

CS473426 - ¿Qué es Autodesk Construction Cloud?

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Sebastian Zaje

Technical Solution Executive para España y Portugal
Autodesk

Safe Harbor

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Sobre el ponente

Jose Ariza

Jose Ariza se unió a Autodesk en 2017. Trabaja como Especialista Técnico para España y Portugal, centrándose en el portfolio de construcción de Autodesk. Antes de unirse a Autodesk, José había trabajado como consultor BIM independiente y también como responsable técnico para un distribuidor Platinum de Autodesk. Como resultado, durante más de 8 años hasta la fecha Jose ha ayudado a las principales empresas del sector AEC durante el proceso de implementación de la metodología BIM y en el desarrollo de proyectos multidisciplinares tanto nacionales como internacionales utilizando la tecnología de Autodesk. Además, ha colaborado con la Universidad de Córdoba (España) como Profesor Asociado. Nacido en Córdoba, Jose es licenciado en Ingeniería Técnica Industrial y master en Técnicas y Métodos de Diseño de Arquitectura e Ingeniería por la Universidad de Córdoba. Cuando no está instalando una nueva versión de los productos de Autodesk, Jose pasa su tiempo libre jugando al fútbol, viendo series y MotoGP, ya que es un amante de las motos.

Agenda

1. El viaje de Autodesk en el sector de la Construcción
2. Destino: Hacia donde vamos

La construcción No es SENCILLA

Ganar Proyectos

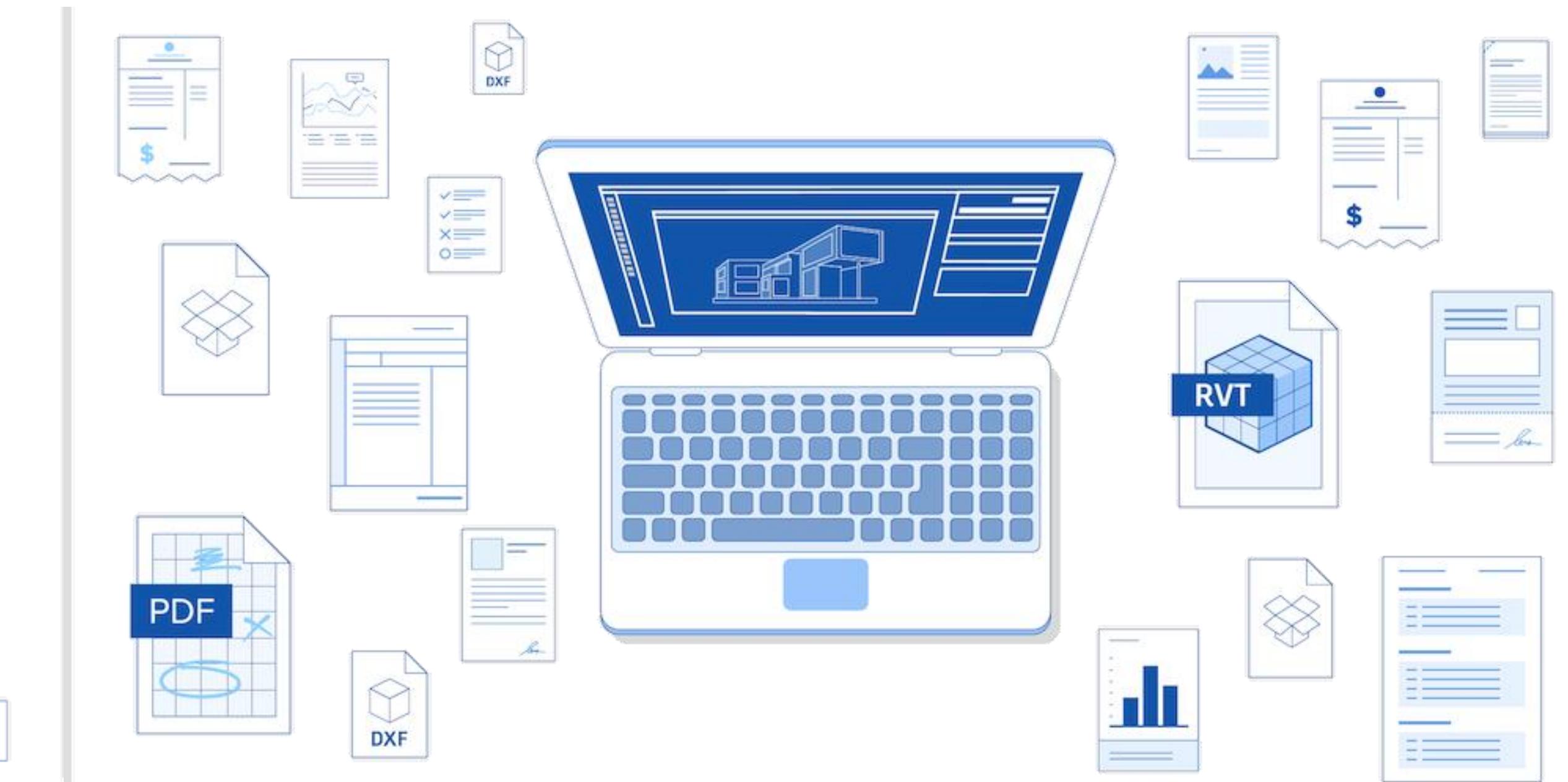
Retrasos

Retrabajos Evitables

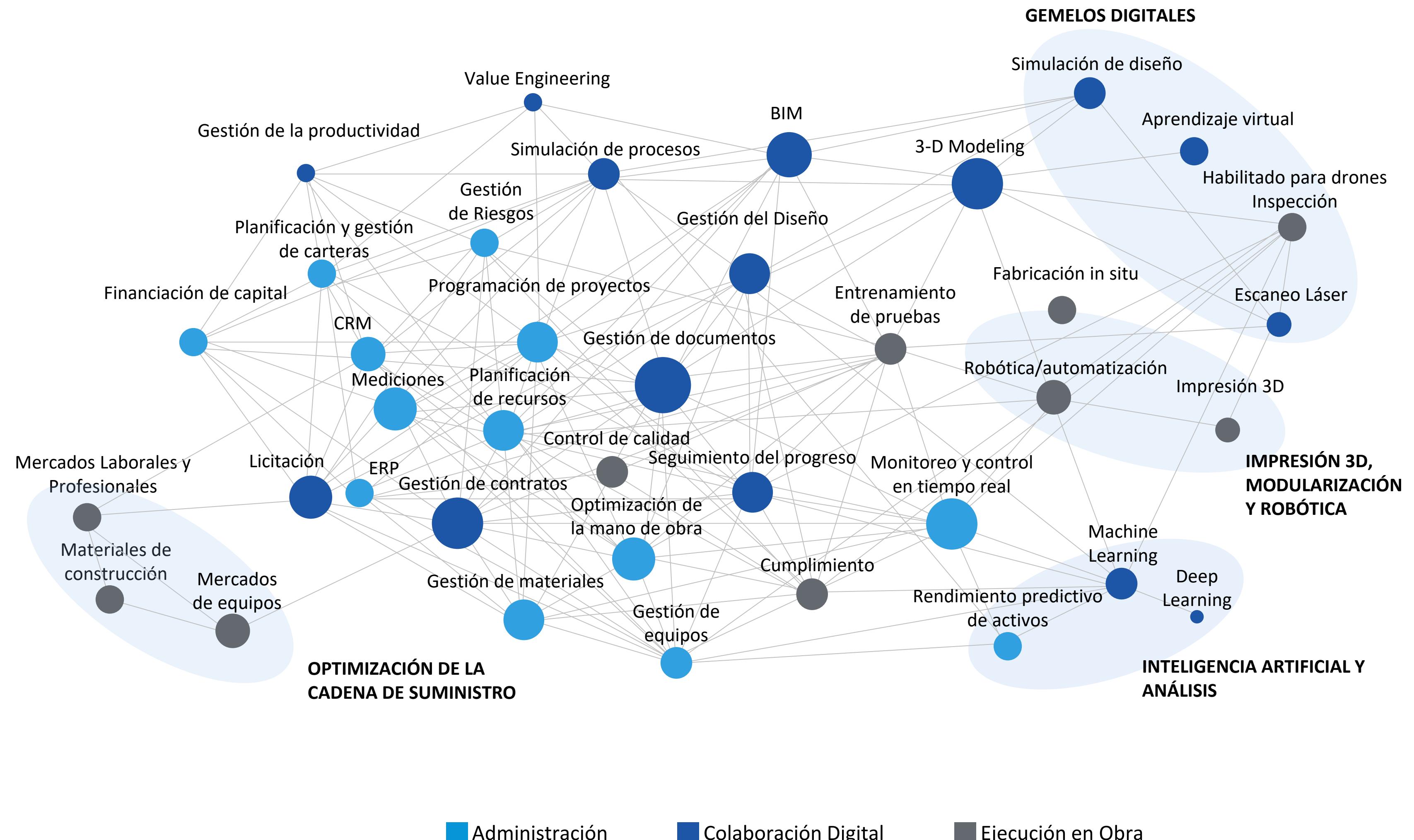
Procesos
Desconectados

Márgenes bajos

Incremento de la
complejidad



Ecosistema Tecnológico en la Construcción



Source: McKinsey Analysis

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25%

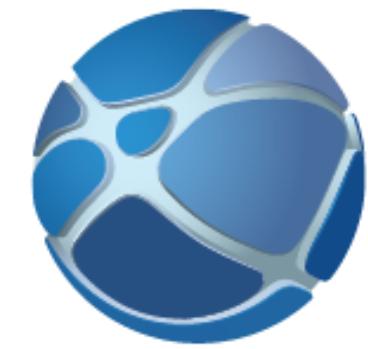
Empresas constructoras usan
5 o más aplicaciones

