



Digital Realty and Data Center Construction at the Edge of Construction Digital Transformation

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Agenda

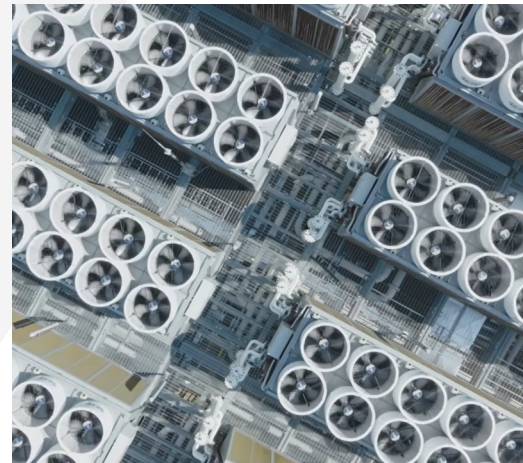
1. Data Center Industry Evolution – The Need
2. Digital Realty Way Forward
3. Vision
4. Q&A

Data Center Industry Evolution

“The Need”

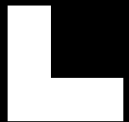
Data Center Industry Growing Challenges

- Higher densities
- New technologies AI, L2L etc
- Space constraints
- Complex designs
- Continuous change management: Need to introduce new technologies & requirements in existing operational facilities and support feasibility studies
- Continuous increasing demand putting pressure on construction timelines
- Increased Health & Safety risk





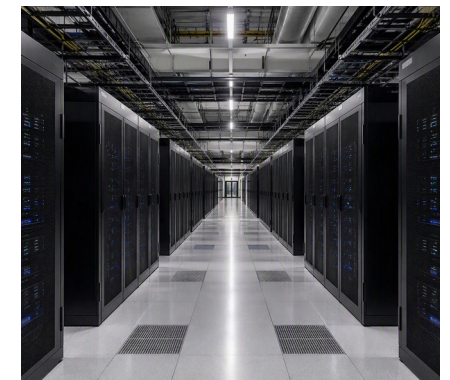
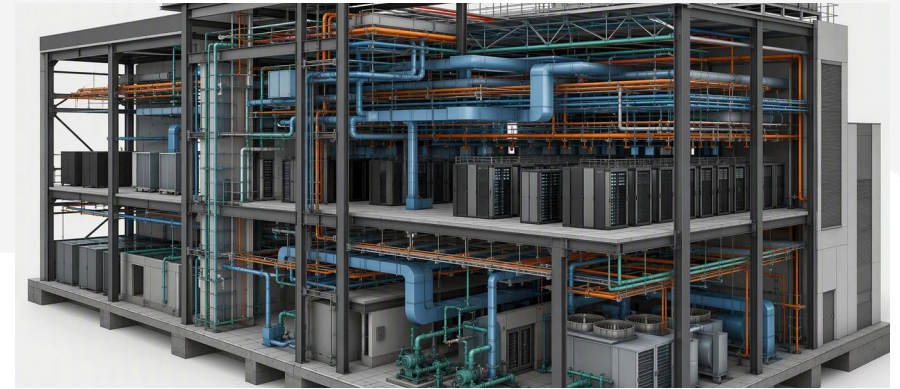
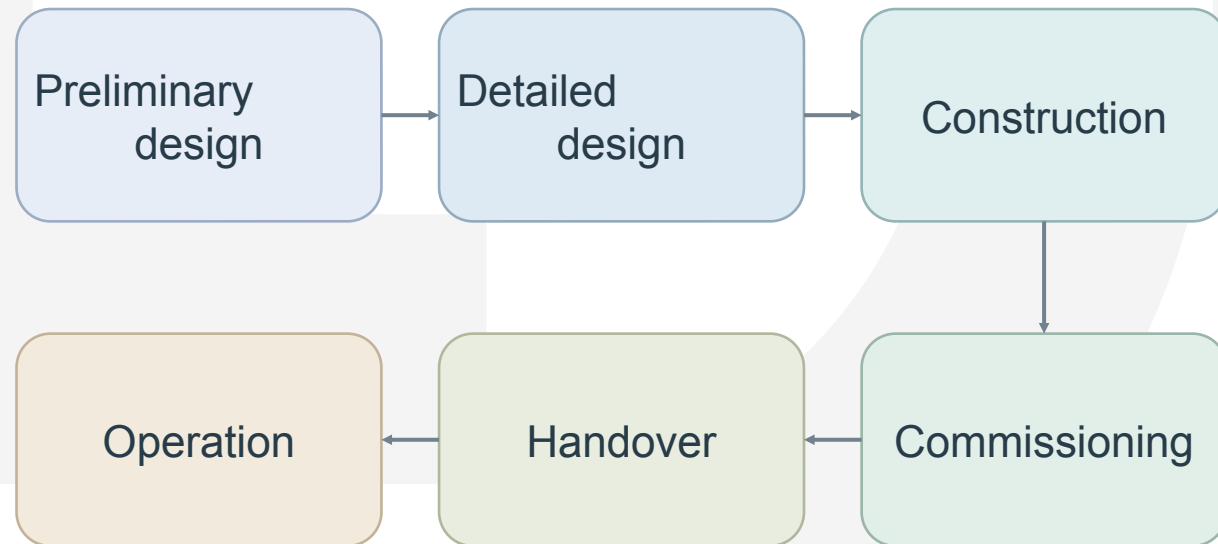
Digital Realty Way Forward



