

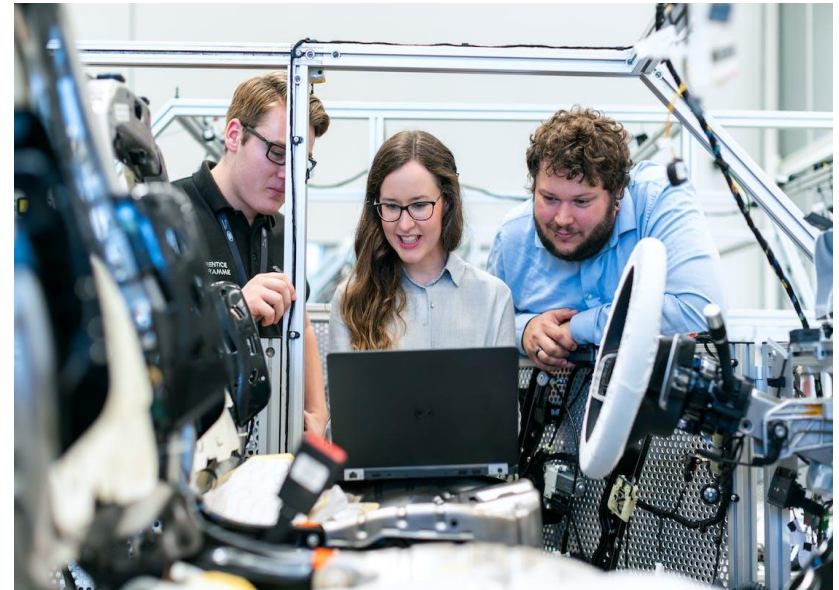


360° Photo-based Digital Twin

beamo

Enterprises have
90% of assets in indoor spaces

but **hard to track**
their location,
status and activities
to manage facilities



Due to limited human resources,
**it takes tremendous time and cost
to visit the facilities**



When it comes to
visiting physical spaces,
there is **no alternative**

YES

GO

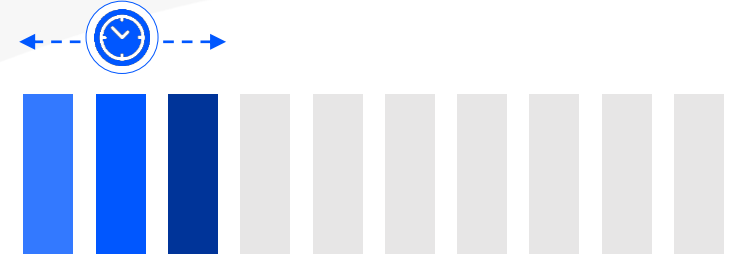
NO

you either go there or no



PM & Facility managers still spend **30% of time**

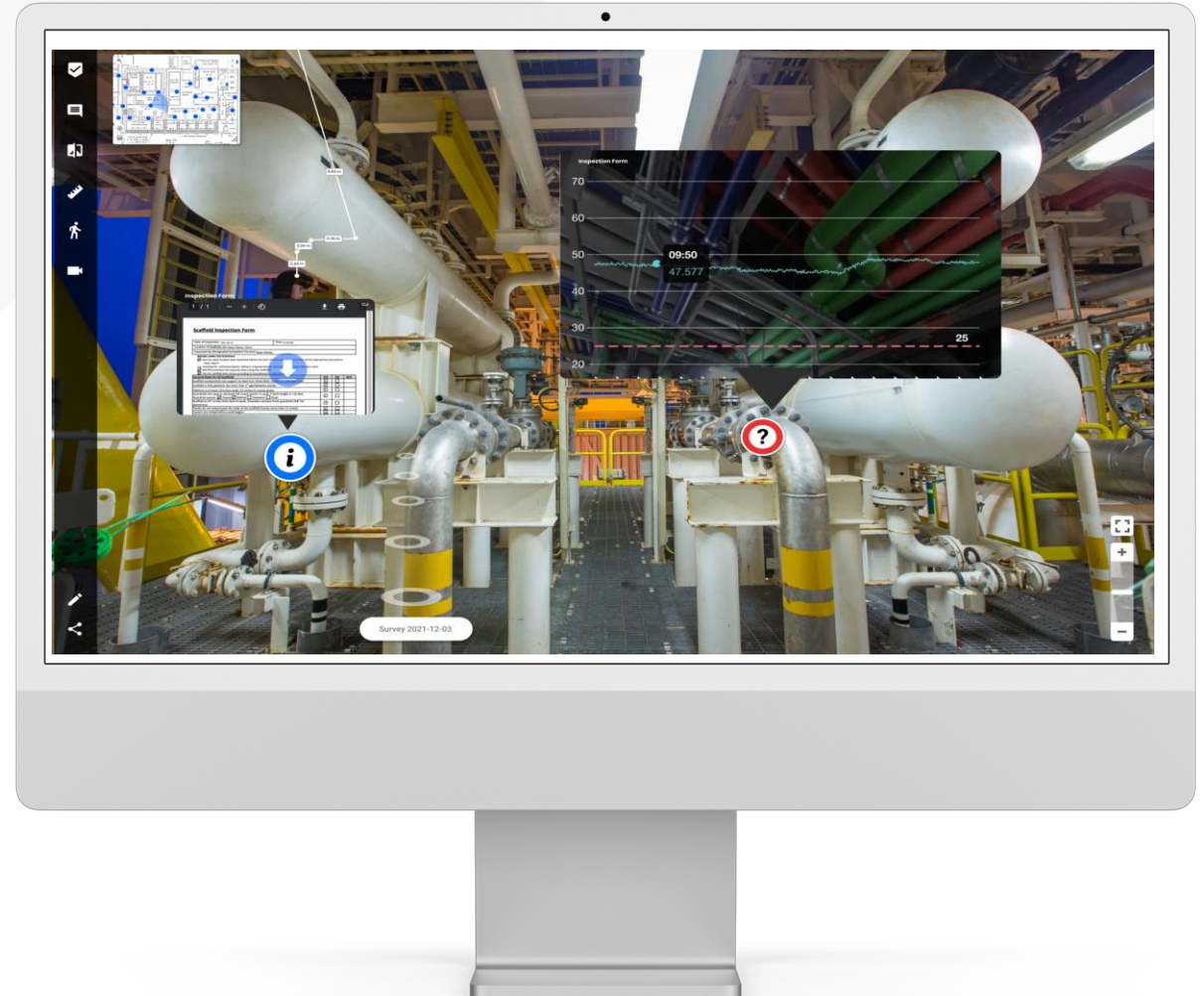
in traveling which is unproductive in time and cost