240B

Coste anual debido
a retrabajos

30%

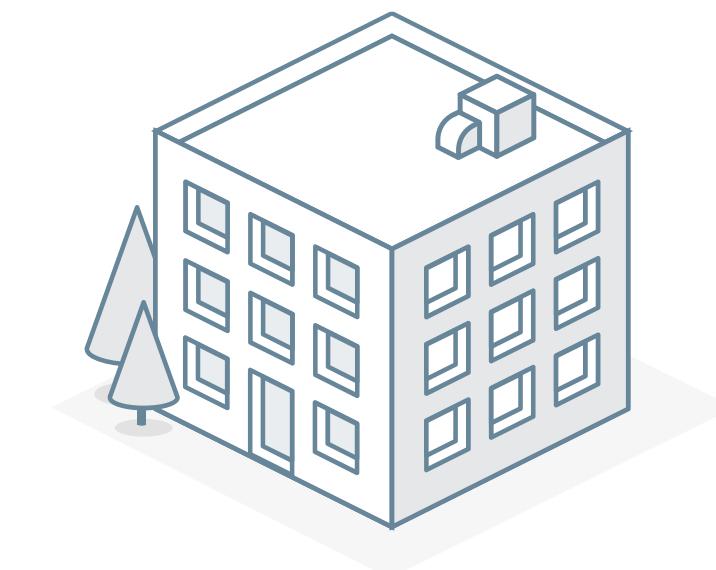
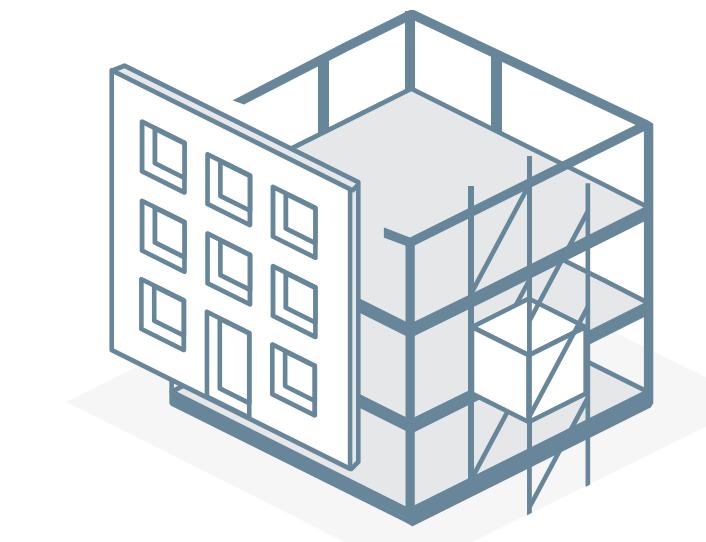
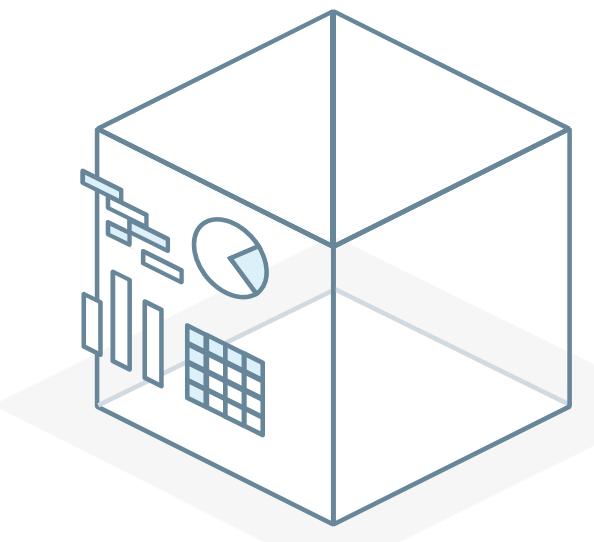
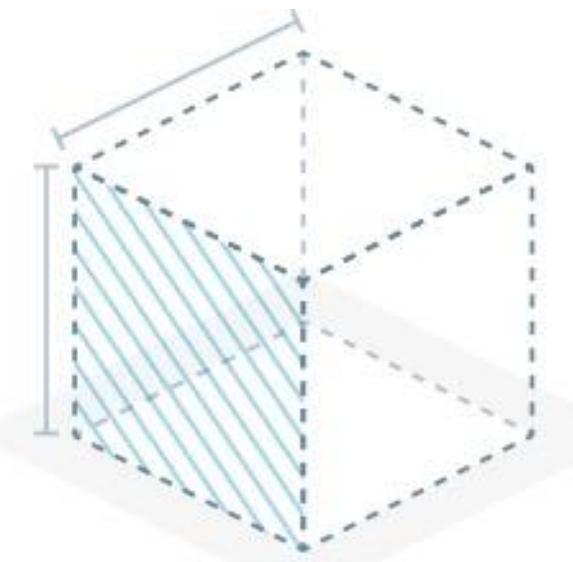
De los datos del proyecto
creados se pierden a su
finalización



