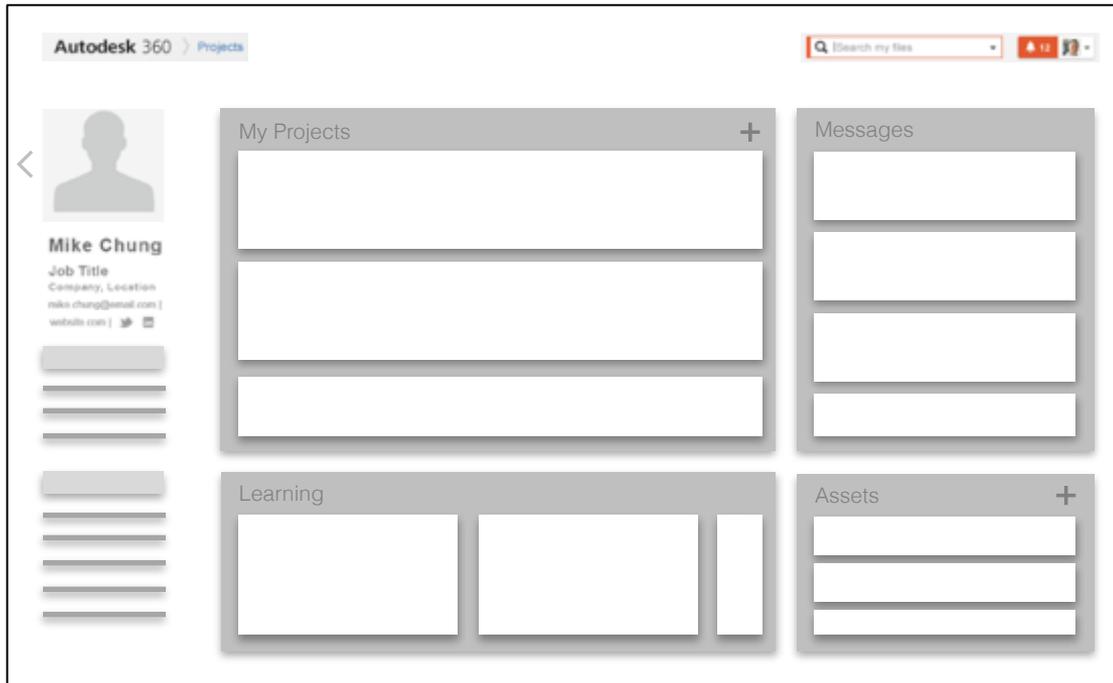
STORY:

- Pam, Eddie and Manny all work at a medium-sized, US manufacturer of electric cars. Their company is finalizing the design phase of a new car for the US market and are beginning to prepare for production.
- Pam, the Plant Manager, asks Eddie, the Industrial Engineer, to work on the design of a new production line. They collaborate on the overall requirements and layout of the line over a several year timeframe. Pam would like Eddie to look at the options of converting an existing facility and assets over to product the new car versus setting up a new manufacturing facility with new assets. (PLAN)
- Eddie works on the details of the layout, tests different concepts, and refines the approach to the new production line. Eddie reviews a couple options with Manny, the Manufacturing Engineer, who will be responsible for the line after launch of the new car. They choose one direction and Eddie refines based on Manny's feedback. (DESIGN)
- Eddie then gets sign-off from Pam on new production line. (COMMISSION)
- The new production line is built and has been up and running for a while. Manny has an idea for a new process improvement that he simulates in CAM360 and then reviews with Pam. (OPERATE)

WIREFRAMES- PLAN



DASHBOARD- START NEW PROJECT



NOTES:

Dashboard will conform with A360 and PLM360 patterns.

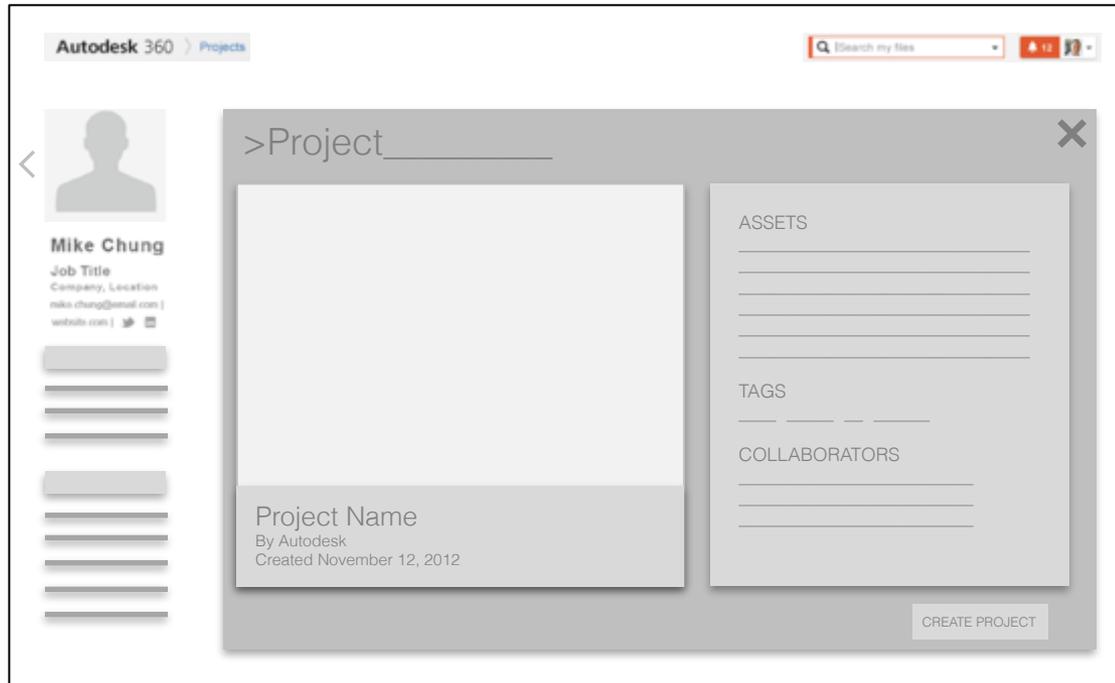
Users should have access to the following features:

- My Projects
- Messages/Activity Feed
- Learning content
- Asset Browser

STORY:

Pam, the Plant Manager, asks Eddie, the Industrial Engineer, to work on the design of a new production line. They collaborate on the overall requirements and layout of the line over a several year timeframe. Pam would like Eddie to look at the options of converting an existing facility and assets over to product the new car versus setting up a new manufacturing facility with new assets. (PLAN)

PROJECT PAGE- SET UP PROJECT



NOTES:

Dashboard will conform with A360 and PLM360 patterns.

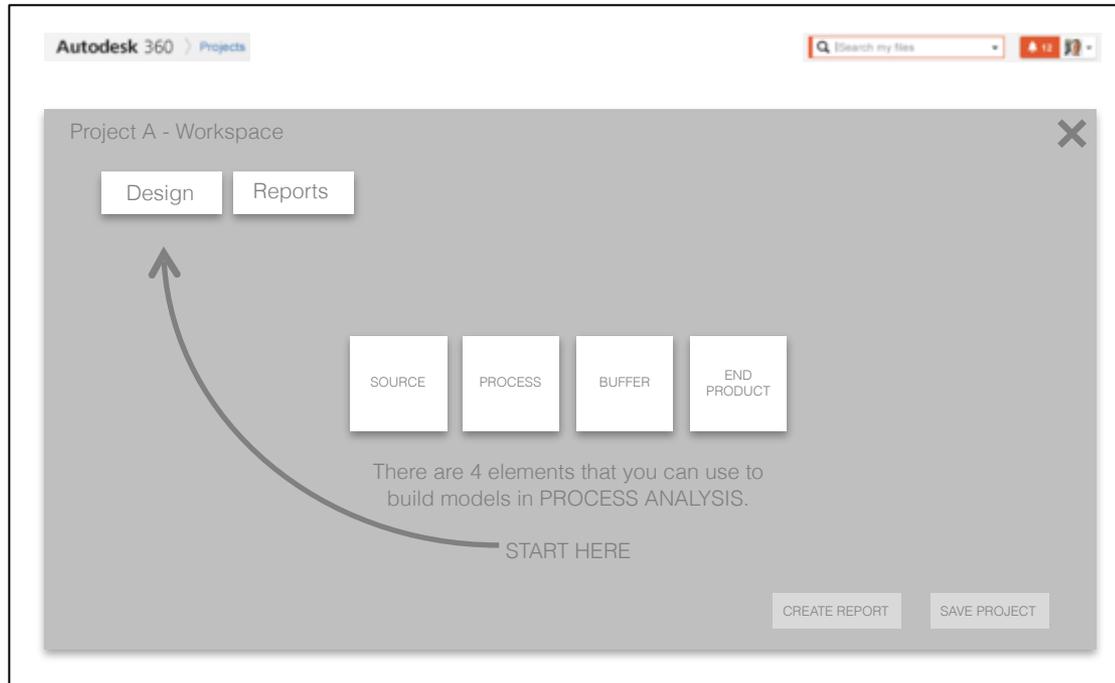
Allows user to add project details unique to a project in Process Analysis:

- Name
- Assets
- Tags
- Collaborators

STORY:

Eddie names the project and adds Pam and Manny as collaborators on the project. He also has the option to add assets or sets of assets from the Asset Browser.