Digital Realty Way Forward

Digital Realty recognized years ago that traditional working methods and tools could no longer meet the construction demands of such complex projects.

Use of BIM on every project, from day one of data center's project lifecycle to operation, building a valuable digital asset.



BIM - Common design platform

✓ Shared design platform

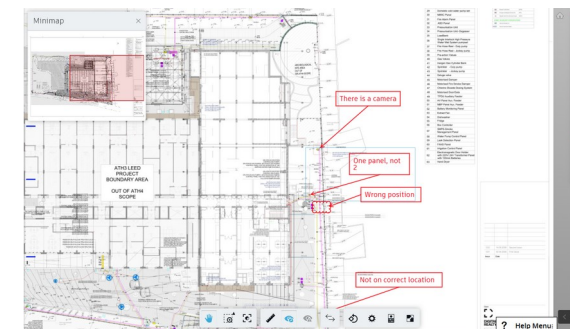
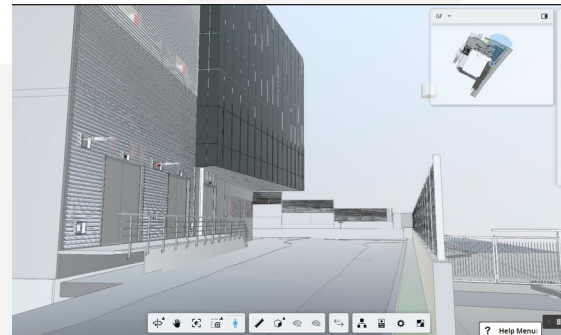
Provides DLR and other teams with a live online workspace to review designs, exchange comments and ideas, and resolve engineering issues.

✓ Online collaboration

Designers, specialists and suppliers can coordinate their work concurrently to produce the final deliverable.