AUTODESK CONSTRUCTION CLOUDTM



AUTODESK CONSTRUCTION CLOUD™



DISEÑO

PLANIFICACIÓN

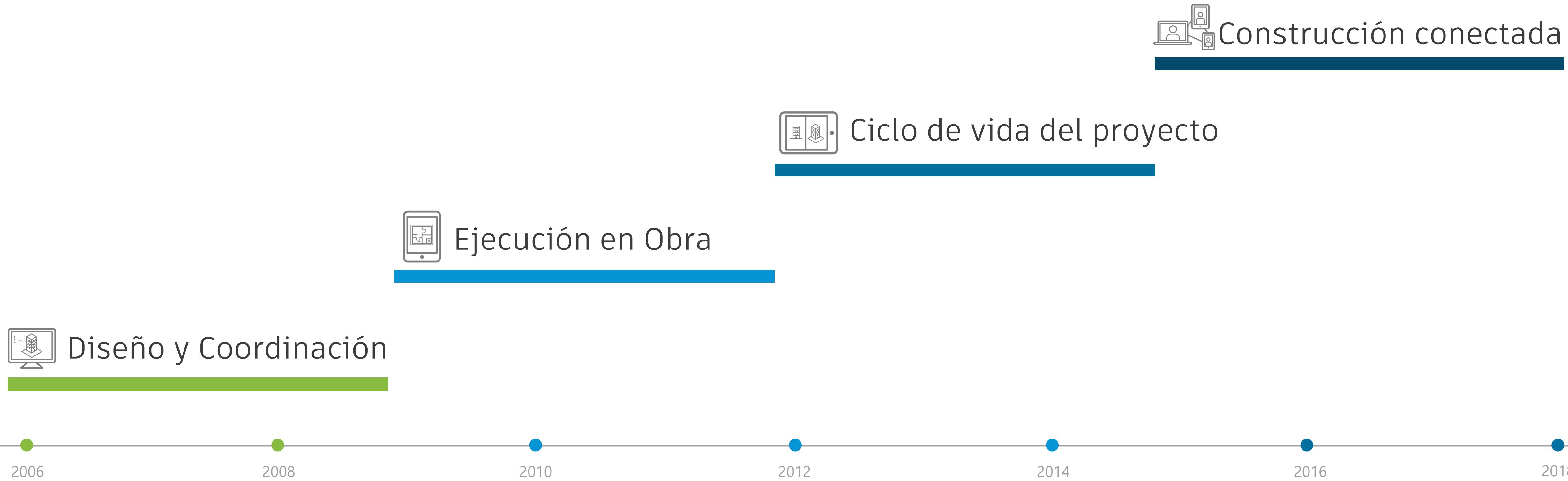
CONSTRUCCIÓN

OPERACIÓN



El viaje de Autodesk en la construcción

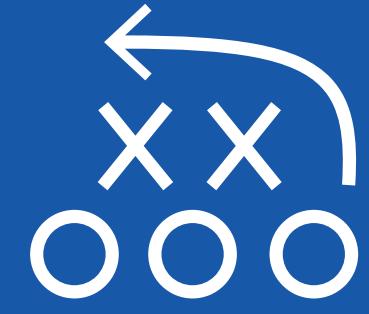
El viaje de Autodesk en la construcción



Principios fundamentales a lo largo del viaje



Escuchar a los clientes

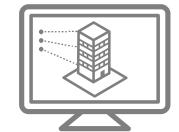


Buscar soluciones para
abordar los problemas



Conocer nuestros propios
límites

El viaje de Autodesk en la construcción



Diseño y Coordinación



2006

2008

2010

2012

2014

2016

2018



APARECEN LAS REDES SOCIALES



El viaje de Autodesk en la construcción



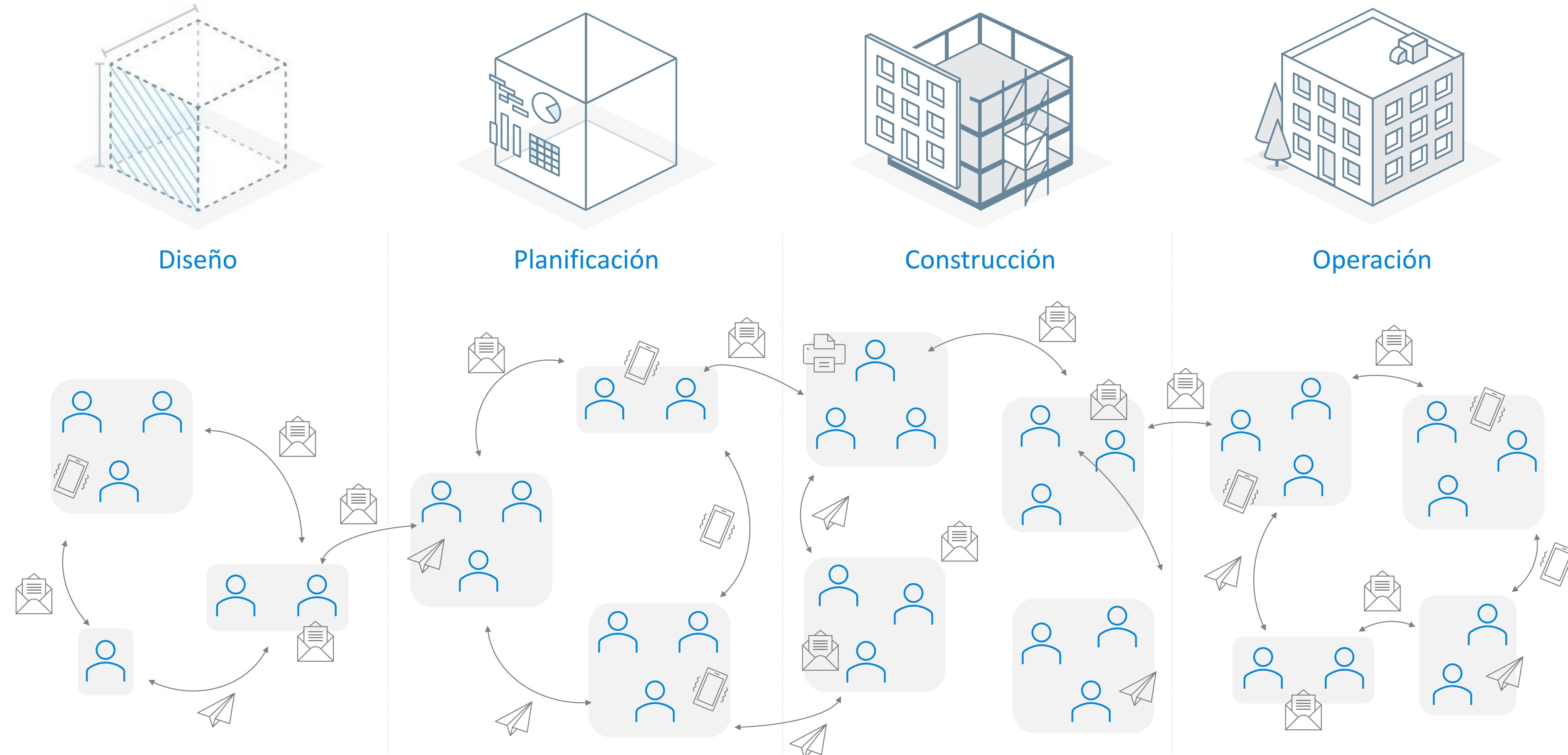


El viaje de Autodesk en la construcción





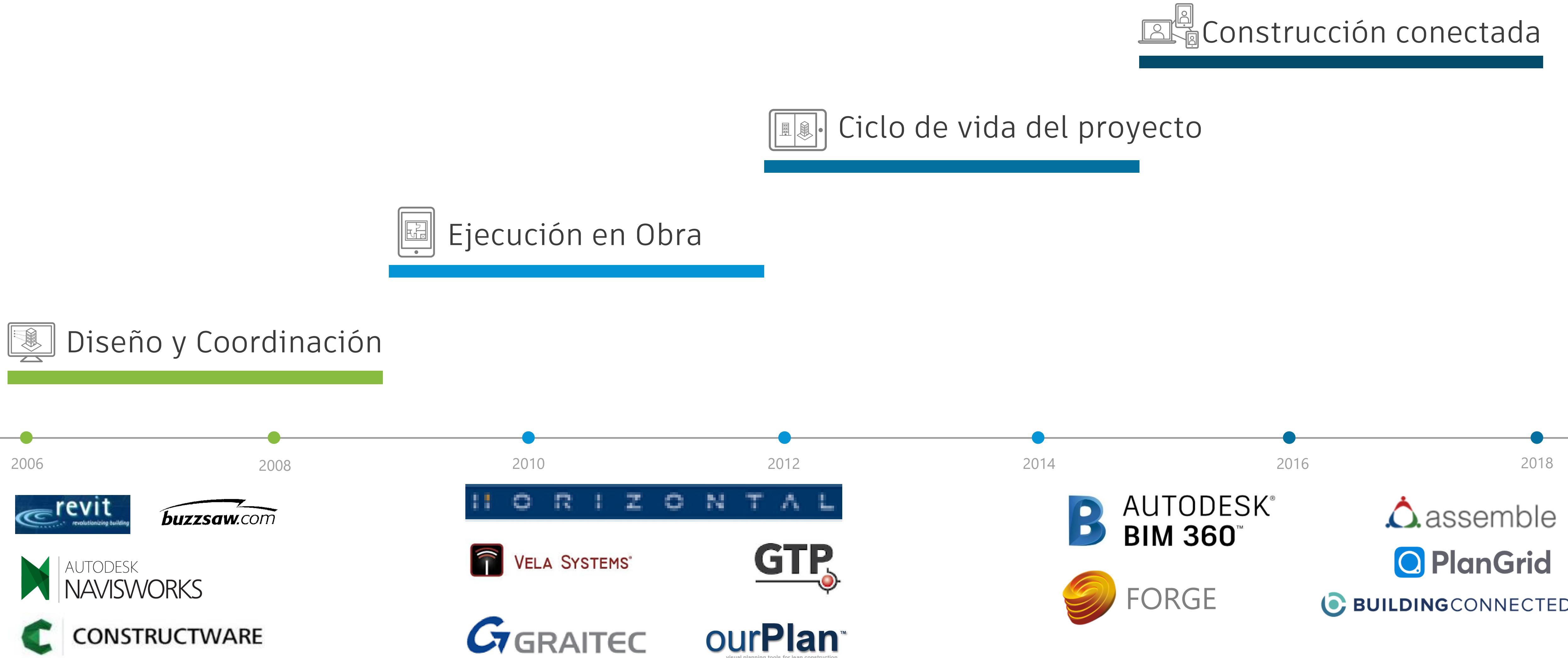
La Construcción es Colaborativa, Pero Fragmentada



>70% de la industria mundial de la construcción sigue trabajando con procesos tradicionales basados en papel