WORKSPACE- FIRST USE ORIENTATION



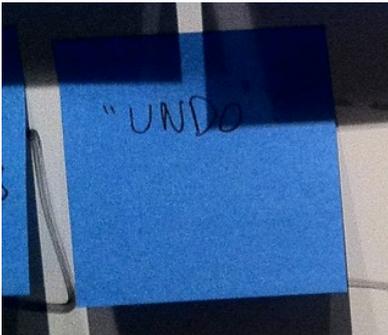
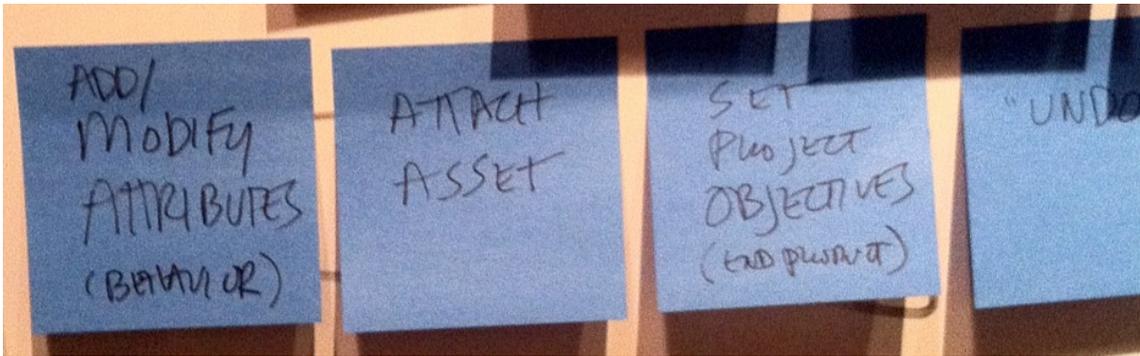
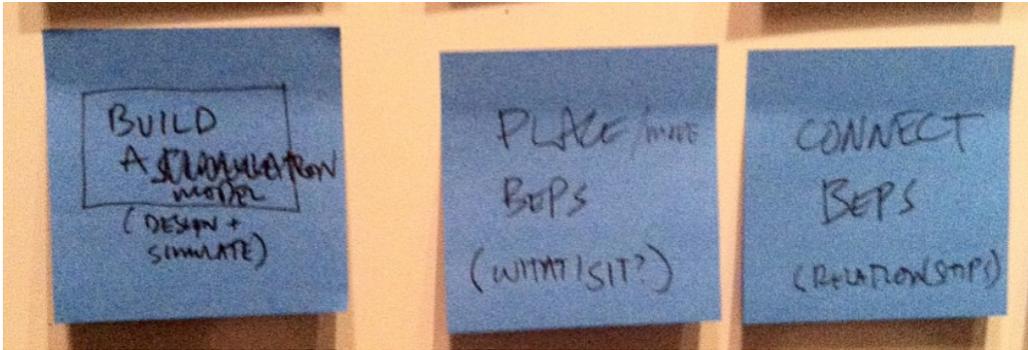
NOTES:

Integrated orientation experience (“zero dock state”) that helps new users get started and gives them a quick tour of the product.

STORY:

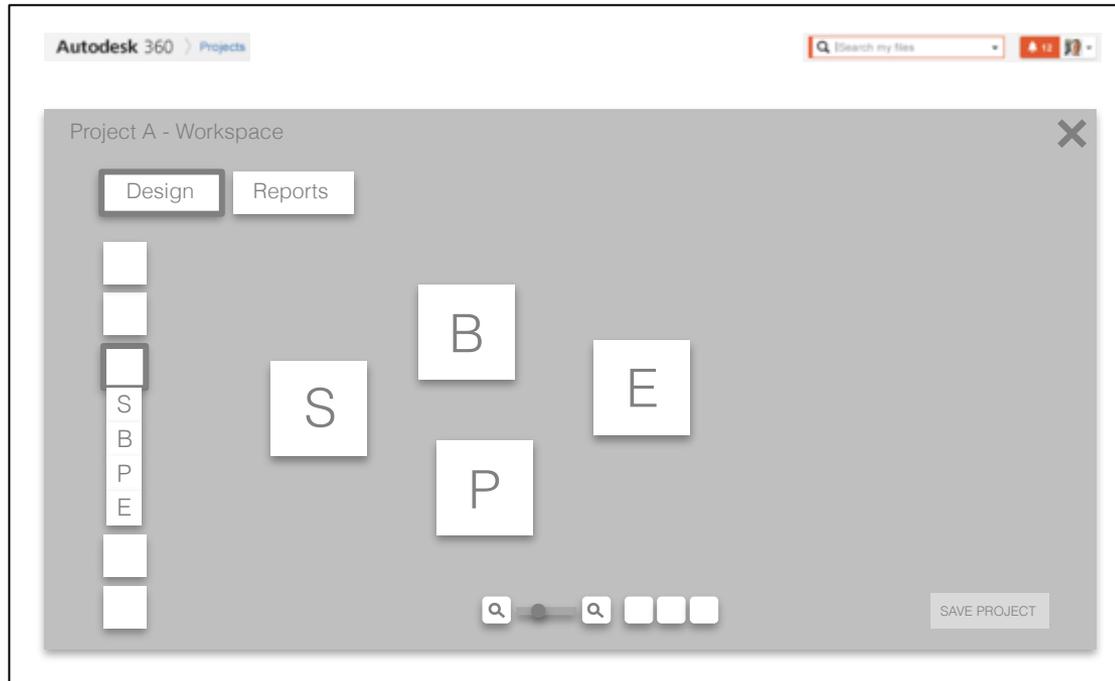
Since this is the first time that Eddie has used Process Sim, the orientation screens show up giving him the option to learn more about how to use the program.

WIREFRAMES- DESIGN



WORKSPACE- PLACE OBJECTS

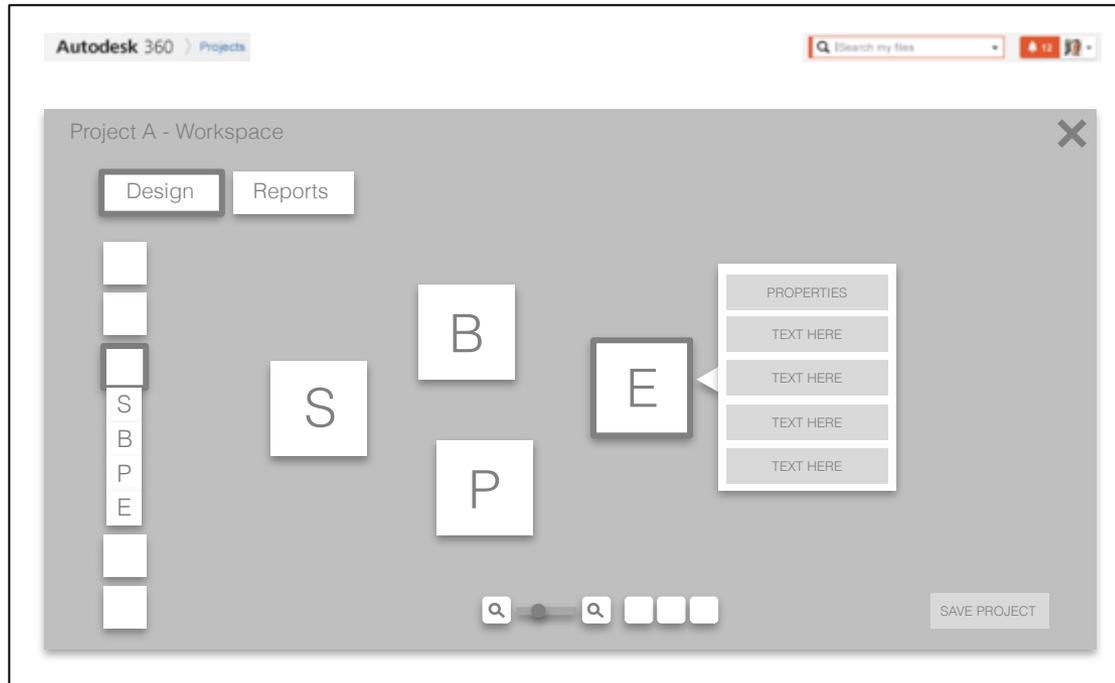
NOTES:



STORY:

Eddie works on the details of the layout, tests different concepts, and refines the approach to the new production line. Eddie reviews a couple options with Manny, the Manufacturing Engineer, who will be responsible for the line after launch of the new car. They choose one direction and Eddie refines based on Manny's feedback. (DESIGN)

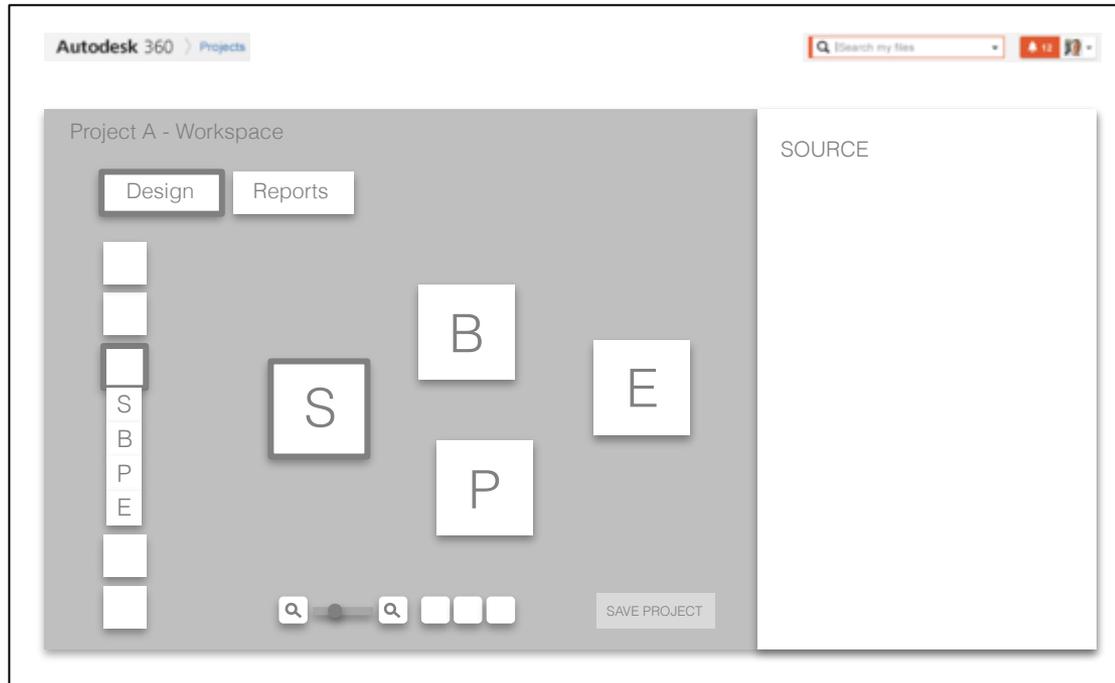
WORKSPACE- CONTEXTUAL PROPERTY MENU



NOTES:

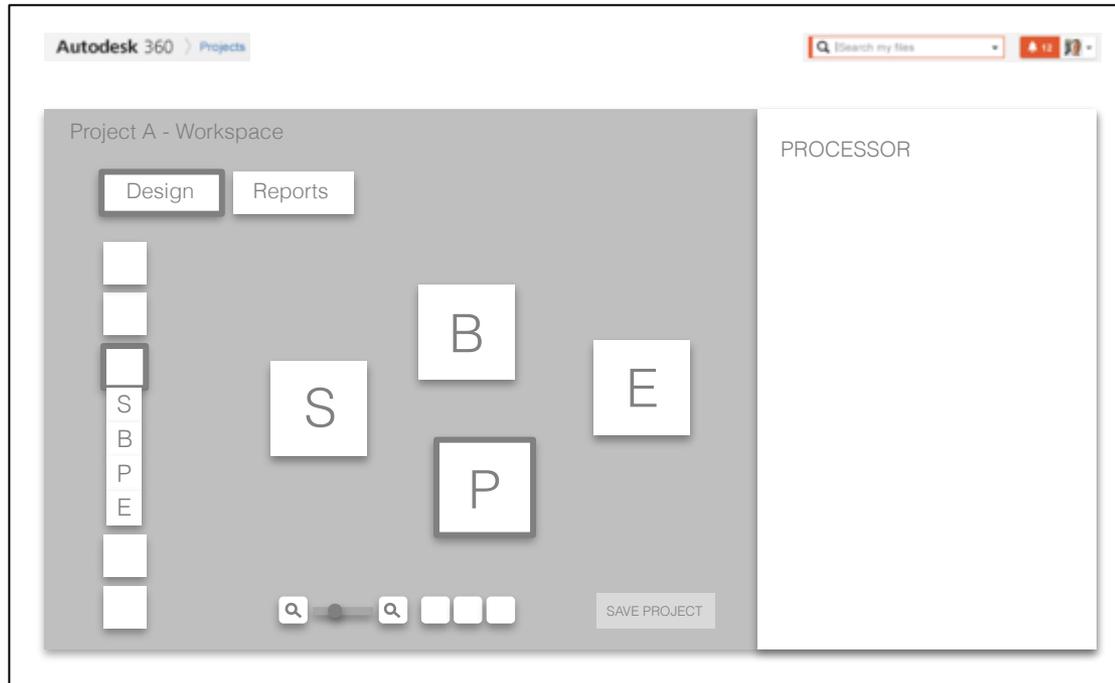
Option to quickly configure objects in canvas with a contextual menu.

WORKSPACE- DEFINE SOURCE PROPERTIES



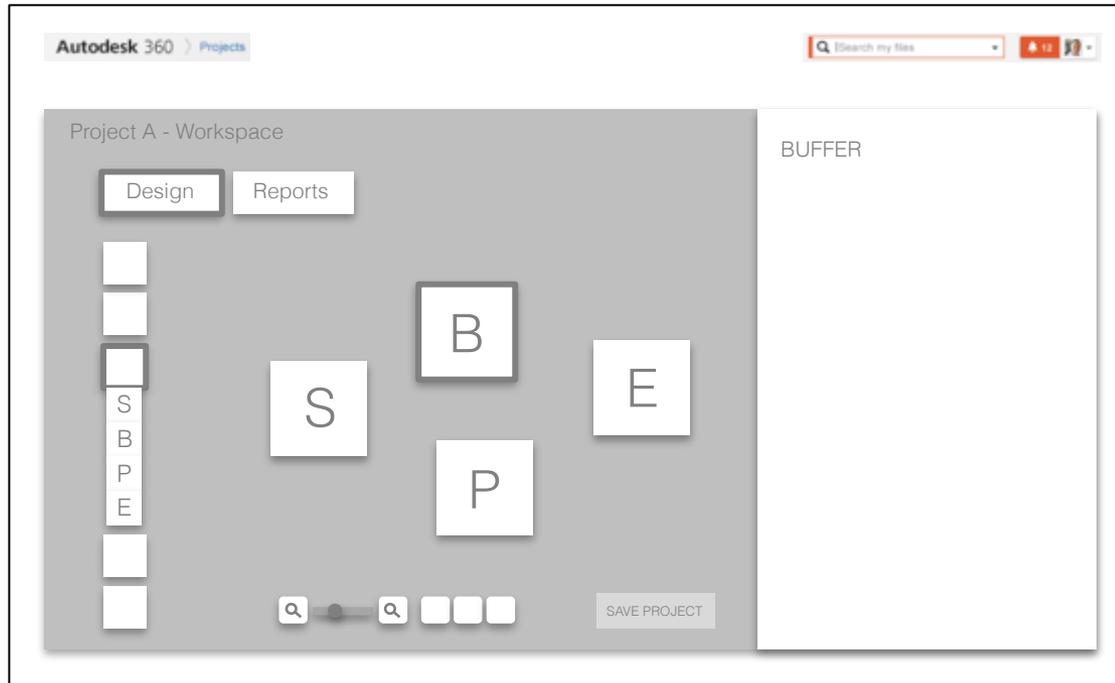
NOTES:
Define properties for
Source.

WORKSPACE- DEFINE PROCESSOR PROPERTIES



NOTES:
Define properties for
Processor.