 Mission Statement

Our mission is to provide with **high ROI**

through Beamio's digital twin which
enables enterprise to effectively
manage the whole lifecycle
of the facilities





360° Photo-based digital twin solution

With easy capture
and fast processing

Beamo's Competitive Advantages

01

**Easy,
Fast, Light**

No experts needed

Simple device, easy capture & fast processing allow to build your digital twin in minutes



02

**Superior
Indoor Mapping**

AI technology

provides automated picture positioning where GPS cannot be available



03

**Unlimited
Coverage**

360 Photo-based

solution allows you to cover a large area or only partial as your needs.



04

**Enterprise
Level Security**

Global standard

for security that handles the threats to data



Competitive Advantage 01

Easy Fast & Light

From capturing to final 3D view, **It takes about 20 min**,
meanwhile competitors takes 1~2 days to see the final results

※ 200 photos based

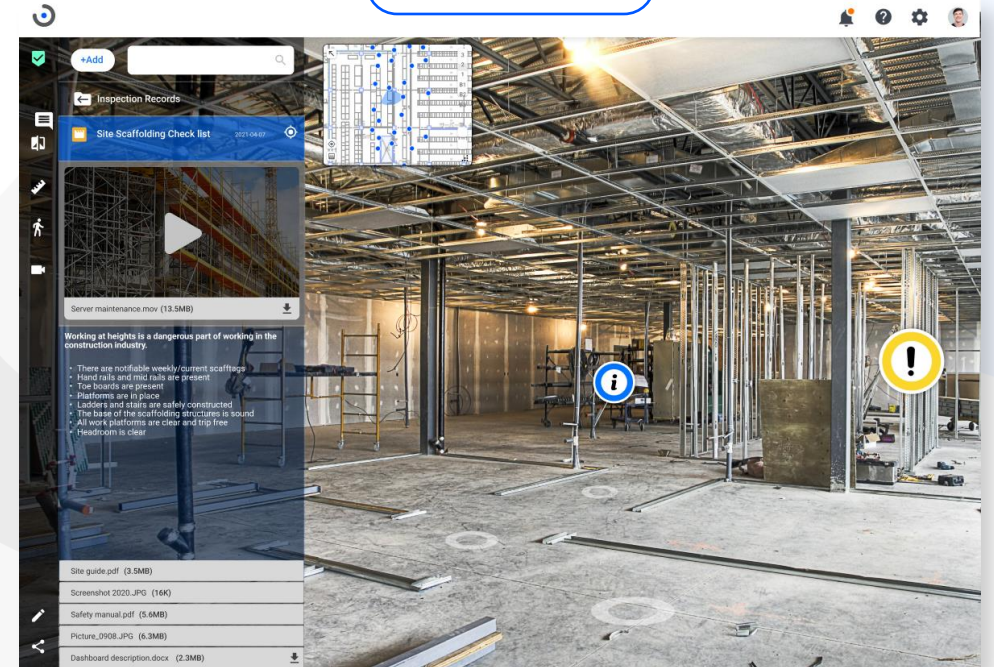
Capture



Upload & Process



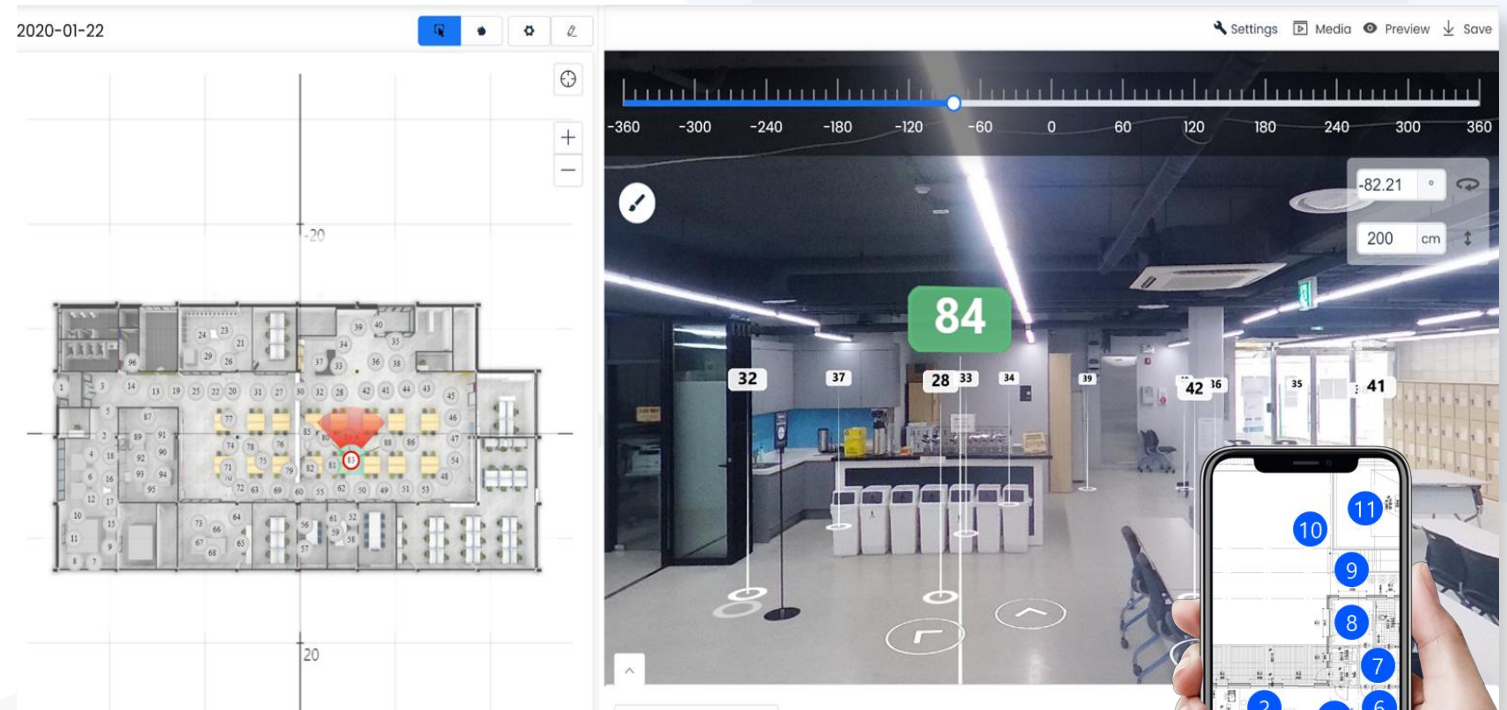
3D View



Competitive Advantage 02

Superior Indoor Mapping

AI provides automated picture positioning for **accurate and precise mapping** with floor plan where GPS is **NOT** available



✧ Automatically keep track of the capture location

Competitive Advantage 03

Unlimited Coverage



Unlimited Coverage

360 photo allows you to capture images without any restrictions of the area size

Editable & Modular