✓ Valuable information repository

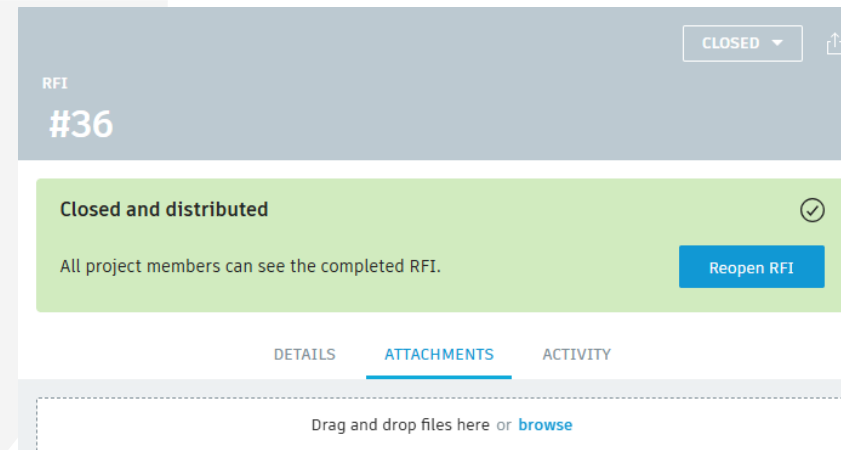
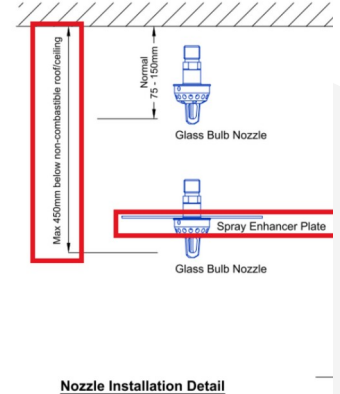
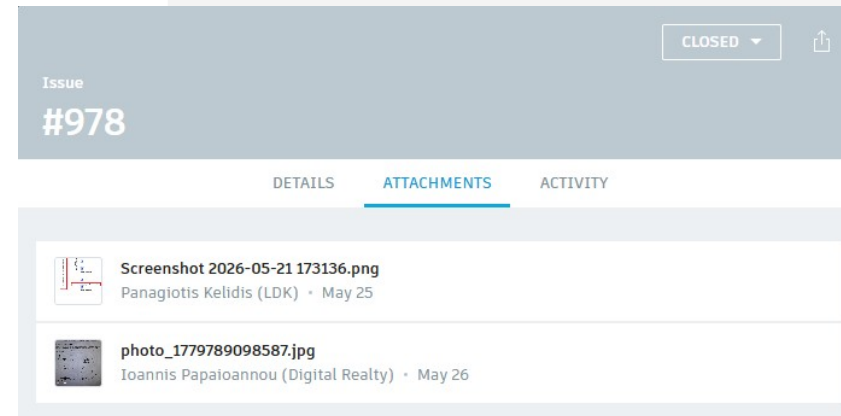
From early design through equipment installation and commissioning, the platform retains a complete history of observations, issues and engineering discussions for each project element.



BIM - A single communication platform and source of truth

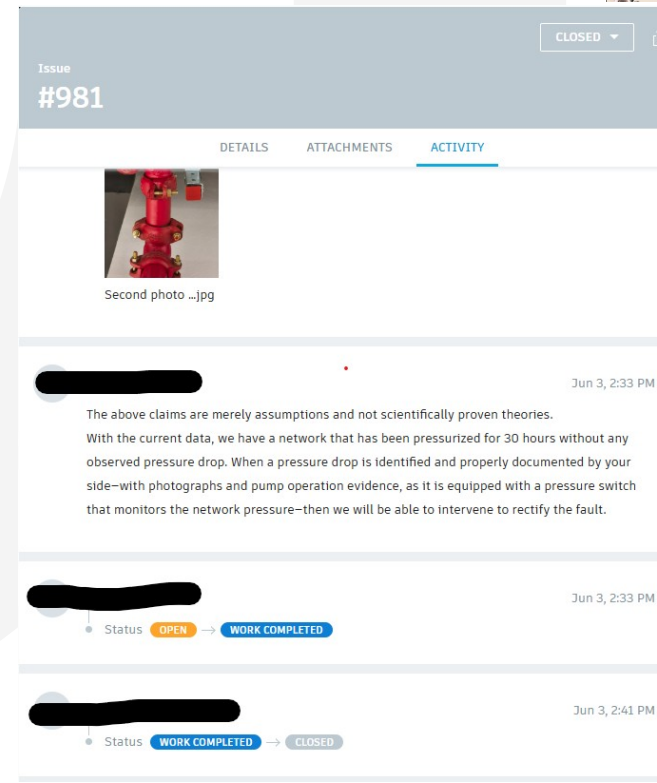
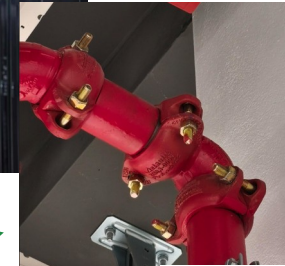
- ✓ A common data environment for stakeholders and teams
- ✓ Multi-step approval workflows with multiple reviewers
- ✓ Material submittals
- ✓ Markups and observations
- ✓ Quality issue tracking and monitoring
- ✓ RFI processes
- ✓ Permit-to-work processes
- ✓ Automated functions and stakeholder notifications

BIM supports coordination and stakeholder communication across design, construction and operations.



BIM - A Quality Management Tool

- ✓ **Integrated issue management**
Report, categorize, monitor and coordinate issue resolution in one single platform.
- ✓ **User-friendly on-site quality reporting**
Raise quality issues on site. Categorize and prioritize each issue, add a timestamp, and connect it to a specific project location.
- ✓ **Single space for document repository**
Manage approvals, material submittals and permit-to-work processes in one place.