WORKSPACE- DEFINE BUFFER PROPERTIES



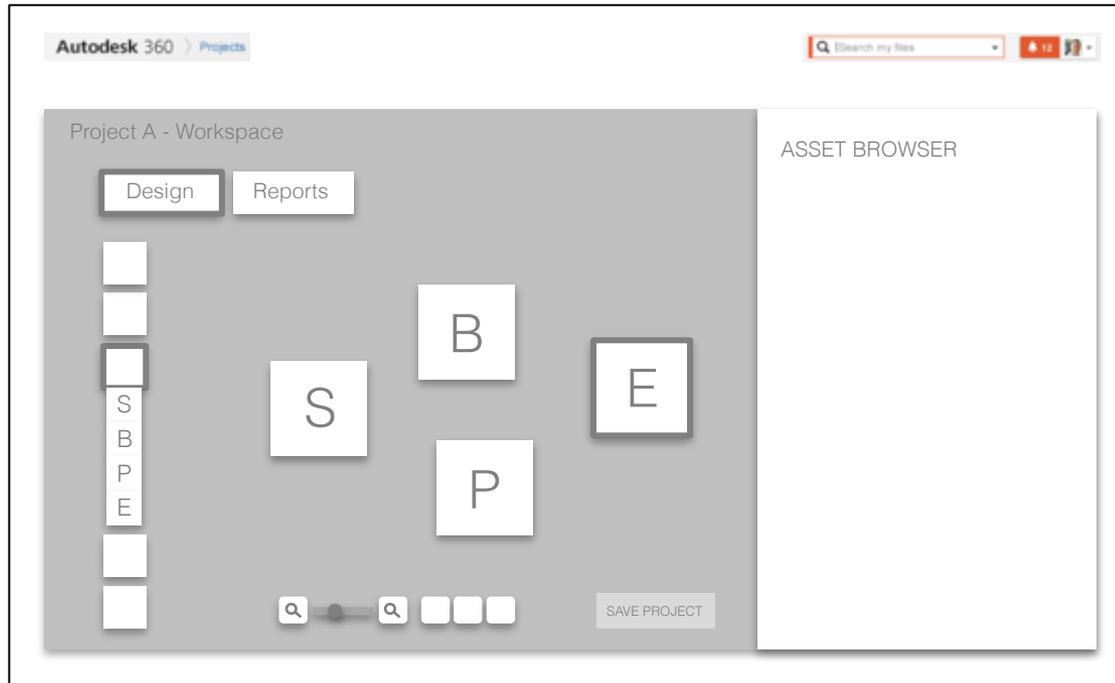
NOTES:
Define properties for
Buffer.

WORKSPACE- DEFINE END PRODUCT PROPERTIES



NOTES:
Define properties for End Product.

WORKSPACE- IN-CANVAS ASSET BROWSER



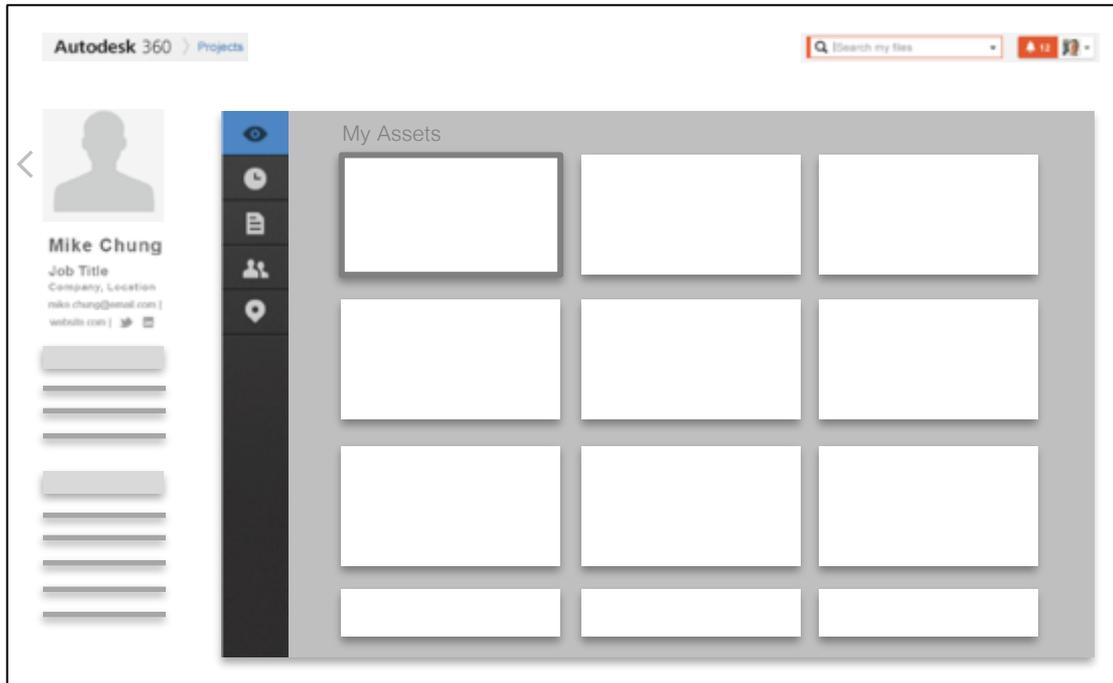
NOTES:

The in-canvas asset browser allows users to associate assets with objects on the workspace.

Assets can be pulled from several sources including local asset libraries, Factory Asset Warehouse, or publicly available community libraries.

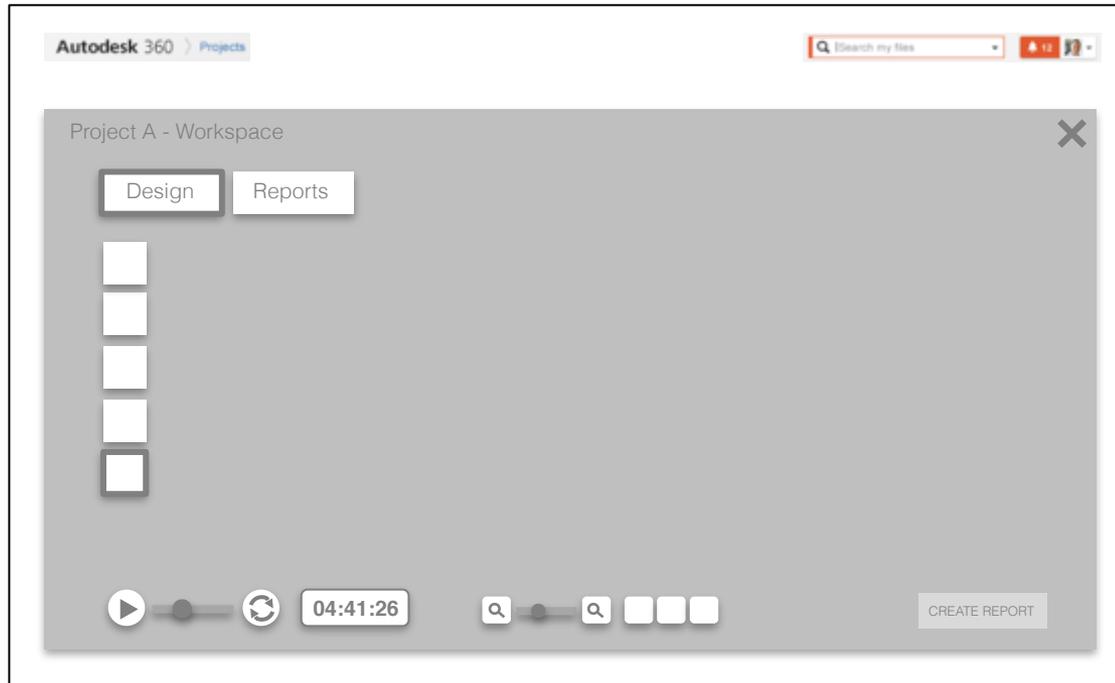
The in-canvas browser will also include search.