If the area/site undergoes changes, simply edit it on to the already existing capture



Competitive Advantage 04

Enterprise Level Security



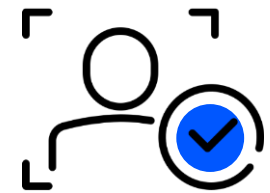
Virtual Private Cloud

VPC



Single Sign-On

SSO



User Management

RBAC

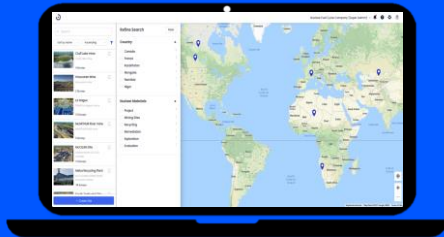
ABAC

Audited by global corporations



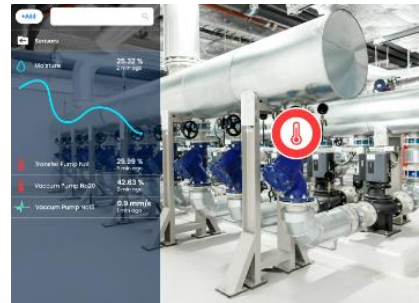
 **Beamio Features**

Centralized Platform



Beamio platform enhances communication with your team and make informed-decisions

IoT Integration



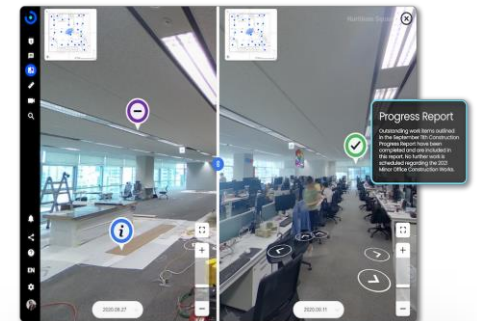
Visible live data through IoT integration makes operation safe and effective in managing facility

Superior Collaboration



Communication such as tags, comments, live-share boost work collaboration as a team

Project Management



Team projects such as time comparison, progress report and layers of annotations strengthen teamwork

 Benefits

It's all about the **money and efficiency**



Decrease
travel time and cost

40%

Revolutionizes facility
management without having
to visit the sites



Cut
project time

30%

Bridge between physical
and digital to serve as
a decision-making tool



Reduce
carbon emissions

16%

Eliminate the need of car
and plane travel to operate
more sustainably



Enhance
safety

25%

Get rid of facing the physical
risks through digital twin
technology



How it works? – 3 Simple Steps

Make digital twin in minutes, not hours or days



COMPACT DEVICE

All you need to make your digital twin are a 360-camera, a smartphone and a tripod.