El viaje de Autodesk en la construcción





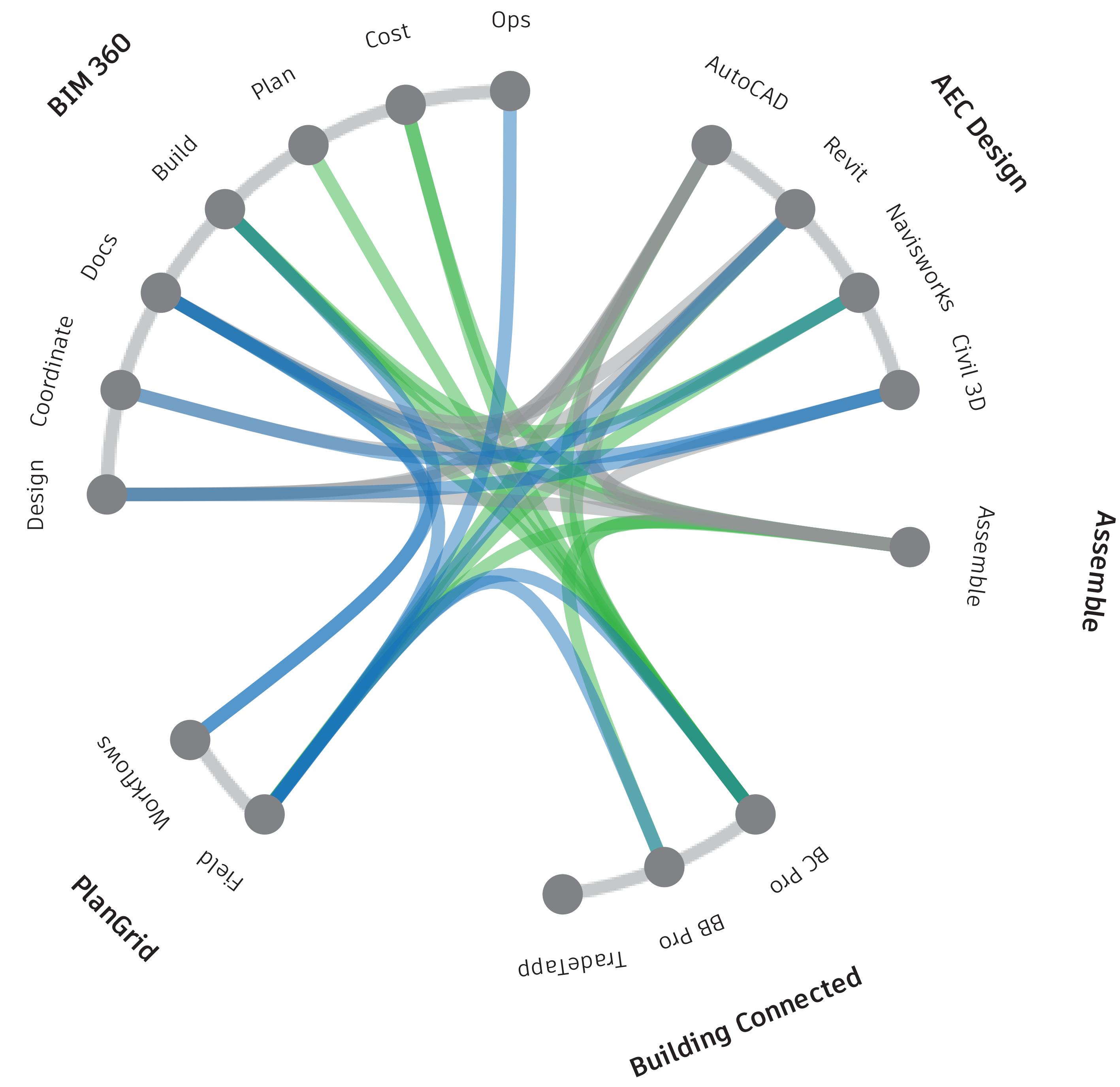
AN AUTODESK® COMPANY



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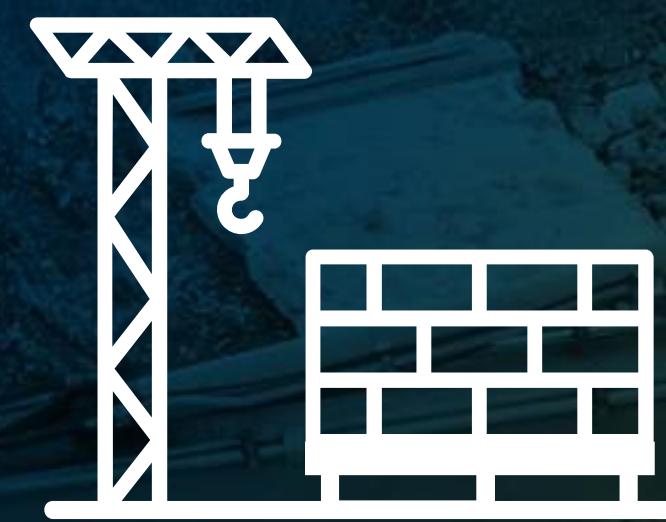




DISEÑO



REVIT®



PRECONSTRUCCIÓN



BIM 360™ DESIGN



CONSTRUCCIÓN



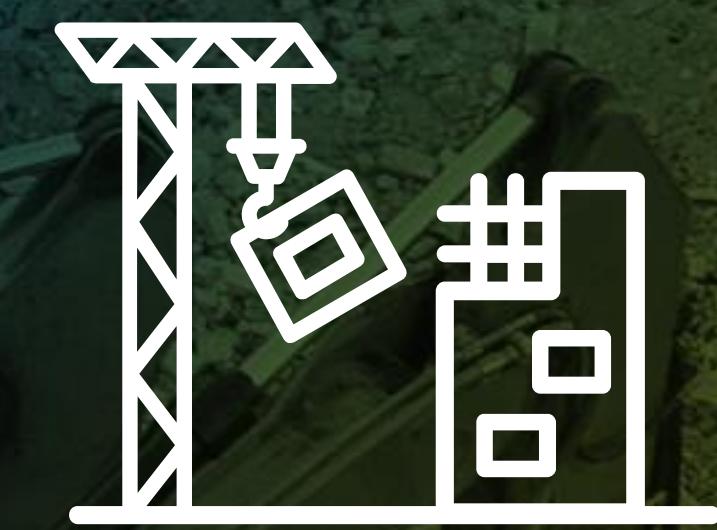
OPERACIÓN



DISEÑO



PRECONSTRUCCIÓN



CONSTRUCCIÓN



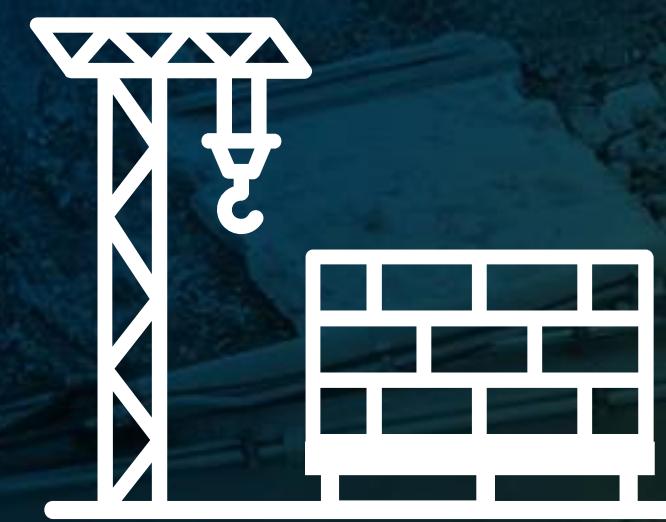
OPERACIÓN

 REVIT® /  BIM 360™ DATA

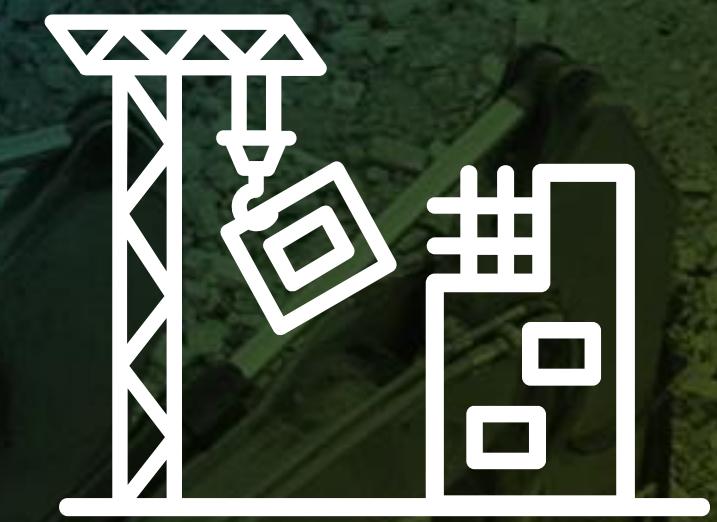
 PlanGrid
AN AUTODESK COMPANY



DISEÑO



PRECONSTRUCCIÓN



CONSTRUCCIÓN



OPERACIÓN



BUILDINGCONNECTED
AN AUTODESK® COMPANY



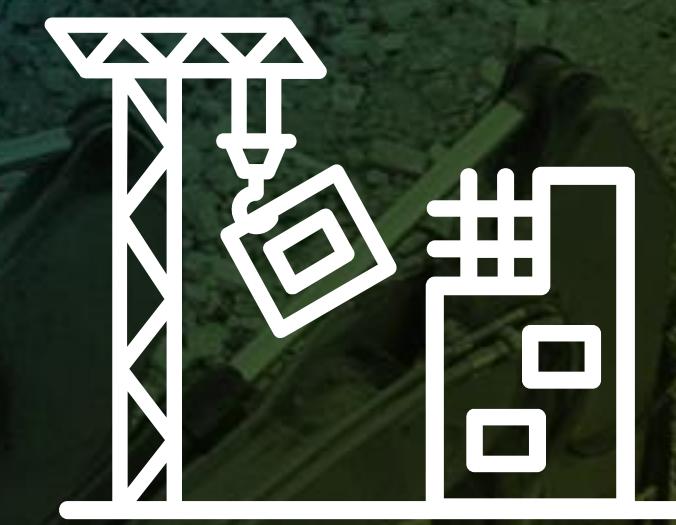
PlanGrid
AN AUTODESK COMPANY



DISEÑO



PRECONSTRUCCIÓN



CONSTRUCCIÓN

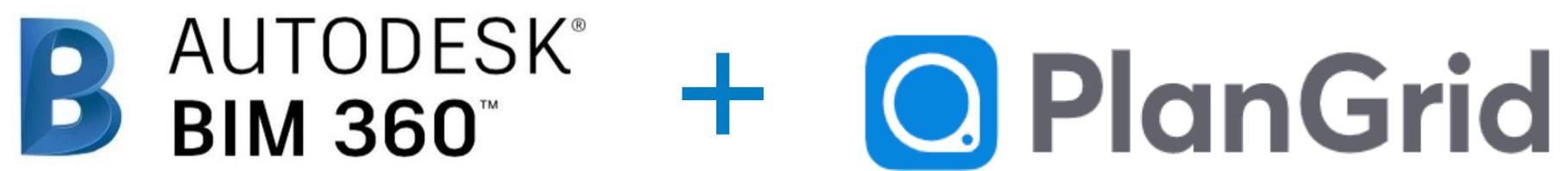


OPERACIÓN

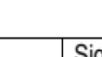
 **Plangrid**
AN AUTODESK COMPANY

 **BIM 360™ OPS**

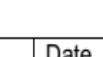
Skanska UK conecta la obra con la oficina



SKANSKA

Site Harpur Centre | Activity Scaffolding to side of building | Conducted by name Signature  Date 12/1/19

Risk Assessment No. 03 | Review Date 02/01/2020 | Revision No. 01 | Conducted by name Signature  Date Sign

Person Supervising Work Danny Board | Employer Access Scaffold | Approved by name Signature  Date Sign

Persons Exposed 0 | Employees 4 | Other Workers 0 | Public/Visitors 0 | Vulnerable Persons 0 | Total at Risk 4

Severity

5	5	10	15	20	25
4	4	8	12	16	20
3	3	6	9	12	15
2	2	4	6	8	10
1	1	2	3	4	5
0	1	2	3	4	5