ASSET BROWSER- SELECT/MODIFY/CREATE ASSETS



NOTES:

WORKSPACE- RUN SIMULATION

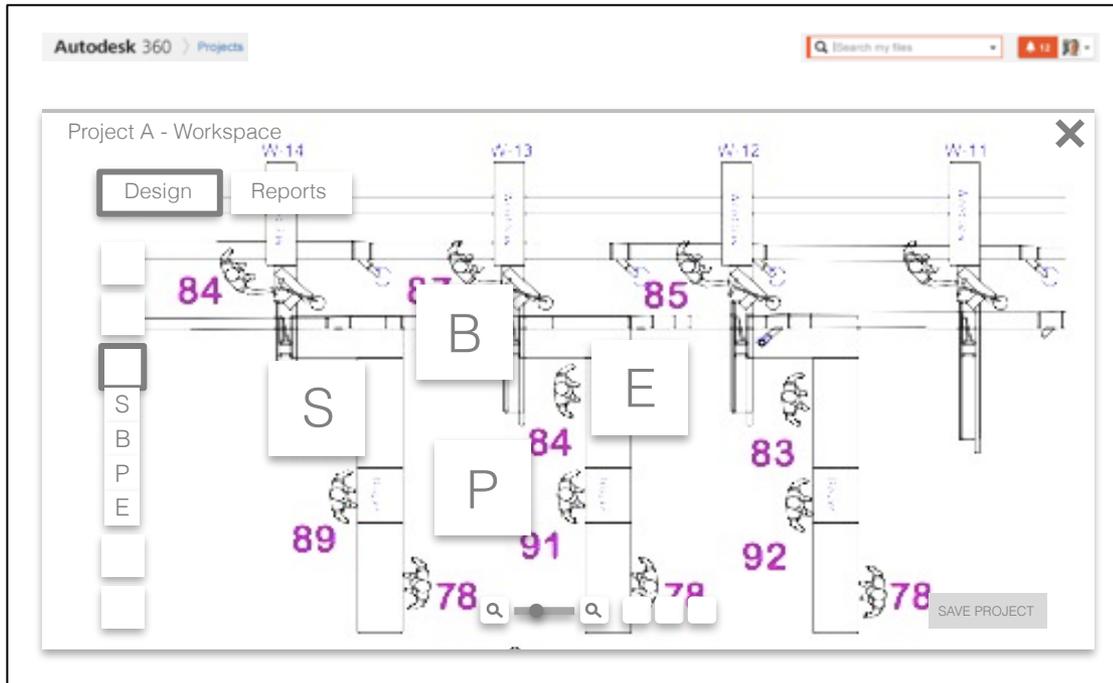


NOTES:

Simulation Menu comes up along with play controls and clock.

The Simulation Menu would give users more features and control over the simulation including output or reporting options.

WORKSPACE- IMPORT 2D LAYOUT

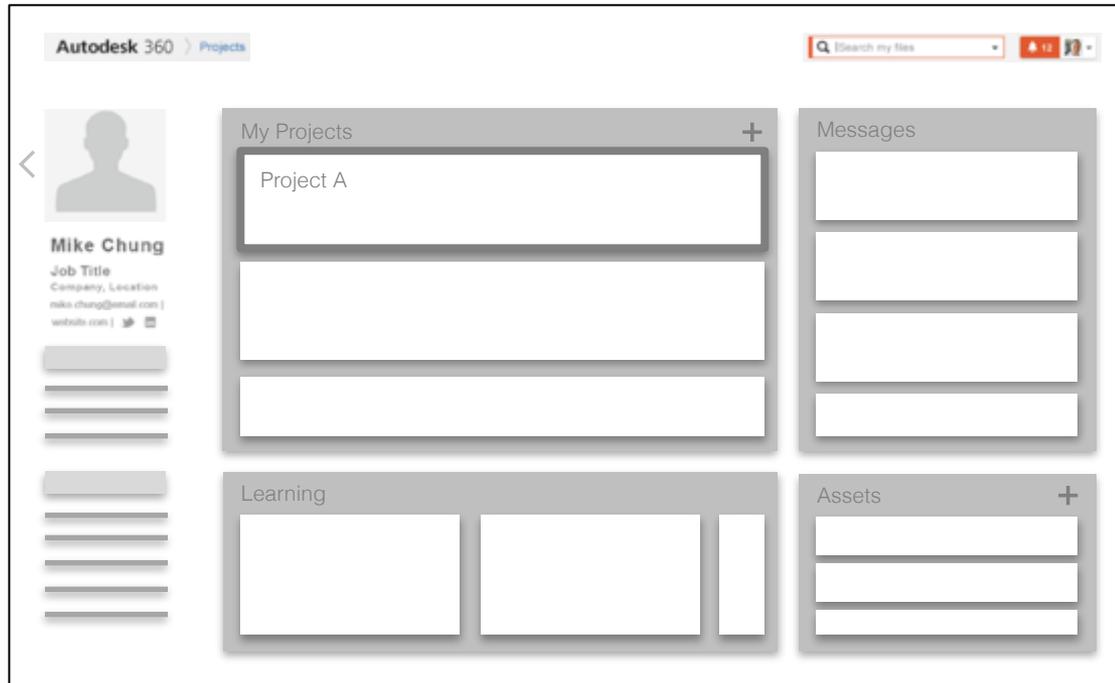


NOTES:
Ability to import AutoCAD
and other 2D formats.

STORY:

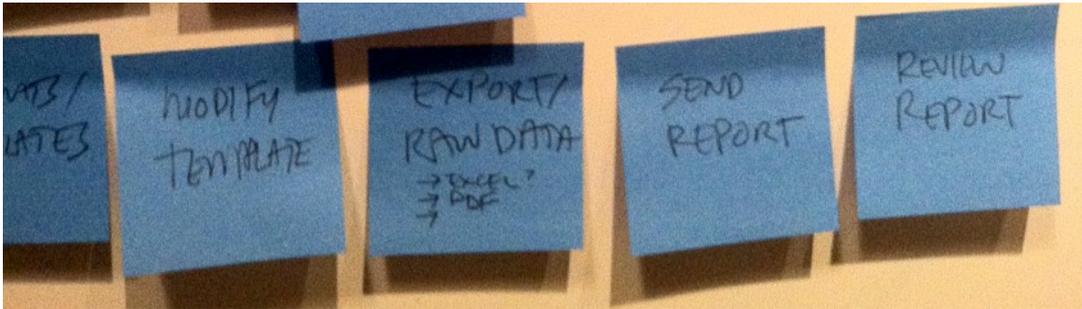
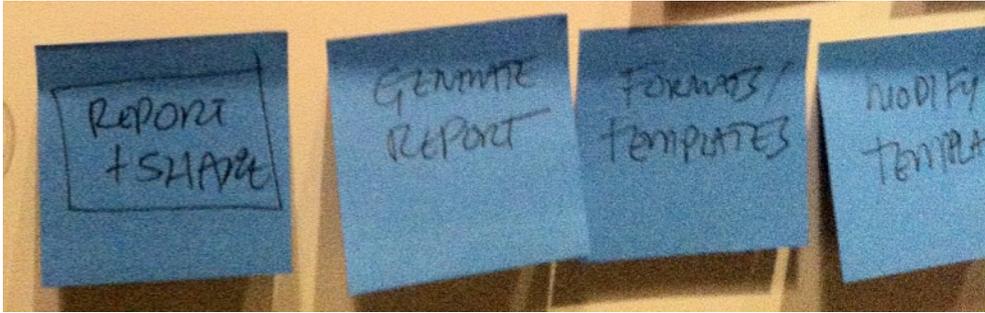
Eddie imports an AutoCAD document of their existing facility.

DASHBOARD- RETURN FROM WORKSPACE



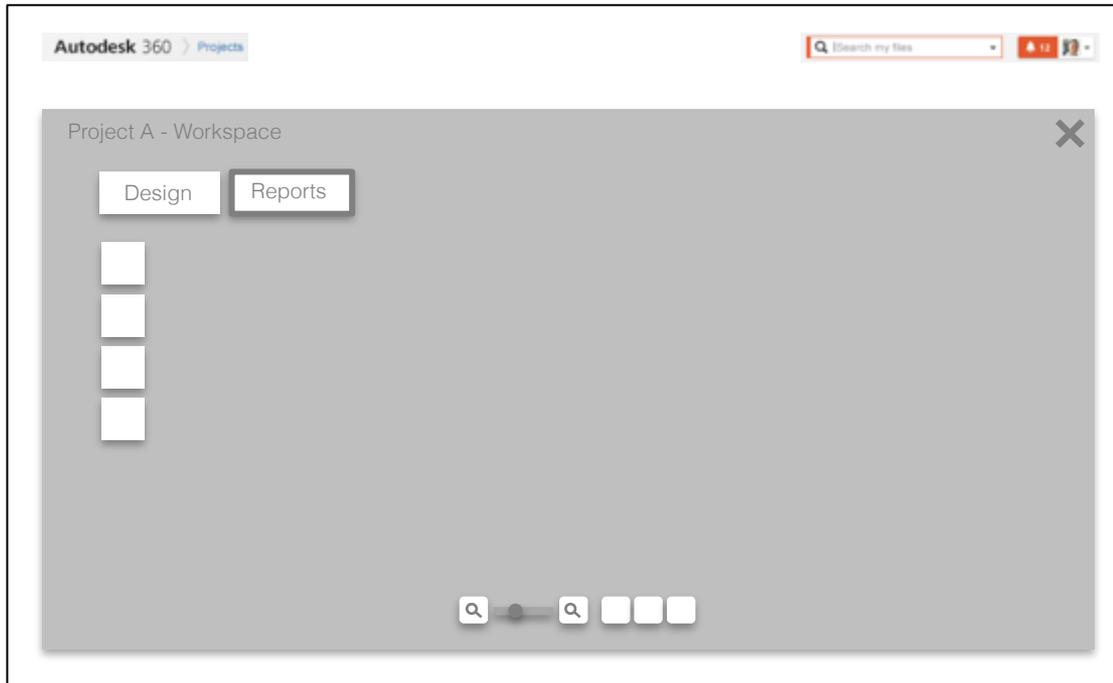
NOTES:
New project show up at
top of My Projects.