EASY CAPTURE

Just walk and capture. Beamo App can locate you anywhere as you perform site surveys.



FAST PROCESSING

An immersive digital twin will be ready in minutes, so you can share and collaborate right away.



Beamo Starter Kit

Just clip your smartphone on the tripod and go!!



Components

Tripod



360 Mount



Smart holder X2



Transport bag



 Various Ways of Capture

A new dawn for modular site survey



Most Intuitive and modular capturing method like using tripod and mounting on helmet.

WALK



Hop on the back of a robot -dog for remote inspection. Excels in rough terrains.

CRAWL



Cover vast open lands and roads, on any vehicle, in no time. Best for outdoor spaces.

DRIVE



Get a bird's-eye view of your sites or inspect high ceilings.

FLY

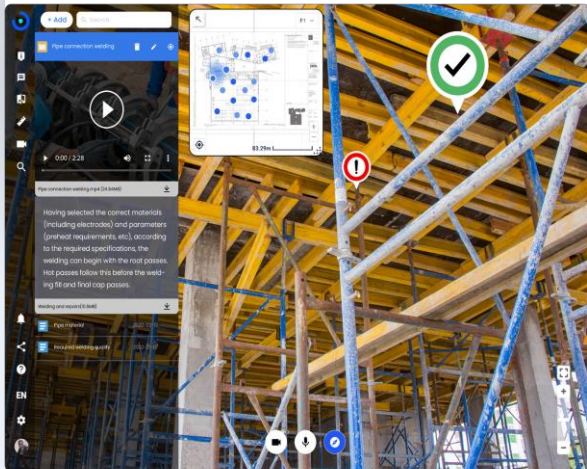
Manage all your sites, teams in one place

The image displays the Beamo Centralized Platform interface. On the left, a search filter panel titled "Refine Search" includes sections for "Country" (listing Canada, France, Kazakhstan, Mongolia, Namibia, Niger) and "Nuclear Materials" (listing Project, Mining Sites, Recycling, Remediation, Exploration, Evaluation). Below the filter is a list of site cards, each with a thumbnail, name, and number of surveys. A blue icon with a cloud and an upward arrow is positioned above the filter. The main area features a world map with several location pins. On the right, a detailed site view is shown, featuring a 3D model of an industrial facility. Overlaid on the 3D model are various data elements: a "Temperature sensor" location map, a "Temperature sensor" data graph, and a "Temperature sensor" warning icon. A blue dashed arrow points from the search filter area towards the detailed site view. A blue icon with a magnifying glass over a data chart is located in the bottom right corner of the site view area.

Solution for a wide variety of industries

Project Management

Manage projects on schedule and utilize as a decision making tool



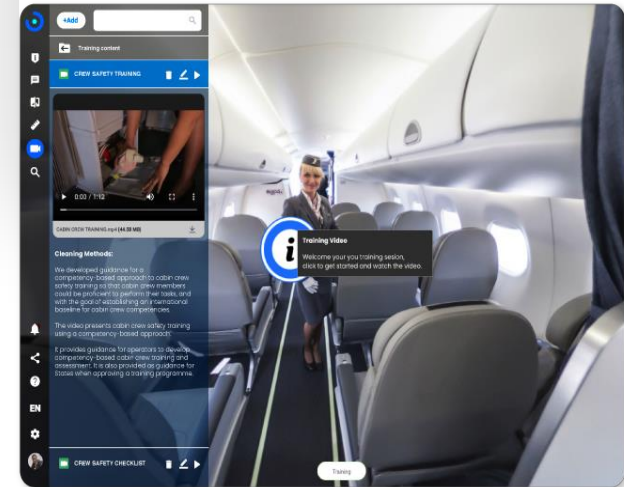
Inspection & Maintenance

Add a 360 view to customer's IoT sensor monitoring platform and embed IoT tag to utilize tasks



Training

Browse the site with a 360 view and learn with tagged images & videos for new employees



Use Case - Mega Construction (Korea)