Likelihood

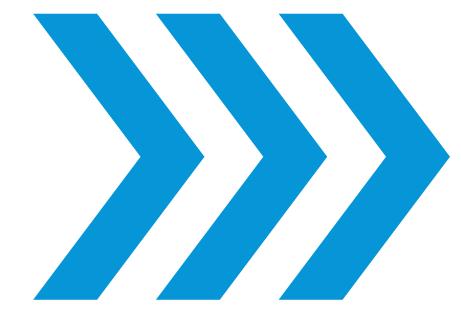
Low	Medium	High
		

Risk = Likelihood x Severity

All risks must be reduced to as low as is reasonably practicable, by applying control measures that reduce the likelihood of an incident, severity of an incident, or both. Risks that are defined as 'high' after control measures have been applied, must be re-reviewed and further control measures implemented to reduce the risk to low or medium

HAZARD

HAZARD	Factors of Harm		CONTROL MEASURES	Factors of Harm		Residual risk Multiple of columns 5 x 6	Control measures implemented by (name)	Control Frequency Check Rate
	Likelihood	Severity		Likelihood	Severity			
	Risk Multiple of columns 1 x 2			Risk Multiple of columns 5 x 6				
Erection of scaffold - falling objects/collapse of scaffold	20	All Scaffold contractors will be members of NASC Skanska require that any scaffolding contractor contracted to work on a Skanska UK project employs a	5	Danny Board	Daily			