WIREFRAMES- COMMISSION



REPORT PAGE- GENERATE REPORT

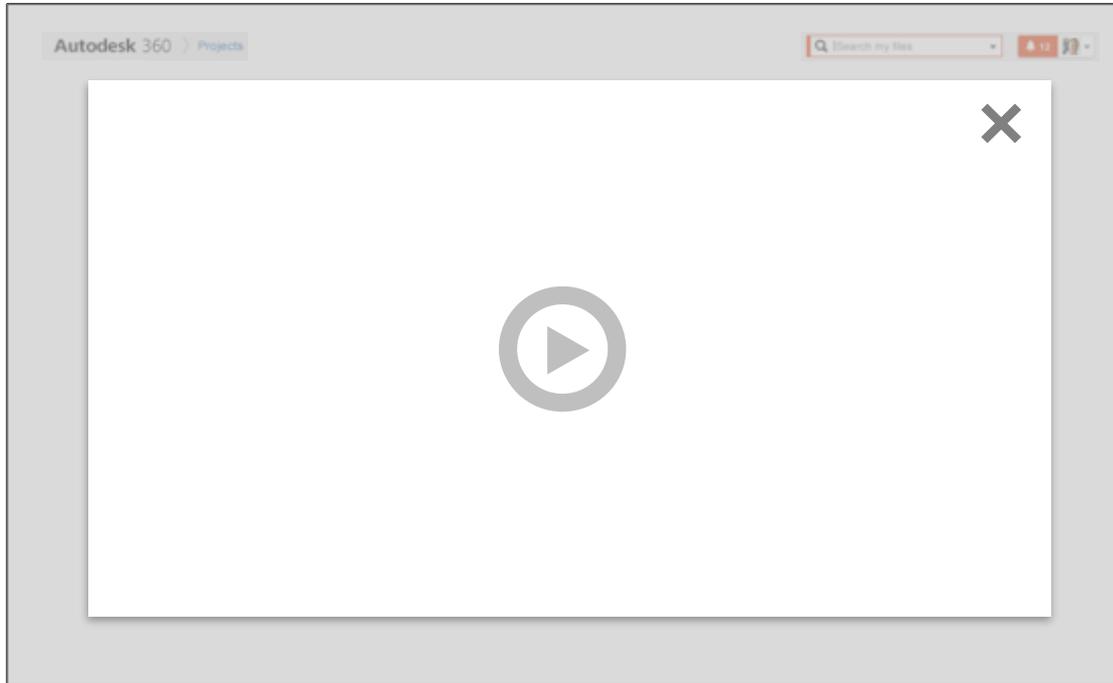
NOTES:



STORY:

Eddie then gets sign-off from Pam on new production line. (COMMISSION)

REPORT PAGE- SEND VIDEO

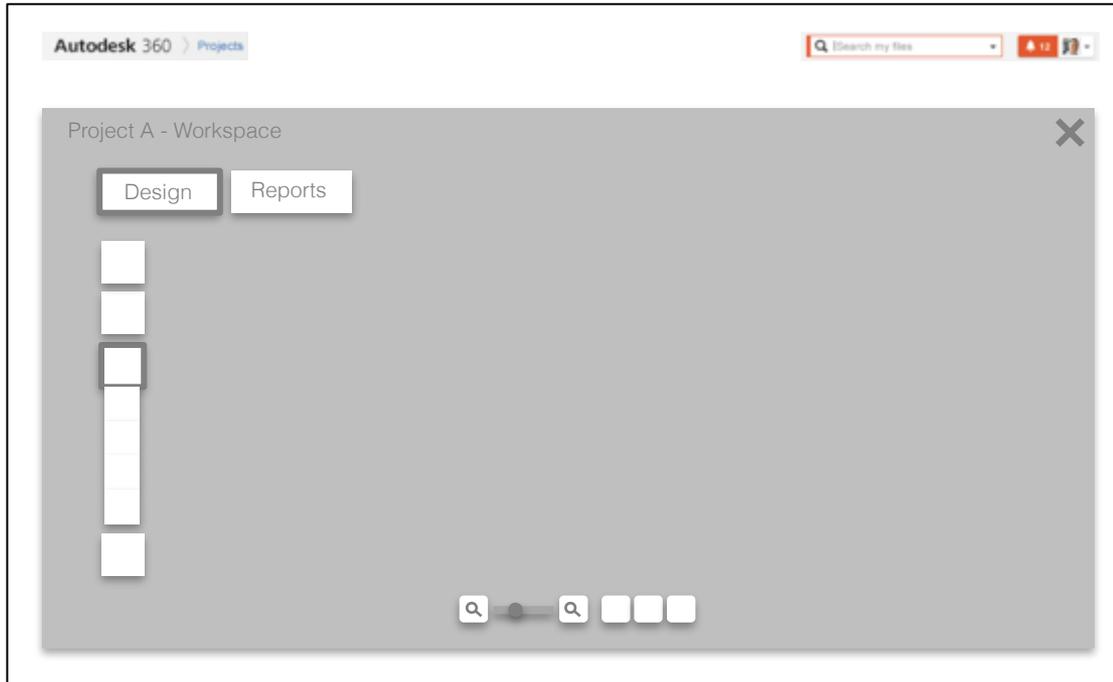


NOTES:

STORY:

Eddie then gets sign-off from Pam on new production line. (COMMISSION)