Problem

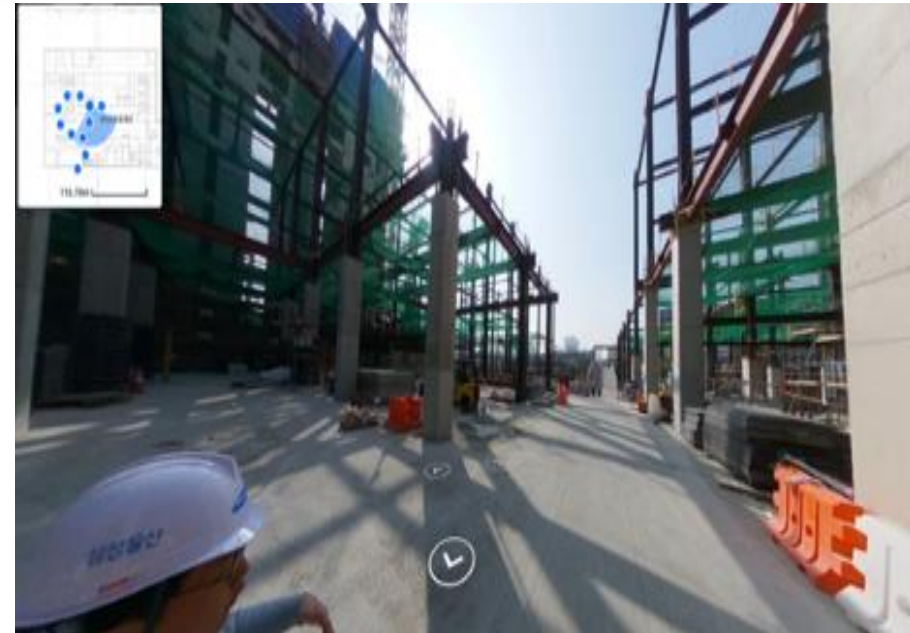
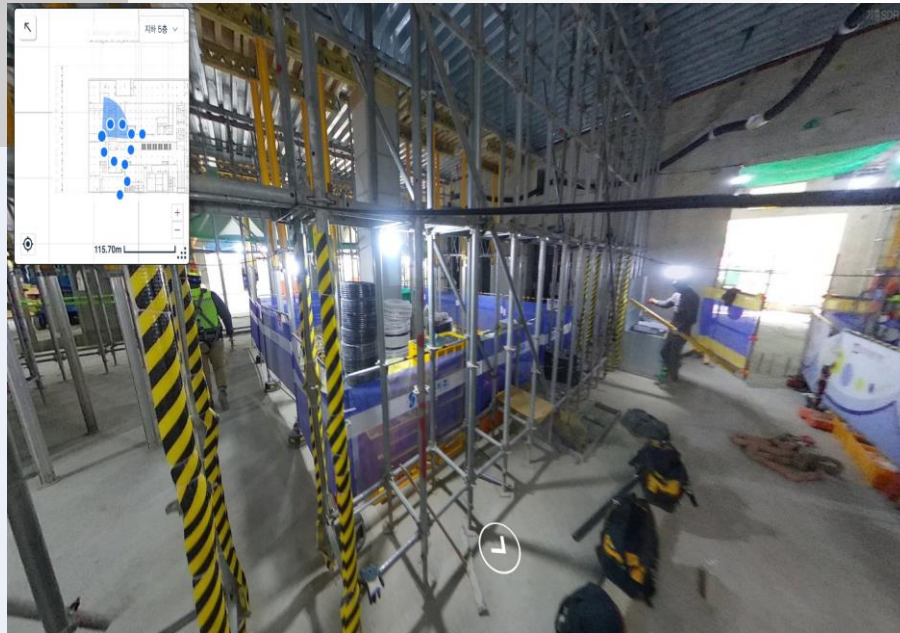
Customer wanted to make swift decisions on construction process and record every stage for later reviews and

Action

Captured onsite in the morning and processed the data instantly

Result

Informed decisions were made afternoon and cut project time



Use Case - Facility Management (Korea)

Problem

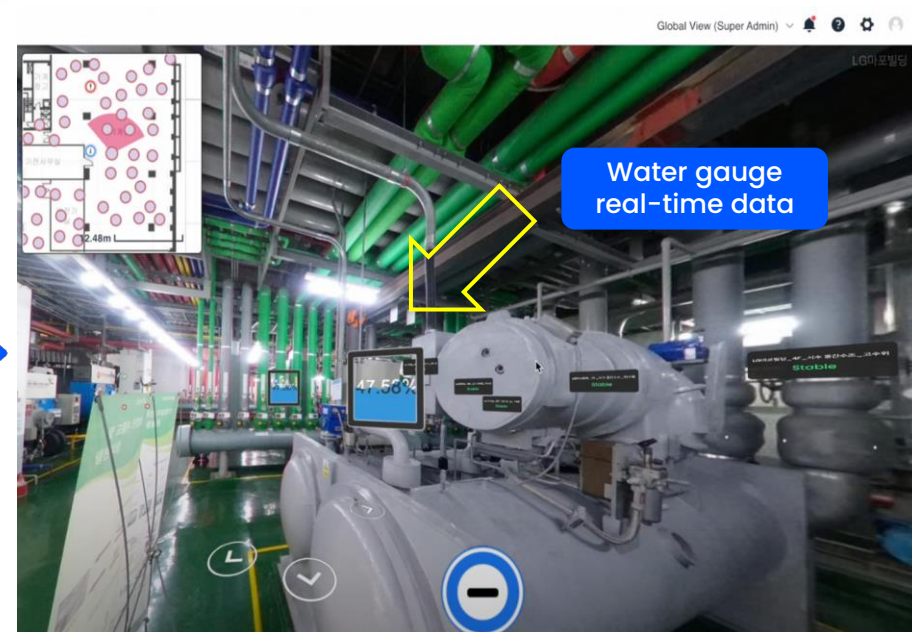
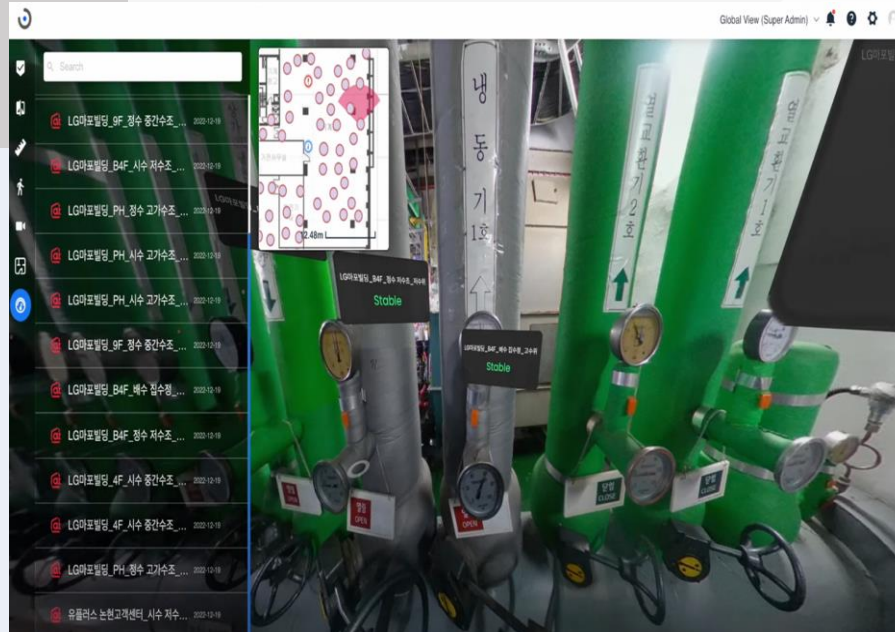
On-site employees were delayed from taking actions when the alarm went off as it was difficult for them to track where the exact sensor was