AUTODESK BIM 360 | United Construction > Corporate Headquarters

Document Manager

Issue #161

ACTIVITY

Dec 2, 10:52 AM

Tom Denby Attached a document from Document Library 04P_002.pdf

Dec 2, 11:03 AM

Tom Denby Attached a document from Document Library 04P_002.pdf

Dec 2, 11:10 AM

Tom Denby Attached a document from Document Library 04P_002.pdf

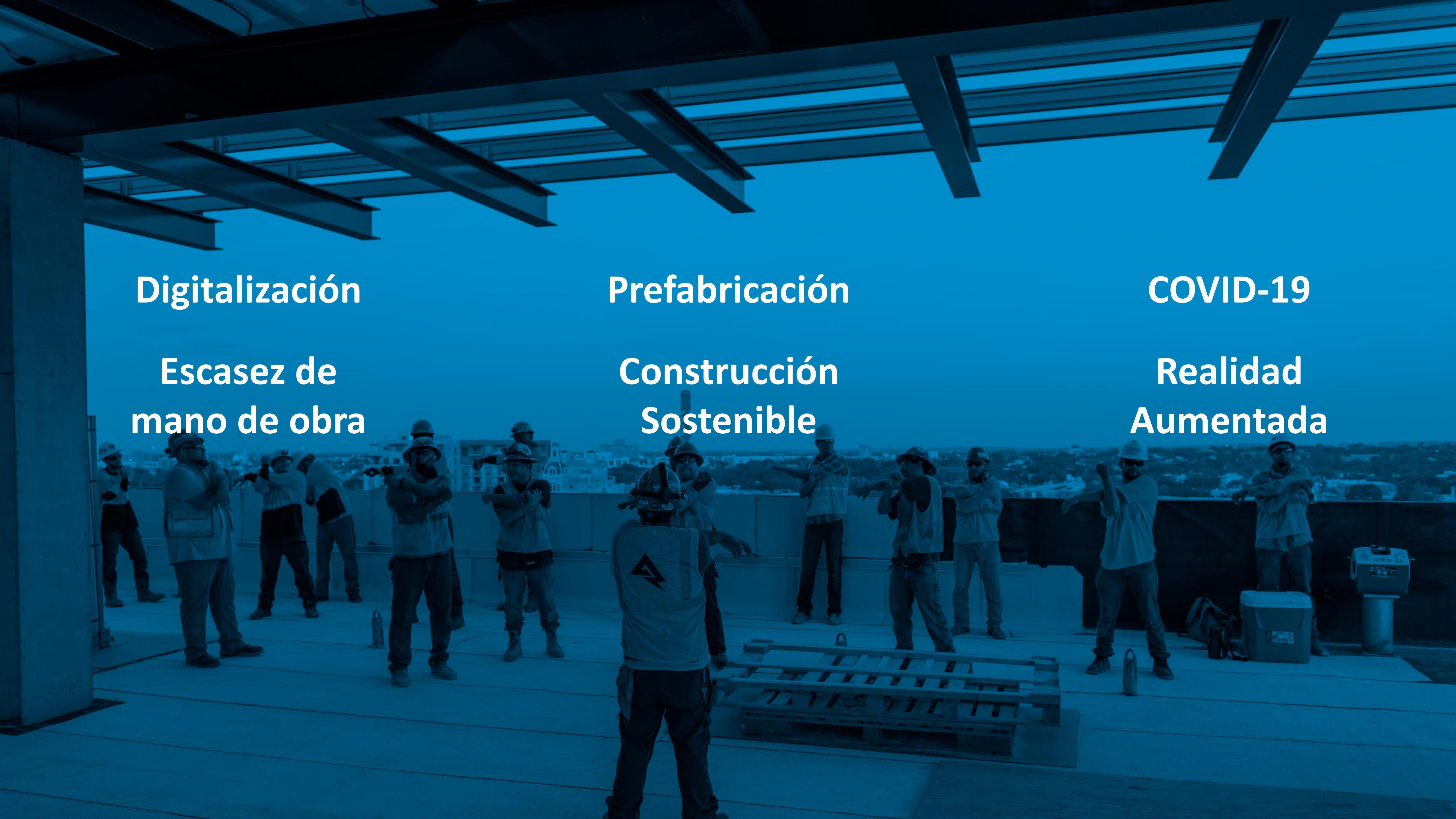
Showing 1 - 16 of 16



El viaje de Autodesk en la construcción

2020





Digitalización

Escasez de
mano de obra

Prefabricación

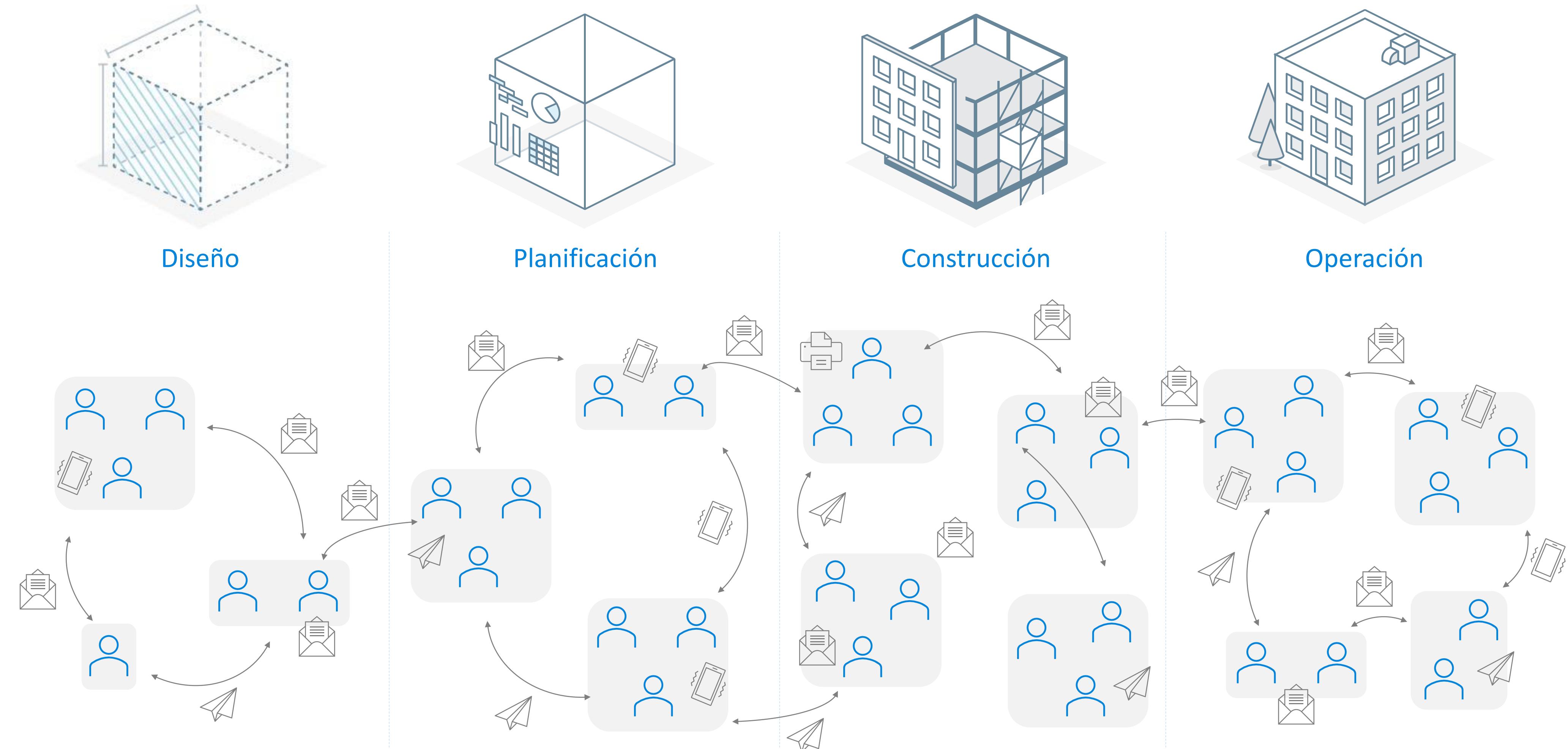
Construcción
Sostenible

COVID-19

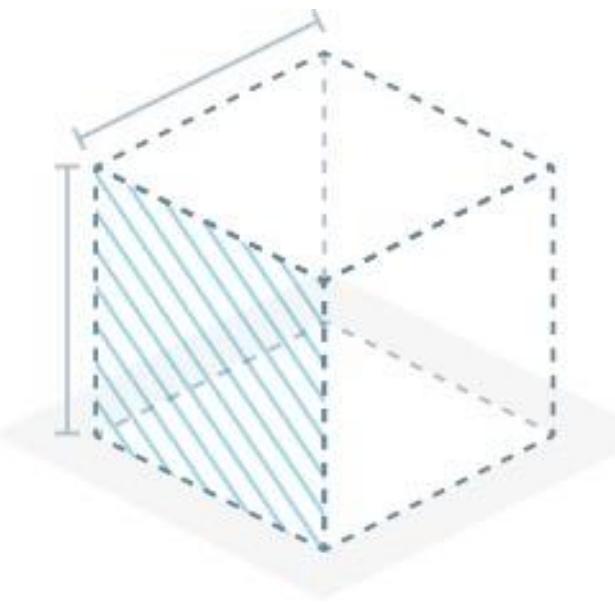
Realidad
Aumentada



La Construcción es Colaborativa, Pero Fragmentada

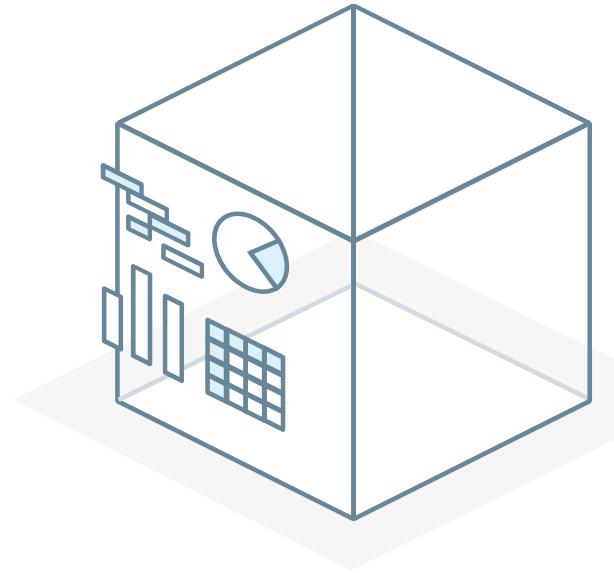


La tecnología conectada en construcción puede transformar el negocio



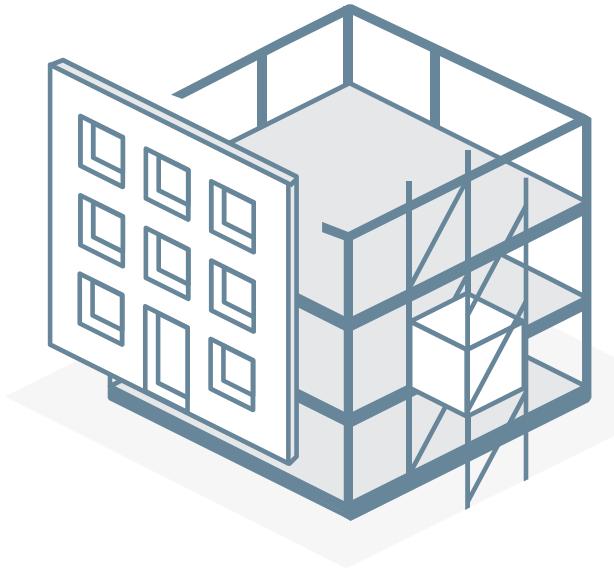
Diseñar

- Creación de diseño
- Diseño Colaborativo



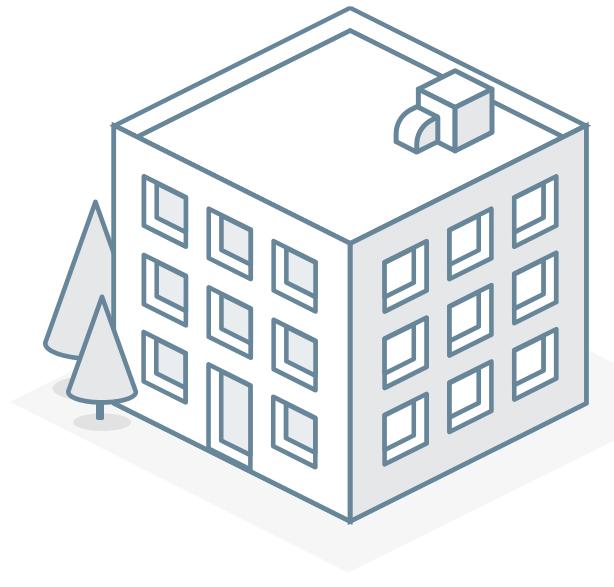
Planificar

- Coordinación de modelos
- Acondicionamiento de modelos
- Mediciones
- Gestión de ofertas
- Calidad



Construir

- Gestión de proyectos
- Control de costes
- Colaboración en Obra
- Calidad y seguridad
- Gestión de pagos



Operar

- Mantenimiento de instalaciones
- Ciclo de vida de los activos

Capacidades

Datos compartidos

Análisis

Red

Modelos · Planos · Incidencias · Especificaciones · RFIs · Costes · Activos · As-Builts

Análisis Predictivo · Informes de Referencia · Estrategias de optimización

Red de Constructores y subcontratas



Visión unificada



INTUITIVA

PRÁCTICA

ESCALABLE

MÓVIL





AUTODESK CONSTRUCTION CLOUD™

DISEÑO

AUTODESK
BIM COLLABORATE

AEC COLLECTION

PLANIFICACIÓN

AUTODESK
QUANTIFY

AUTODESK
COORDINATE

BUILDING
CONNECTED

ASSEMBLE

CONSTRUCCIÓN

AUTODESK
BUILD

PYPE

OPERACIÓN

BUILDING
OPS

AUTODESK DOCS

Modelos · Planos · Incidencias · Especificaciones · RFIs · Costes · Activos · As-Builts · Fotos · Videos