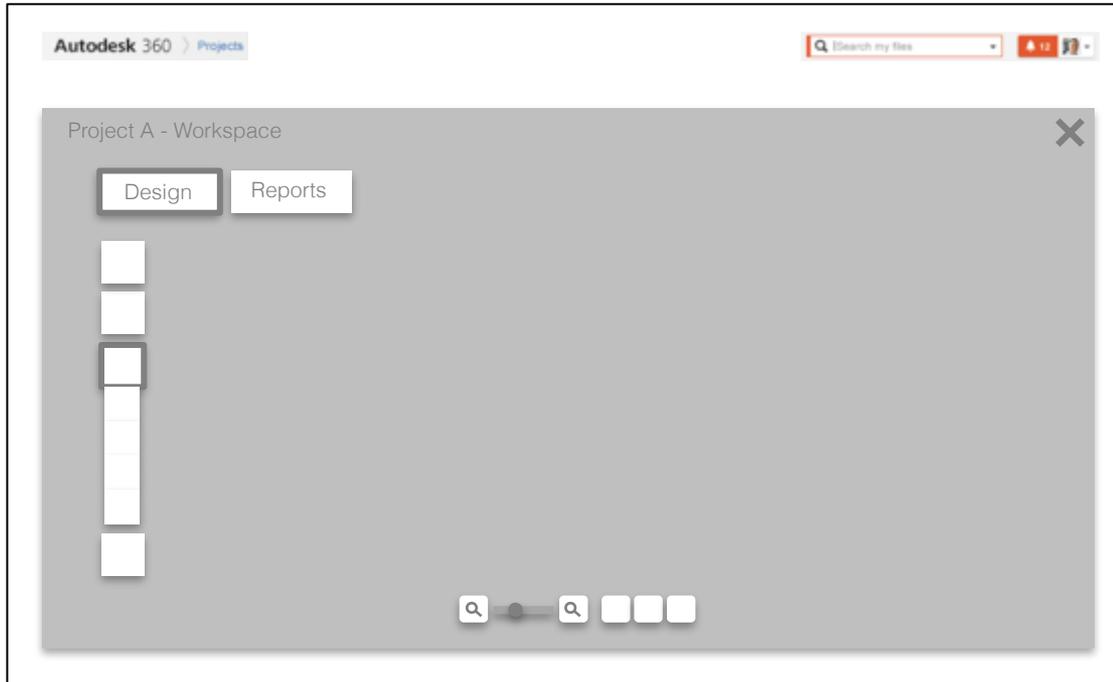
WORKSPACE- CONVERT TO 2D/3D



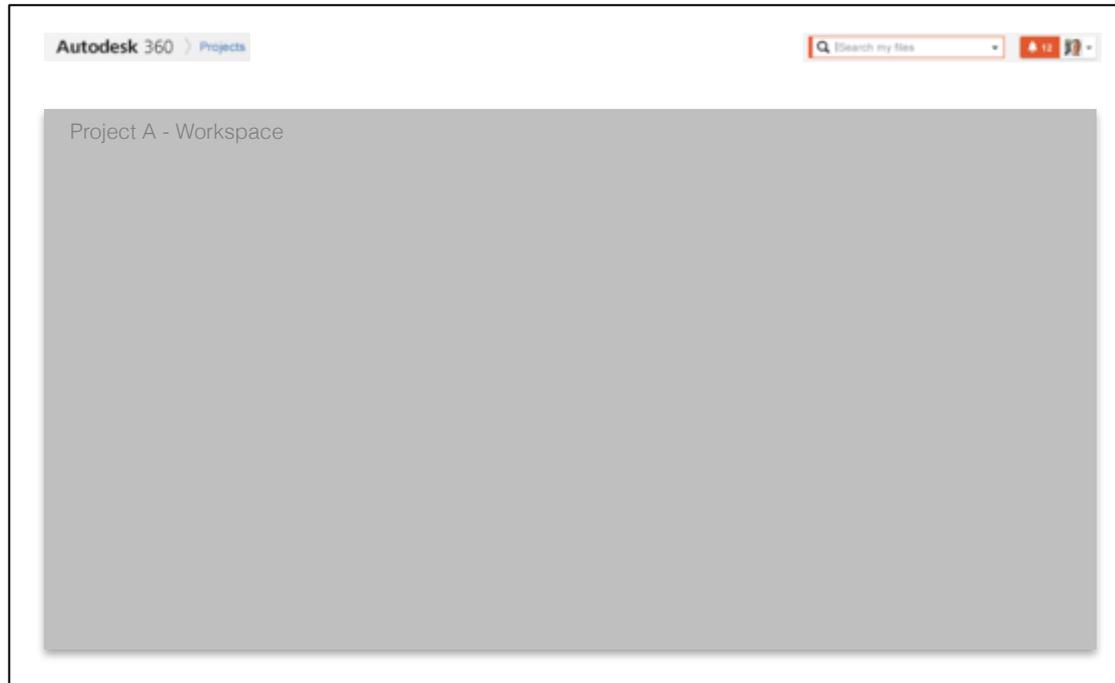
NOTES:

WORKSPACE- CREATE OBJECTS FROM 3D

NOTES:

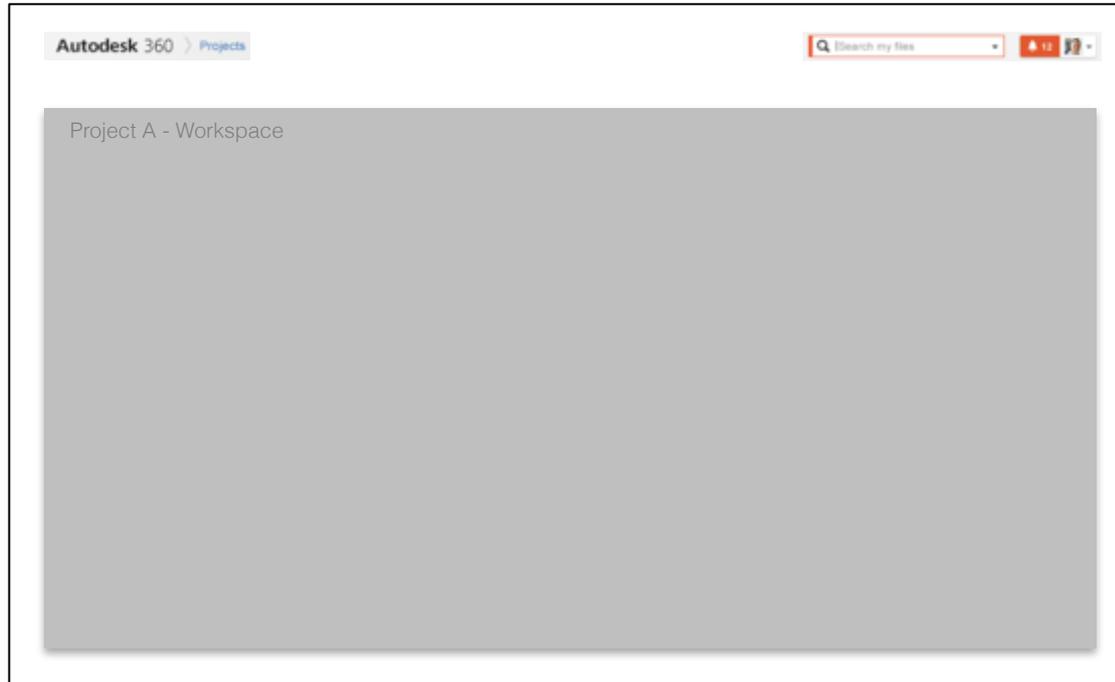


GENERATE REPORT



NOTES:
User will be able to
generate a report of the
simulation

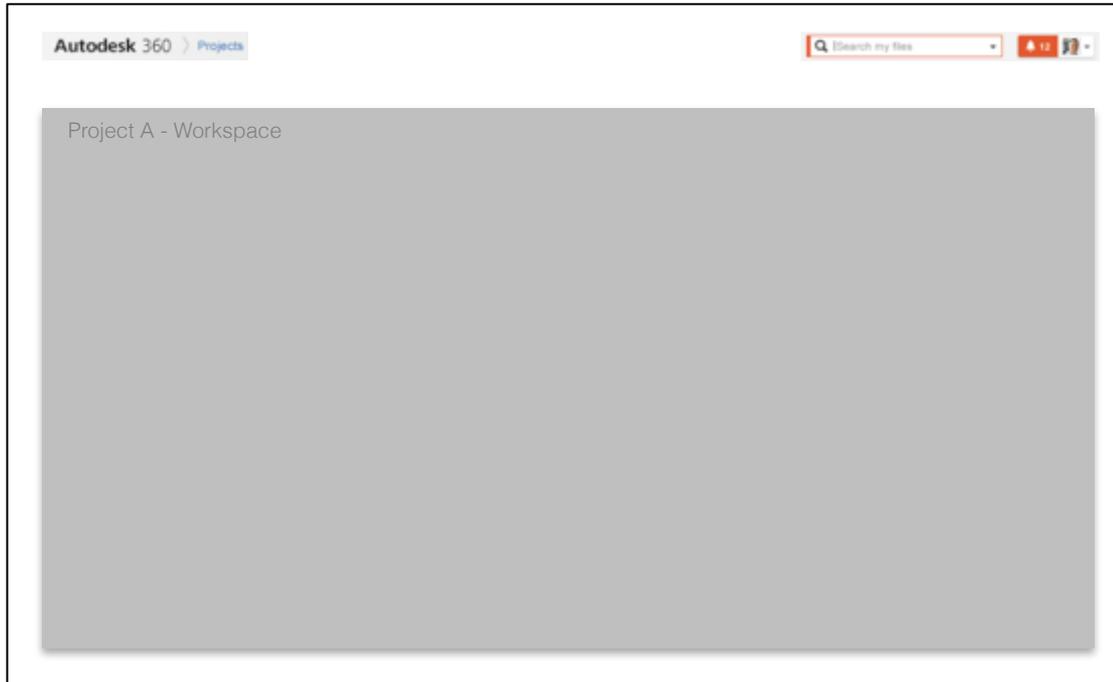
SELECT FORMAT/TEMPLATE



NOTES:

User will be able to select a data format or a report template

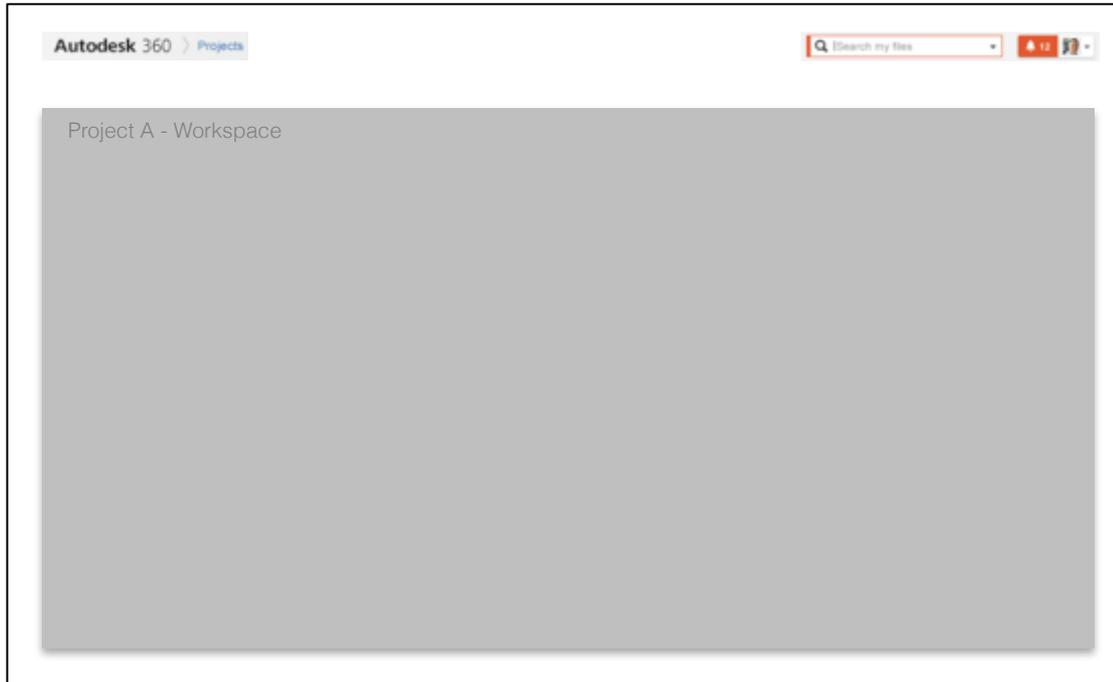
MODIFY TEMPLATE



NOTES:

User will be able to make simple modifications to the report template

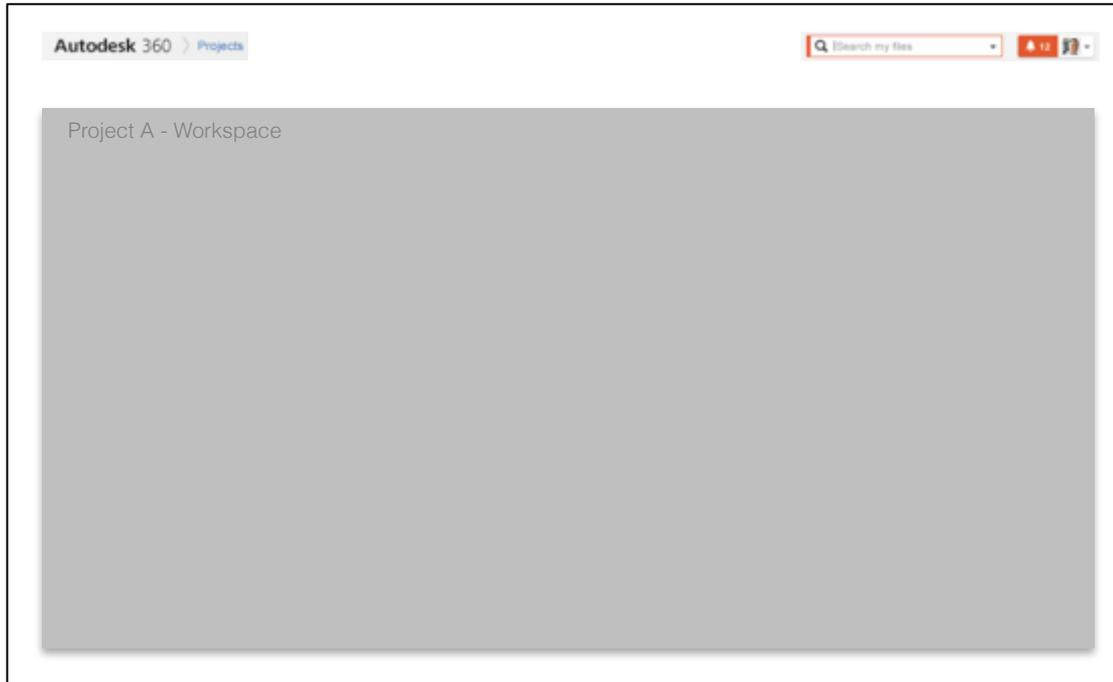
EXPORT RAW DATA



NOTES:

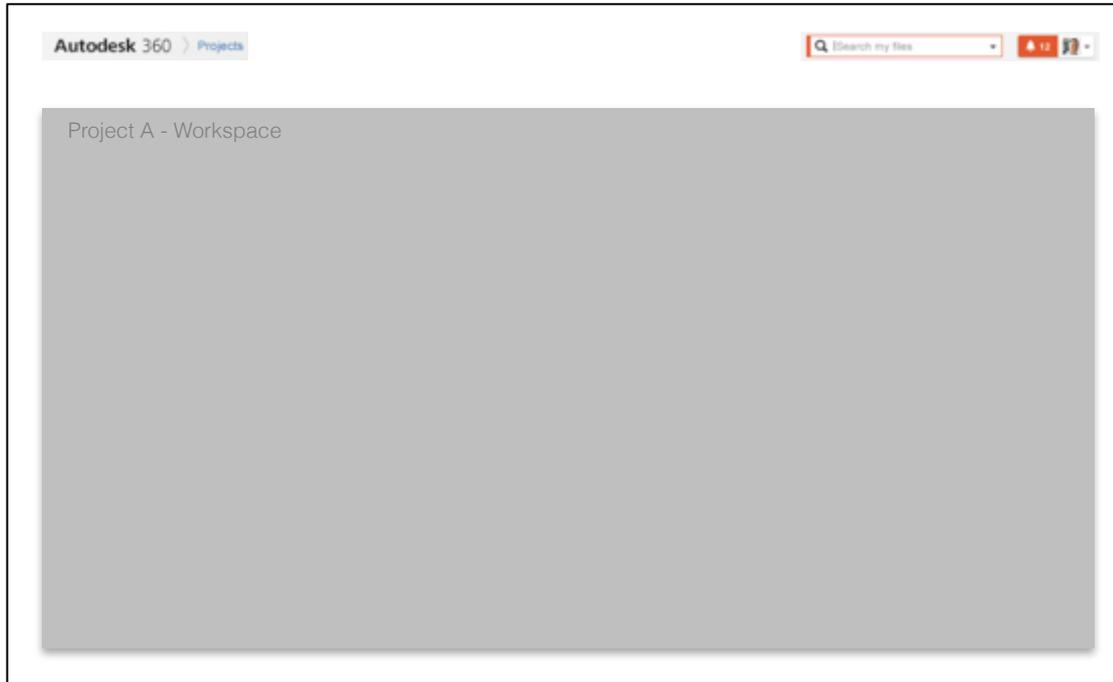
User will be able to export the raw data (.csv, .xml etc).

SEND REPORT



NOTES:
User will be able to send
the report

REVIEW REPORT

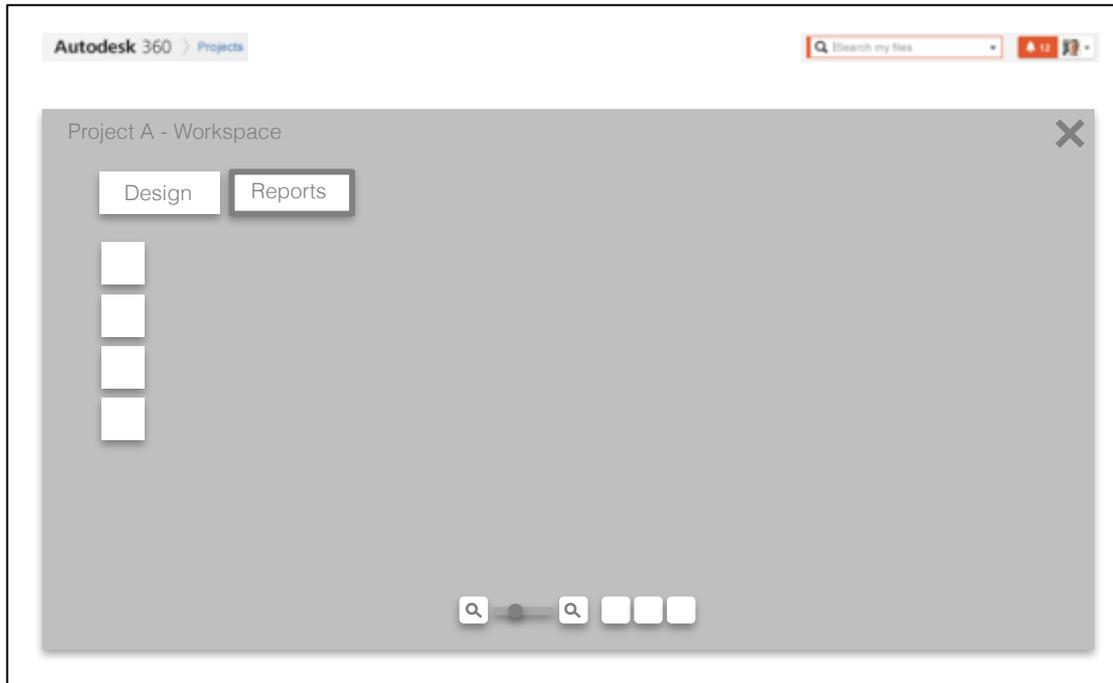


NOTES:

User will be able to review a template report within the UI

COMPARISON PAGE-EVALUATE UPGRADE

NOTES:



STORY:

The new production line is built and has been up and running for a while. Manny has an idea for a new process improvement that he simulates in CAM360 and then reviews with Pam. (OPERATE)

