

Catenda

Unlocking Airport Potential: The Critical Role of BIM and Open Data in Modern Infrastructure

Modern airport infrastructure projects are complex and require seamless data management.

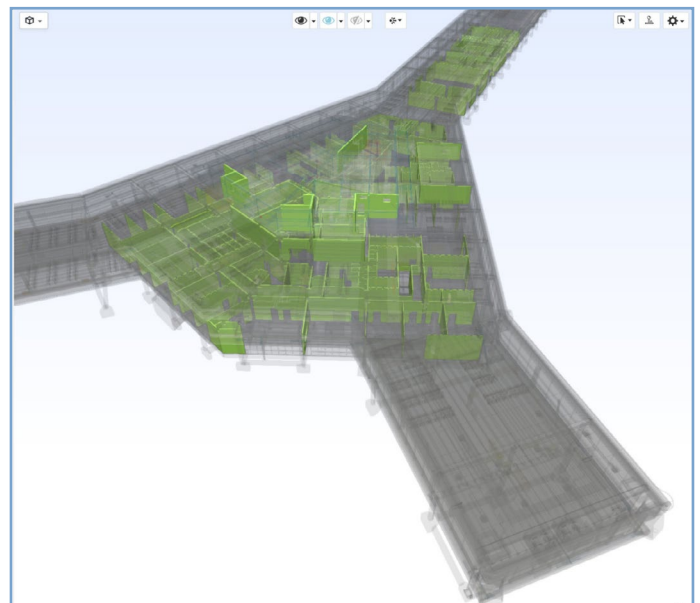
A unified approach is important for airport owners and project teams to deliver projects on time and on budget. Building Information Modeling (BIM) is an increasingly recognised strategic solution in the aviation industry, offering a data-rich approach to design, construction and operation.

A core component of this transformation is an open Common Data Environment (CDE). Open BIM standards such as IFC, BCF and IDS are becoming key for ensuring interoperability and preventing vendor lock-in, which is important for long-lifecycle airport assets. An open CDE provides a single source of truth for all project data, which fosters transparent collaboration. Facilitating adherence to standards such as ISO 19650 ensures consistent, reliable data flow throughout the project lifecycle, enhancing compliance and asset value.

Catenda Hub is a leading cloud-based open CDE designed for projects ranging from complex airport infrastructure to the operation of terminals and spaces. The platform offers an intuitive platform for managing airport projects and creating transparent and efficient workflows.

Enabling Data-Driven Airport Project Success

Catenda Hub is designed to support comprehensive data management for airport projects. Its advanced



document and model management features ensure that teams work with current information, preventing errors. This includes smart version control and an improved approval workflow that streamlines the review and sign-off processes for regulatory documents, blueprints and models. This helps reduce bottlenecks in the multi-layered approval chains of airport projects.

The platform's integrated 3D viewer and issue tracking allow for direct problem resolution within the model. Teams can identify and track clashes in real time, which reduces miscommunication and accelerates progress. For instance, a complex airport redevelopment project used virtual design coordination with Catenda Hub to identify and resolve a significant conflict between the structural steel design and mechanical systems. By addressing this 'clash' in the digital model before construction began, the project avoided costly on-site

rework and maintained its construction schedule. For a project that involved renovating piers, improving aircraft parking and building a new pier, Schiphol used Catenda Hub to enable multidisciplinary teams to work together more efficiently. The platform's ability to store IFC models, BCF issues, files and documents was a key factor in its adoption, helping to improve communication and information exchange.

Catenda Hub is built on open APIs and supports extensive integrations. The platform's architecture simplifies compliance with international standards like ISO 19650 by offering a structured and customizable environment for information management. Beyond construction, Catenda Duo extends digital continuity into operations. This BIM-based facility management system centralizes building data for an airport's entire lifecycle. It empowers asset owners to make data-driven decisions about maintenance, performance and space optimisation, which can extend asset lifespan and reduce operational costs.

Partnering for Progress: The Catenda Approach to Airport Infrastructure Projects

Choosing a digital platform for airport projects means selecting a practical solution that aligns with industry leaders and project needs. Catenda provides a robust feature set within an easy-to-use interface. The platform simplifies workflows, which allows for rapid adoption without the need for extensive training. Catenda's unlimited user policy per project is a significant benefit for large-scale airport developments.