INSIGHTS

Gráficos · Reportes · Construction IQ · Data Connector

ADMINISTRATION

Administración de Usuarios · Autodesk ID · Administración de proyectos





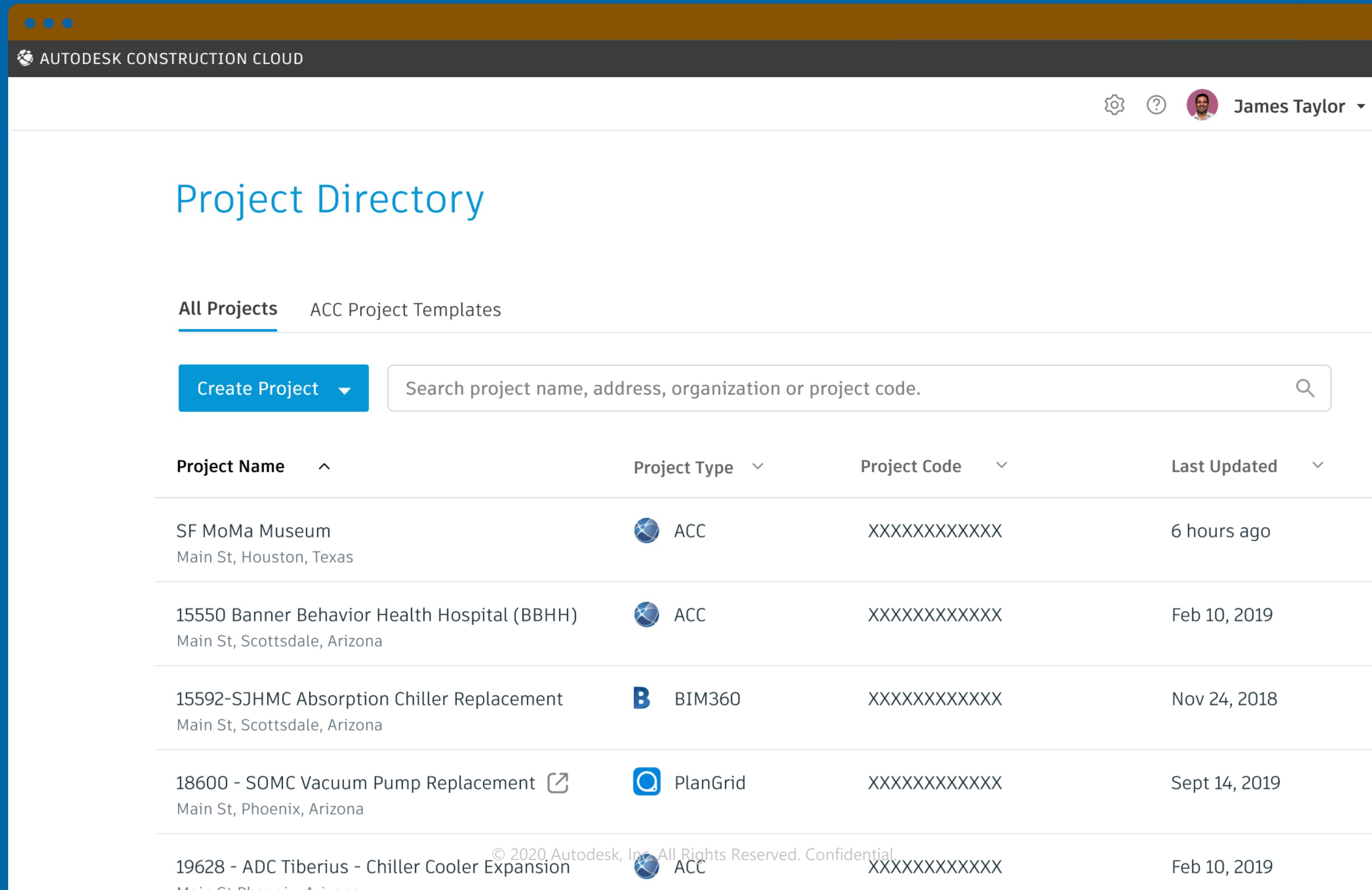
AUTODESK CONSTRUCTION CLOUD™



Funcionalidades	Coordinación	Cuantificación	Gestión de proyectos	Gestión de costes	Gestión de la calidad	Gestión de seguridad	Entrega
Flujos de Trabajo	<ul style="list-style-type: none">• Coordinación de modelos• Revisión Constructibilidad• Gestión de Incidencias	<ul style="list-style-type: none">• Análisis del alcance• Mediciones 2D/3D	<ul style="list-style-type: none">• Planificación de proyectos• RFIs• Entregables• Actas de la reunión• Informes diarios• Seguimiento del avance	<ul style="list-style-type: none">• Creación de contratos / Administración• Órdenes de Cambio• Solicitudes de pago• Previsión de costes	<ul style="list-style-type: none">• Planificación de la calidad• Comprobación de calidad• Listados de Verificación• Gestión de incidencias/Tareas	<ul style="list-style-type: none">• Planificación de la seguridad• Formación en seguridad• Observaciones de seguridad• Inspecciones de seguridad	<ul style="list-style-type: none">• Pagos• Entrega• Documentación final de proyecto• Gestión de garantías• Encuesta as-Built
Control de Documentos · Versionado de Documentos · Aprobación de Documentos							
Información Unificada							Modelos · Planos · Incidencias · Especificaciones · RFIs · Costes · Activos · As-Builts · Fotos · Videos
Conocimiento							Gráficos · Reportes · Construction IQ · Data Connector
Administración							Consola de Administrador · Permisos · Configuración de Proyectos · Plantillas · Notificaciones



Punto único de entrada



The screenshot shows the Autodesk Construction Cloud Project Directory interface. The top navigation bar includes the Autodesk Construction Cloud logo, a three-dot menu, and user profile for James Taylor. The main title is "Project Directory". Below the title, there are two tabs: "All Projects" (selected) and "ACC Project Templates". A "Create Project" button and a search bar are also present. The main content area displays a table of project details, with columns for Project Name, Project Type, Project Code, and Last Updated. The table lists five projects:

Project Name	Project Type	Project Code	Last Updated
SF MoMa Museum Main St, Houston, Texas	ACC	XXXXXXXXXXXX	6 hours ago
15550 Banner Behavior Health Hospital (BBHH) Main St, Scottsdale, Arizona	ACC	XXXXXXXXXXXX	Feb 10, 2019
15592-SJHMC Absorption Chiller Replacement Main St, Scottsdale, Arizona	BIM360	XXXXXXXXXXXX	Nov 24, 2018
18600 - SOMC Vacuum Pump Replacement Main St, Phoenix, Arizona	PlanGrid	XXXXXXXXXXXX	Sept 14, 2019
19628 - ADC Tiberius - Chiller Cooler Expansion Main St, Phoenix, Arizona	ACC	XXXXXXXXXXXX	Feb 10, 2019

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Seguimiento del Avance

AUTODESK CONSTRUCTION CLOUD

Build SF MoMa

A156.1 (90% Progress Set - Architecture)

Progress Tracking (4)

Hide progress markups

Ductwork - Phase A - Zone 1 Commissioned Aug 18, 2020 by Brandon Lacourciere

Ductwork - Phase A - Zone 1 Installed Aug 18, 2020 by Brandon Lacourciere

Ductwork - Phase A - Zone 1 Arrived on Site Aug 18, 2020 by Brandon Lacourciere

Ductwork - Phase A - Zone 1 N/A

GENERAL NOTES:

- Provide aircraft cable suspension at perimeter suspension points and at ceiling type ACT-5 (095113). RE: 1/A52
- Center sprinkler heads in 2x2 ceiling panels.
- Center panel and fixtures of equal spacing in rooms unless noted otherwise.
- Provide UL Assembly U415 (09216123) in horizontal ceiling applications at termination of shafts at lower floor levels. The ceiling panel shall be adjacent to exterior glazing (REL 1/A580).
- RE: electrical drawings and luminaire schedule for location of emergency fixtures.
- RE: A560 for return air plenum detail at conference and privacy rooms.
- RE: A505 for ceiling bracket and suspension details.
- Not used.
- Install access doors (088113) at 12'-0" A.F.F. for access to fire/smoke dampers. Coordinate final size and horizontal location with mechanical contractor.
- The suspended ceiling lateral force bracing members shall be located a minimum of 6 inches from all horizontal piping or ductwork that are not provided with bracing restraints for horizontal forces. Cable trays and electrical conduits shall be supported independently of the ceiling.
- Except where rigid braces are used to limit lateral deflection, sprinkler heads and other penetrations through the ceiling tile require minimum 2-inch rings, sleeves, or adapters that will allow a minimum 1-inch ceiling movement in all horizontal directions. Alternatively, a swing joint can be provided at the top of the sprinkler head extension to accommodate the 1-inch movement per ASCE 7, Sec. 13.5.6.2.2.
- Provide seismic escutcheon at every instance where a condensate pipe penetrates the Acoustical ceiling enclosure.