Action

Embedded IoT Sensor tag list of customer into Beamo platform

Result

Integration made workers easy to find the sensor and remotely manage the facilities



Use Case – Industrial IoT Solution in Australia

Problem

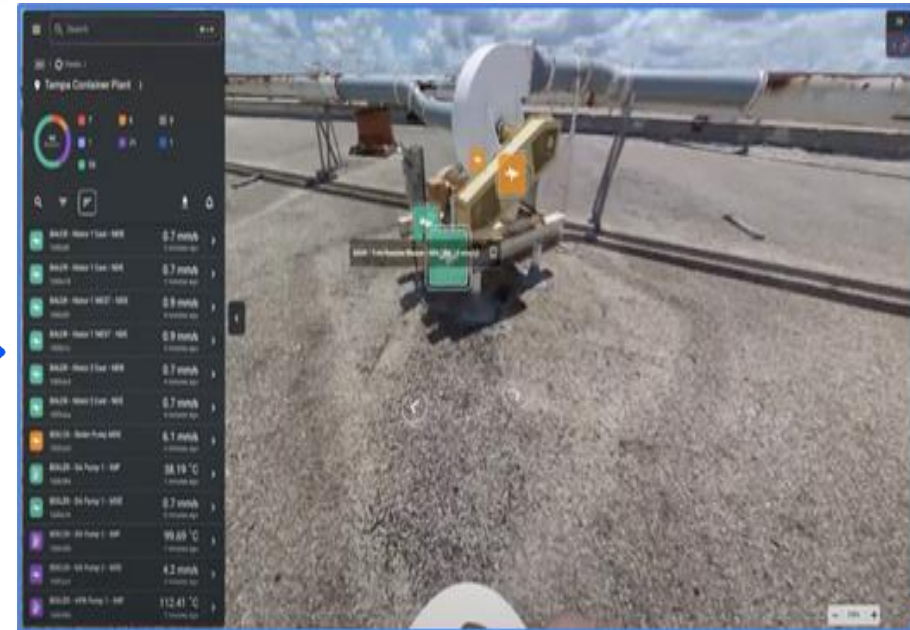
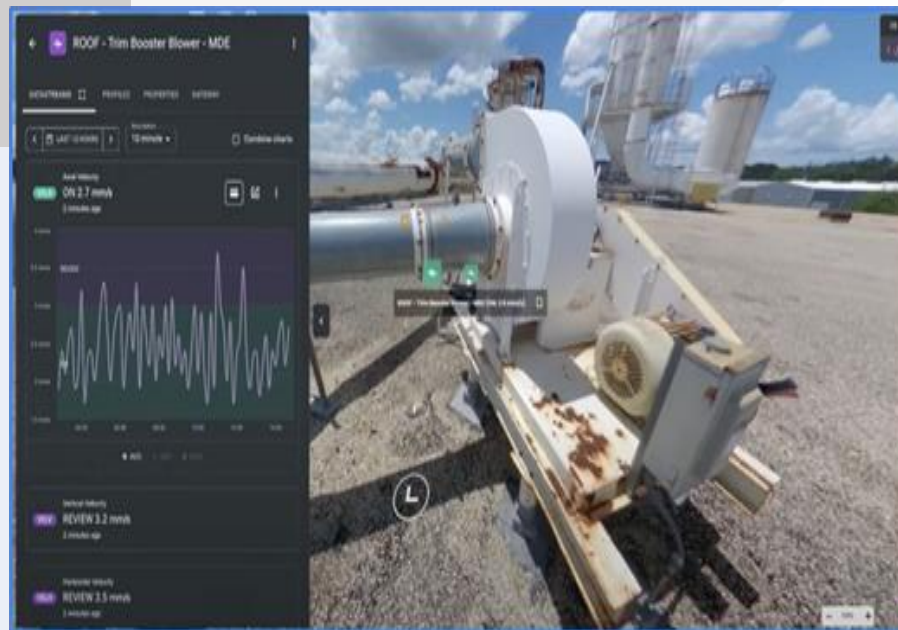
Problem - Employees had a difficulty to find exact sensor location in a large outdoor field and lack of spatial information