This policy removes licensing barriers and promotes comprehensive collaboration among all stakeholders, creating a connected project environment without hidden costs. The platform is also designed with high-security requirements in mind, offering features like Single Sign-On (SSO). The AWS Data Centre used by Catenda Hub and Catenda's supplier Ibi are both ISO 27001-certified.

Catenda provides the tools for open, seamless and efficient digital collaboration throughout the entire building lifecycle of airport assets. The platform delivers the transparency and efficiency required to meet industry standards and achieve project goals, whether for new terminal constructions or runway expansions. This commitment to open standards and data integrity ensures that an investment in Catenda is future-proof, providing a project management platform that empowers the delivery of outstanding airport infrastructure. Advantages gained include reduced failure costs, shortened lead times and increased plan stability.

Ready to transform your airport projects?

Learn more about how Catenda can elevate your airport infrastructure development and operations.

Visit catenda.com.



Streamline Airport Construction Projects with Catenda



Catenda Hub is a BIM-based Common Data Environment (CDE) for managing complex construction projects. It provides a single, secure platform for all project data, from document and model management to centralized communication and issue tracking, ensuring every stakeholder is working up to standards.

Catenda Hub

Used by global transportation leaders, Catenda Hub is designed to enhance project efficiency and quality, our platform helps you:



Manage Information:

Centralize project data with advanced document management capabilities and a powerful BIM viewer.



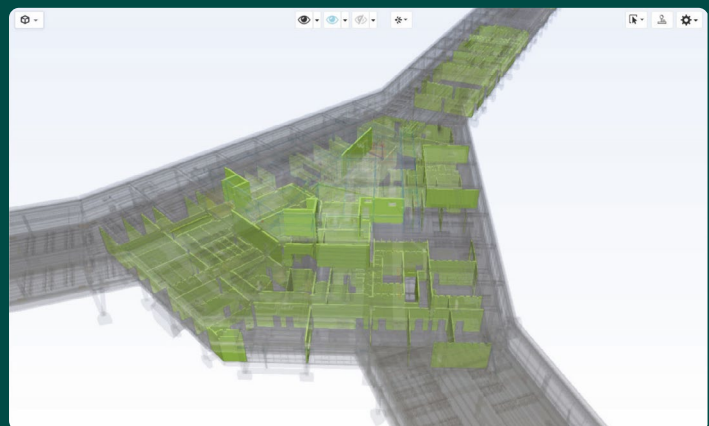
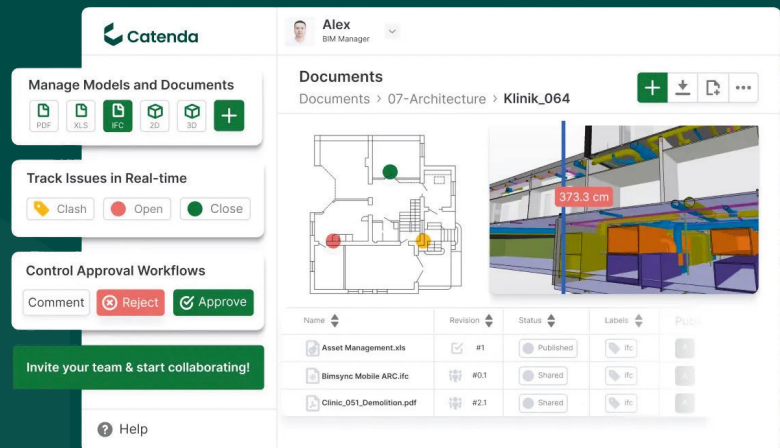
Coordinate Design:

Monitor team interactions and track changes from anywhere.



Ensure Adoption:

Ensure your team and subcontractors are up and running in no time.



Catenda Duo

Optimize Operations and Maintenance

- Manage as-built versus designed and planned
- Unify all operations and maintenance KPIs

Catenda Boost

The Foundation for Your Digital Tools

- Build custom solutions on an open API
- Connect your existing technology stack

Learn how Catenda can
transform your next project.

the open way

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