Ductwork - Phase A - Zone 1

Remove

Ordered

Arrived on Site

Installed

Commissioned

Complete

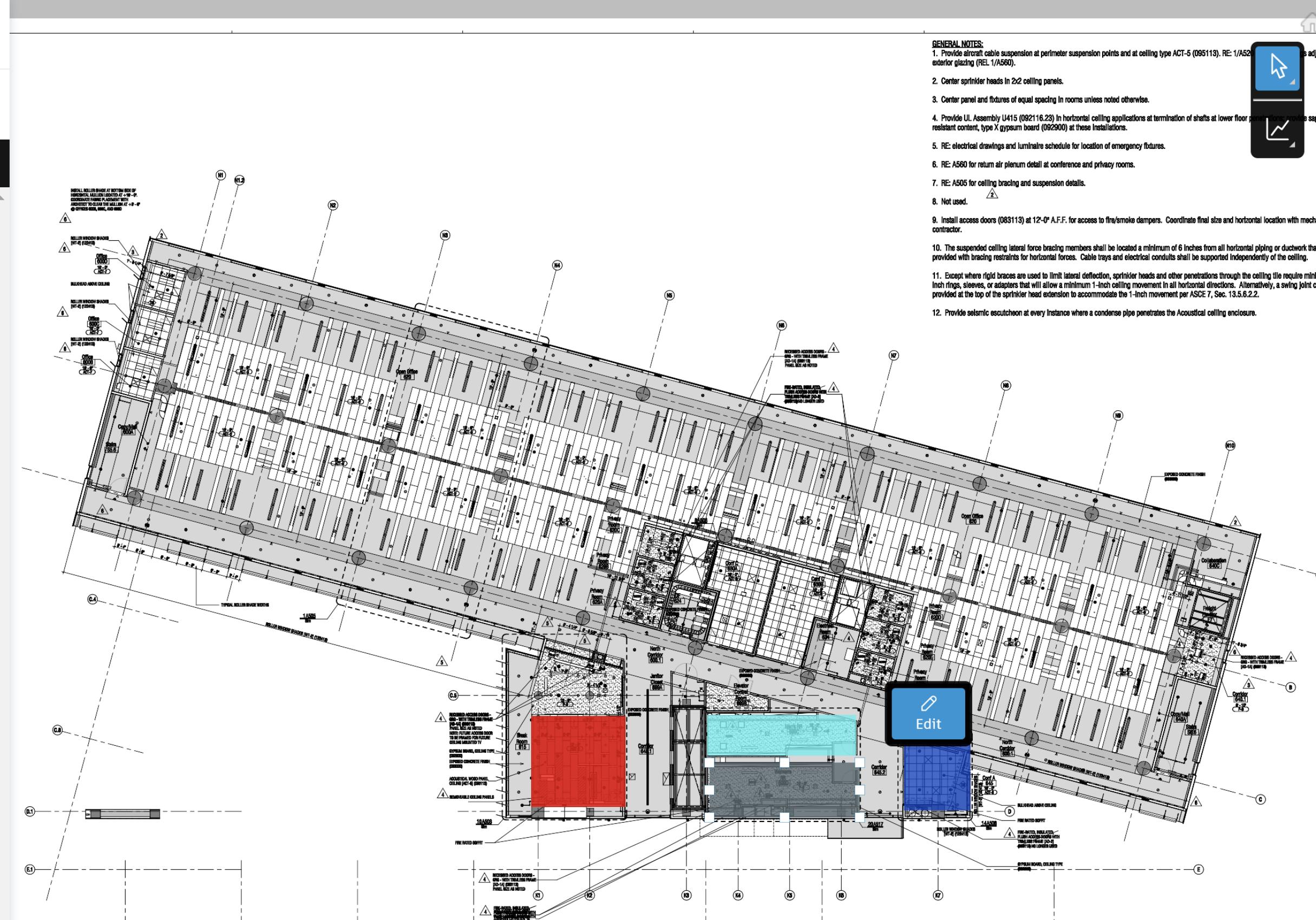
Object Type

Changing this object will reset previously tracked data

Ductwork - Phase A - Zone 1

Cancel

Submit

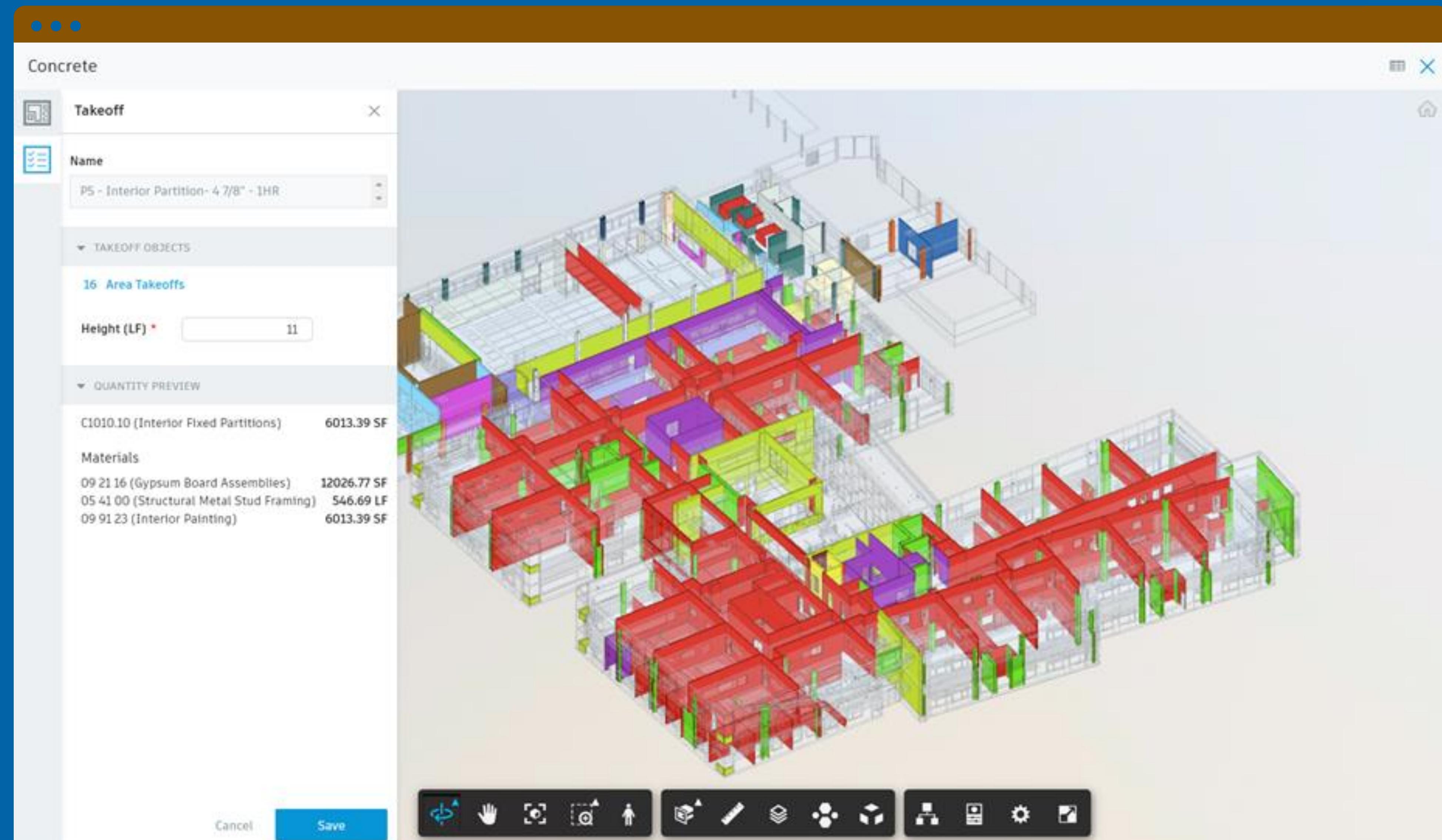


1 Level 6 RCP - North Bar

CEILING PLAN LEGEND

- DUCTWORK SPANNING 0.50' (127MM)
- DUCTWORK SPANNING 1.00' (254MM)
- DUCTWORK SPANNING 1.50' (381MM)

Cuantificar



Visión entre Proyectos

AUTODESK CONSTRUCTION CLOUD

Insight

Project Overview

Quality Overview

Safety Overview

Cost Overview

United Construction

Quality Risk Overview

310 Active Projects

- 7 High
- 4 Medium
- 25 Low
- 255 No Data

View Project Risk Trend

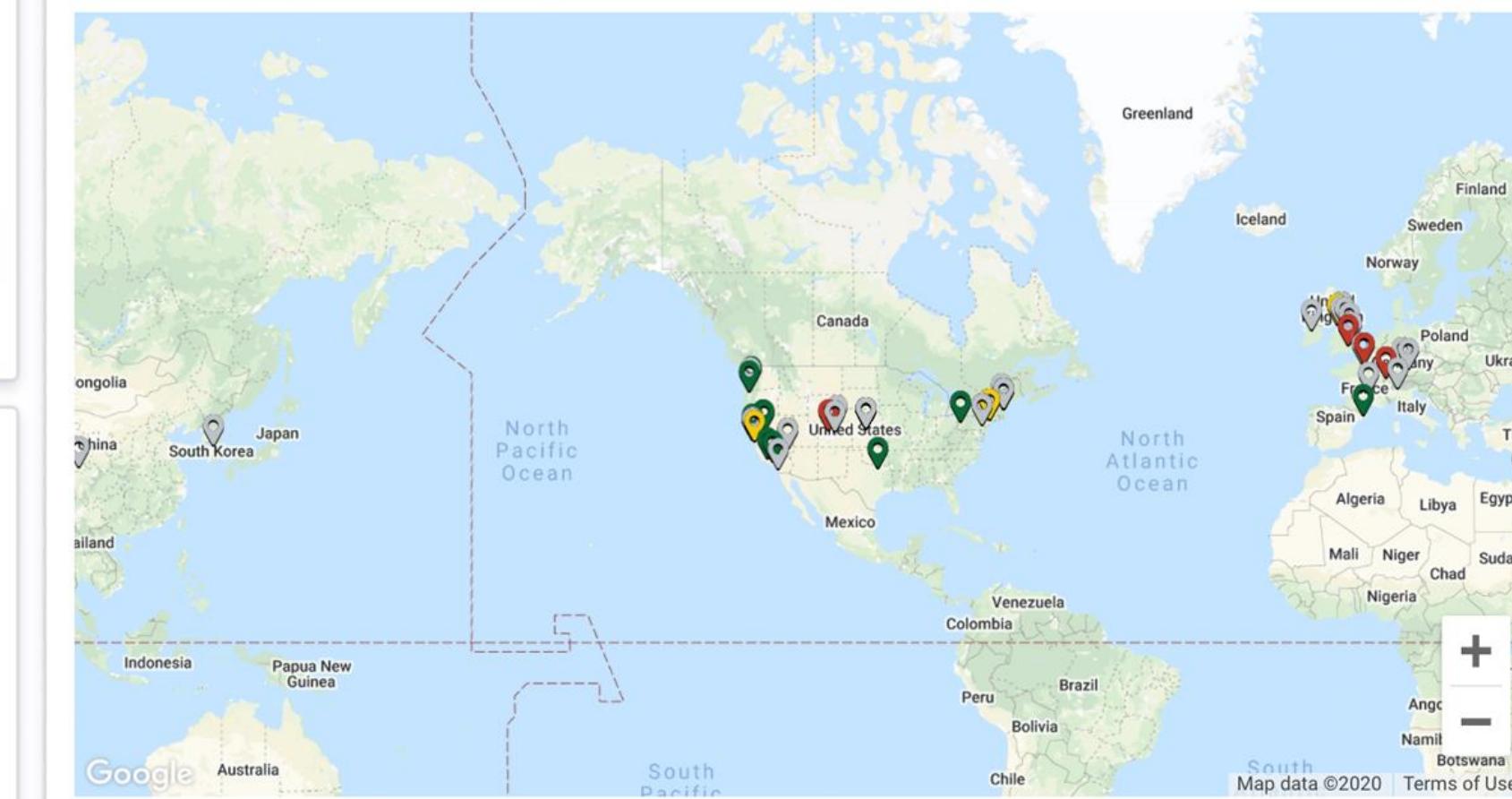
Construction IQ - PREVIEW

Project Risk

Project	Risk Level
Bayfront Arena	High
Castle Medical Center	High
Center of Excellence	High
Farnborough Hotel	High
Lumina Casino and Hotel	High
Dos Flores Resort	High
Alpine Retreat	High
Pleasant Court Building	Med
Pacific Center Campus	Med
Blackpool Lobby Remodel	Med
Hotel G San Francisco	Med
Alameda High School	Low
Assets	Low
Carrer Center	Low
Corporate Office2	Low
Family Skating Rink	Low
London Blackfriars	Low
Manchester Performing Arts Center - Phase 2	Low

Construction IQ - PREVIEW

Locations



Map data ©2020 Google Terms of Use

Construction IQ - PREVIEW

High Risk Quality Issues

20
15
10
5
0

January February March April May June July

- All High Risk
- Water
- Rework
- Key Activity
- Inspection

Construction IQ - PREVIEW



La siguiente fase del viaje



Autodesk adquiere Pype



AUTODESK® + aurigo®



 **AUTODESK****bridgit**

Makenzie Thomas
Site Superintendent ● Over allocated

June 1 - Aug 26 200%

Project Role %

Maplewood Mall Superintendent 100

Essex Assisted Living Superintendent 100

Project Name April July Today October

100 Victoria * Active Apr 1 - July 31

Sr. Project Manager

Project Coordinator

Project Engineer

Status includes: Active Build type includes: High-rise residential





Escuchar a nuestros
clientes



Buscar soluciones para
los puntos débiles



Conocer nuestros propios
Límites

BIG ROOM





A large, modern industrial building under construction. The structure features a complex steel frame with multiple levels of windows. The interior is visible, showing various construction materials and equipment. The overall image has a blue-tinted, slightly overexposed look.

Construction.Autodesk.com



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