Action

Embedded IoT Sensor tag list into customer's platform

Result

Spatial information saved time for workers and no communication issue occurred



Use Case - Smart Factory (Korea)

Problem

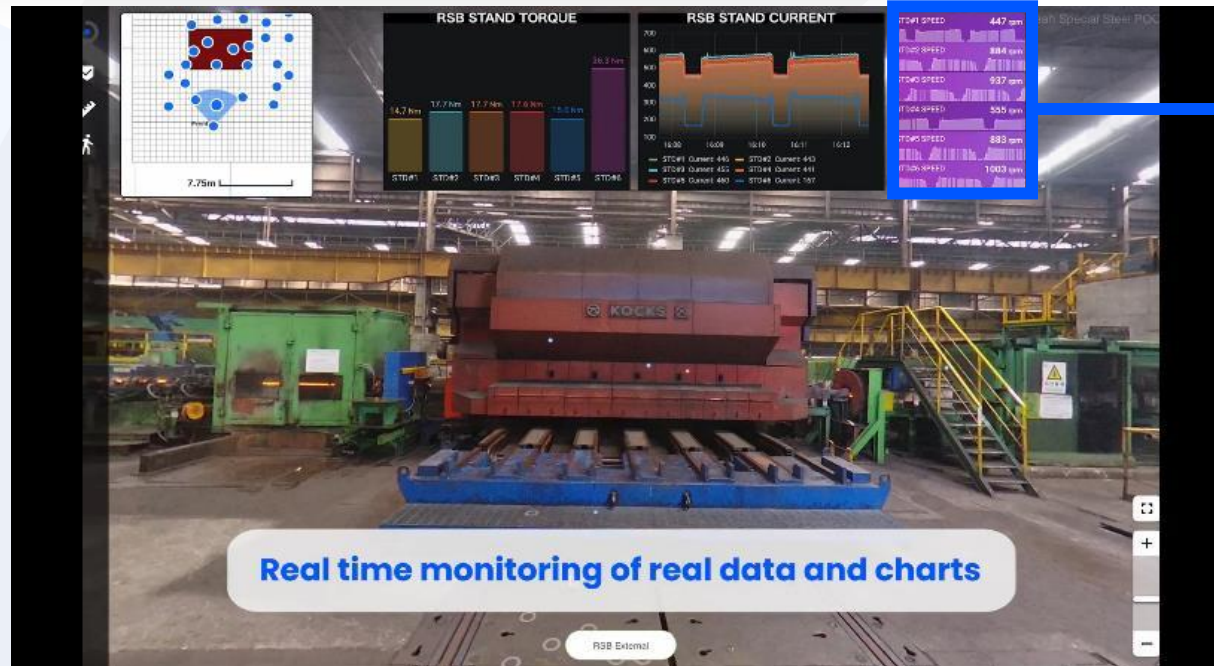
SeAh steel has numerous facilities in and out of Korea. To manage the large number of sensor data, it was difficult to visualize through their traditional dashboard

Action

Integrate Beamo into Seah's platform

Result

Significantly boost the overall safety and easily monitor sites regardless of skill set



Use Case - Data Center Management (Japan)

Problem

NTT had aged +1,000 data centers and looked for the best way to consolidate, but the travel cost was tremendous since facilities are throughout Japan

Action

First applied to 70 facilities to capture the sites with Beamo 360 view

Result

Shared the data with HQ and made informed decisions for consolidation



Aged +1,000 data centers throughout Japan



Use Case - 3D Virtual Training (Japan)