Issues

Templates

Search

Filtering is on

Filters

Clear all

Status

Closed

Location

Select a location

☐ Include sub-locations

Owner

Select an owner

Assigned to

Select a user, role, or company

Due Date

Choose date

Root cause

Select a root cause

Created by

Select a user

Status	ID	Type	Sub-type	Title	Location
Closed	981	Quality	Quality	Fire hose pipe alignment	L1
Closed	980	Quality	Quality	Water leakage at FHR	L1
Closed	979	Quality	Quality	TX replacement - coordi...	L0
Closed	978	Quality	Quality	Watermist nozzles plate	-
Closed	977	Work List	Work to Comple...	CP panels cabling lack L...	-
Closed	976	Commissioning	Monitoring Sys...	SFAR cards are not com...	-
Closed	975	Quality	Quality	DX battery rooms	L0
Closed	974	Quality	Quality	Gantry feeder pillar as ...	L0
Closed	973	Quality	Quality	TPDU 2A9 Wrong labeling	L0
Closed	972	Quality	Quality	Interlocking cables lack...	L0
Closed	971	Commissioning	Correcting Acti...	Gantry staircase issues	-

Digital Realty Greece

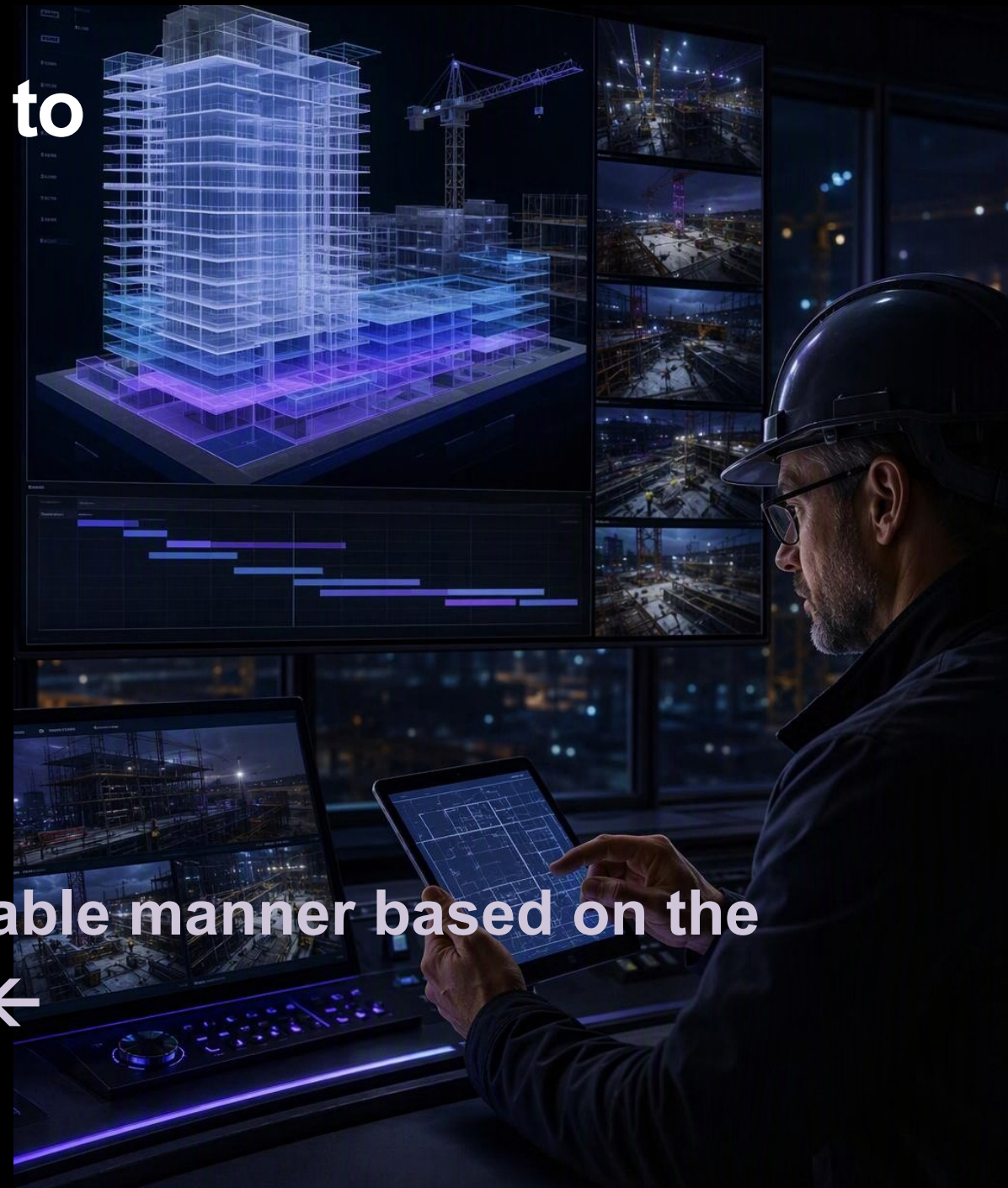


Digital Realty vision & opportunities for further digitalization of construction

What is Digital Realty trying to achieve?

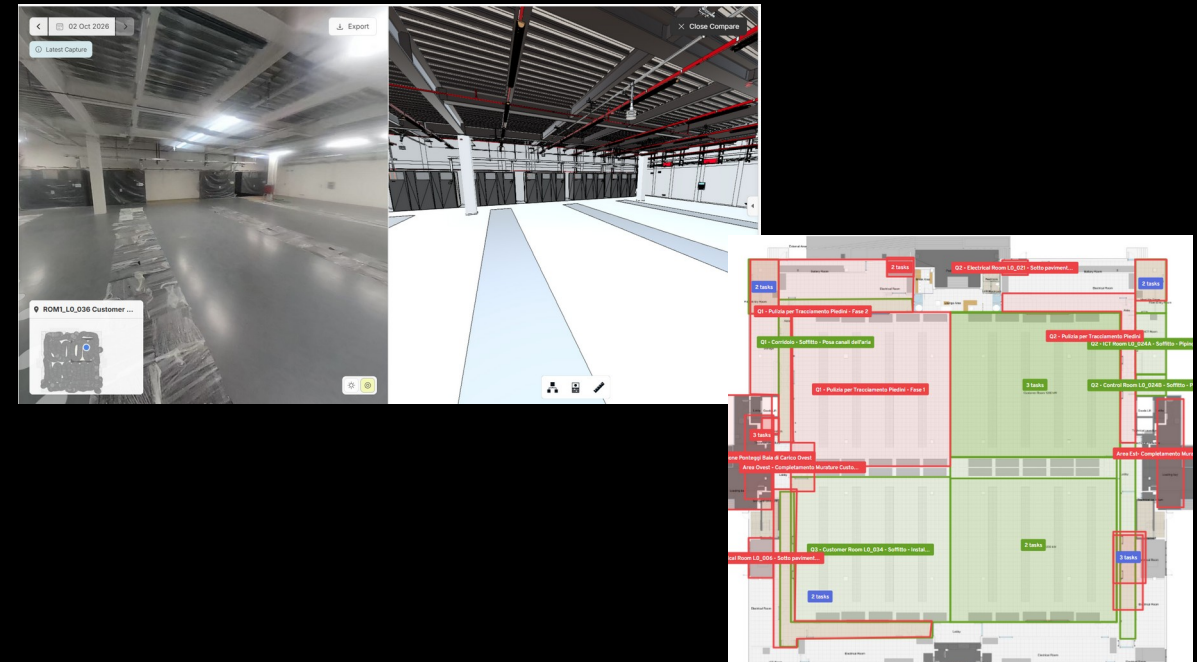
- ✓ Improve predictability
- ✓ Risk/Opportunity earlier identification
- ✓ Time & Cost efficiencies
- ✓ Use resources more effectively
- ✓ More Accurate information
- ✓ Data driven decisions
- ✓ Feedback for continuous improvement

→ Deliver with a structured predictable manner based on the discipline “Keep delivery on plan” ←



Opportunities for further digitalization of construction

- ✓ Platforms that integrate with existing systems to provide additional construction intelligence
- ✓ User-friendly applications accessible across mobile devices
- ✓ Integration with site cameras
- ✓ Integration with artificial intelligence (AI)
- ✓ Tools to coordinate daily and concurrent activities in constrained spaces
- ✓ Platforms that integrate with other systems to manage risks and opportunities





Thank you