Problem

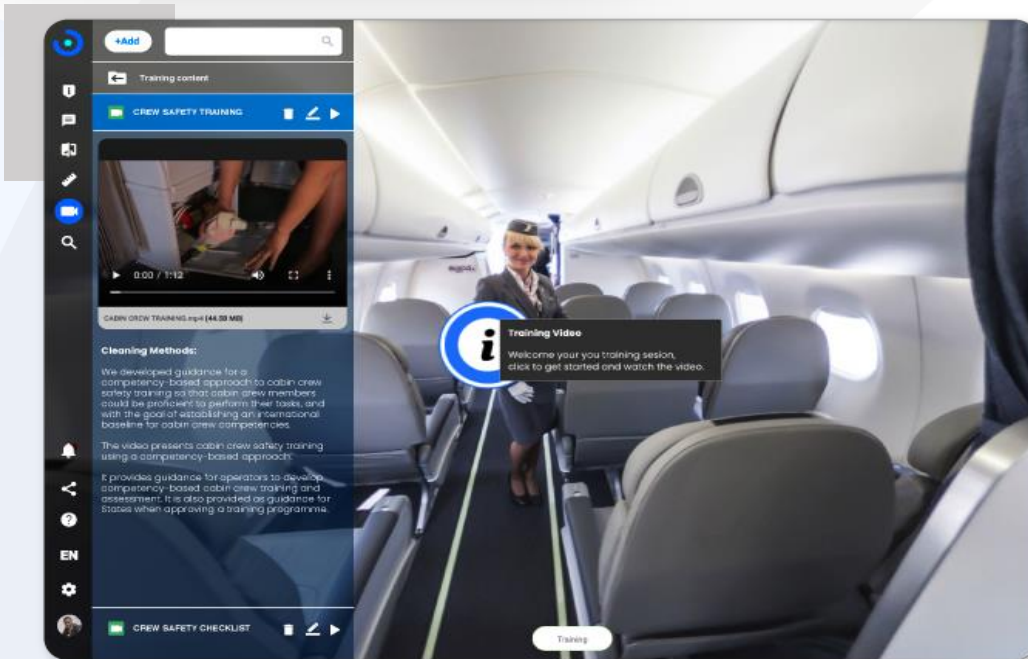
JAL used PPT or paper for new employees training to educate color lane, equipment location, etc.

Action

Applied Beamio 3D view in training

Result

84% of satisfaction rate due to 'easy to use', 'proactive learning process since trainees can touch and control 3D view



 Customer Testimonials

“

“What used to be possible only on the site can now be done remotely, allowing us to check on the current situation of the field and to align our perceptions.”



SENIOR MANAGER, NTT
COMMUNICATIONS

Yoichi Taguchi

“

“For enterprises with distributed facilities, Beamo is a game-changer when it comes to reducing inspection time and the number of trips you have to make onsite.”



ASSOCIATE DIRECTOR AND ASSOCIATE
PROFESSOR, SAN JOSE STATE
UNIVERSITY

Dr. Jae H. Pyeon

“

“With Beamo, it takes only one or two hours to create immersive digital twins of our Special Steel Manufacturing Plant, instead of 6 months using traditional methods.”



CHIEF DIGITAL OFFICER, SEAH CSS

Minseok Chae

“

“Working with the Beamo team has enabled us to deliver a jaw-dropping user experience to contextualize our IoT networks deployed in real-world spaces.”



FOUNDER/CEO, URBAN.IO

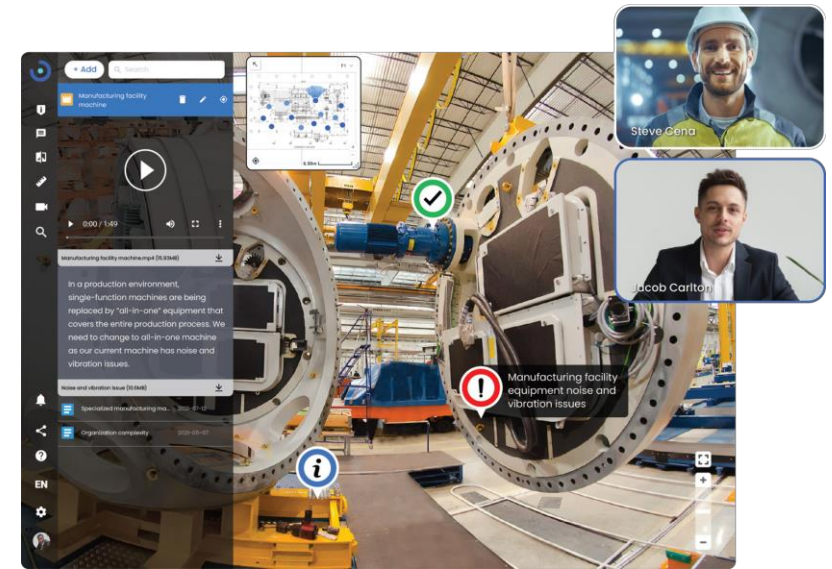
Rob Cumming

Comparison Chart

Beam3 specialized in DIY and processing speed

Category	Capability	beam3	Matterport	Navvis	Cupix	Openspace
Easiness	DIY	Yes	No	No	Yes	Yes
	Capture workflow	Automatic	Automatic	Automatic	Manual	Manual
	Continuous scanning	Not mandatory	Mandatory	Mandatory	Mandatory	Mandatory
	Post processing required	No	Yes	No	Yes	Yes
Speed	Capture speed	3,000	700	3,000	2,300	10,000
	Processing time for 200 pics	5 min	3~7 days	24 Hours	8 Hours	1 Hour
Capture/Quality	#of capture limit	Unlimited	200	3,000	20	800
	Image quality	High	High	High	Average	Low
Collaboration	Team management	Yes	No	No	Yes	No
	Access control	Yes	No	No	No	No
	Collaboration features	High	Limited	Limited	Average	Average

Whole lifecycle management in one platform



From construction & inspection to maintenance & training, Beamo revolutionizes the whole lifecycle facility operation

 Current Partners

Current partners who trust us

MANUFACTURING



ENERGY & UTILITY



AEC



TECH & AIRLINES



 Company Overview

-  Established in 2017
-  HQ located in Seoul, South Korea
-  120 employees (Sept.2023)
-  Investment- 28 Billion won
-  36 registered patent(s) + 24 Trademarks

