

One Platform, Endless Collaboration: Centralized Project Data Management

Chitra Kendre^{1*}, Tushar Bhamare²

¹M.Tech. Student, MIT College of Management, MIT Art, Design & Technology University, Pune, India

²Assistant Professor, MIT College of Management, MIT Art, Design & Technology University, Pune, India

Abstract: Autodesk docs is a cloud-based document management system. For a long time, there was an opinion that subcontractors don't require a document management system as main contractors or clients. However, an internal document management system is as important as an external system. A system was needed which would make relevant data available to all appropriate staff and sub-contractors, would be simple to use and administer, would track all communications including emails and issues, and would act as a single source of truth for a project. In this paper we will find how the Autodesk docs is used in construction industry.

Keywords: Autodesk docs, document management.

1. Introduction

A. What Are Autodesk Docs

It's a cloud-based platform where you can store project data and use AEC workflows to collaborate inside and outside of your team.

Autodesk docs create and operate on digital databases for collaboration, manage change throughout those databases so that a change to any part of the database is coordinated in all other parts, and capture and preserve information for reuse by additional industry-specific applications. In summary, the use of Autodesk Docs has proven instrumental in optimizing our project's documentation, collaboration, and overall efficiency. As we continue to leverage the platform's capabilities, we anticipate sustained improvements in project management and outcomes.

It has 3 subparts.

- Built
- Docs
- Insight

Docs includes the following features:

1) Document Control

- Create your own folder structure with different permissions for different project members – control who can see and modify what files/folders.
- File versioning – every version of your design saved and accessible in the cloud.
- Unlimited cloud storage for all file types

2) Design software integration

Open, save, and link/xref files directly from the cloud in

Revit and AutoCAD (and verticals)

3) Web-based design file viewers

Explore, markup, and compare versions of design files in the web.

4) Markups – Create markups and redlines on 2D and 3D models in the cloud.

5) Issue Tracking – Centralized issue creation and resolution with the ability to assign and a record that stays with the project.

6) Document approval and transmittal workflows

7) Document collaboration

2. Objectives

- Store and manage all project documents and data from design to construction in a single platform.
- To keep everyone in a loop and updated.

3. How to use Autodesk Docs

A. Create New Projects

- Project name, project code and its type.
- Project location
- Project value
- Project start and due date

B. Add Team Members

- Assign them roles.
- They should have access to the software that they are assigned to work.

C. Create Subfolder as Per Requirement

- Provide access to allotted peoples as in
 1. View
 2. View and download
 3. Create-download- publish markup.
 4. Create-download- publish markup-upload.
 5. Create-download- publish markup-upload-edit.
 6. Manage – full administrative access.

D. Files can be locked and unlocked

E. Can view versions of same files and make anyone as current

*Corresponding author: chitrakendre25@gmail.com

F. Can compare versions by either overlaying or seeing side by side.

G. Can add comment and reference files and can be published or kept private

H. Can address the issue and assign someone to resolve it. We can also see the status regarding the assigned issue

I. Can use voice command to type.

4. Use of Autodesk Docs in Construction

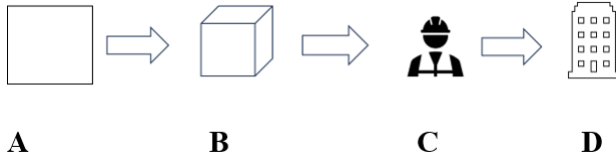


Fig. 1.

- a. Design: Work together with shared files.
- b. Plan: Coordinate on Single platform.
- c. Built: Connect office to construction site.
- d. Operate: Increase project visibility.

5. Advantages of Docs

- Improved Communication
- Improve Quality control.
- Increased efficiency.
- Less errors.

6. Limitations

- Cost constraints: The expense of Autodesk licenses and subscriptions may be a limiting factor for users with tight budgets.
- Learning curve: Someone who is not familiar with Autodesk product, it can be confusing and overwhelming in start.
- Additional Requirements: Certain advanced features in Autodesk software may require users to purchase and integrate additional plugins or invest in specialized hardware, adding to the overall cost.

7. Case Study

Site: Parishram, Pali, Bandra.

Building Configuration: Service basement + Ground floor + 4 podium + 15 floors.

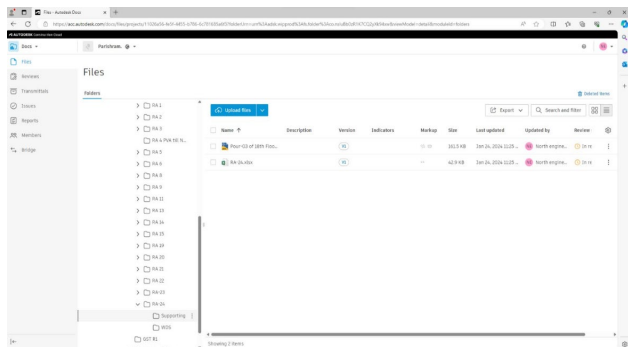


Fig. 2. Supporting documents for RA bill

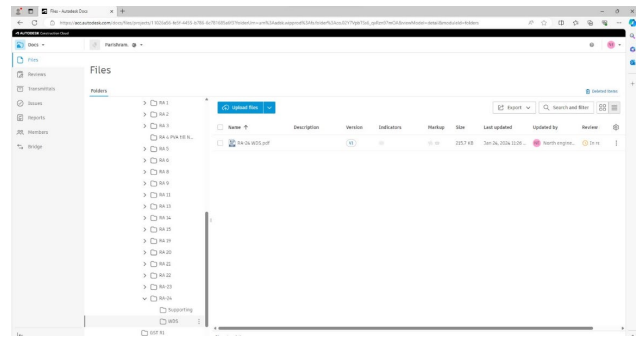


Fig. 3. WDS sheet for the RA bill

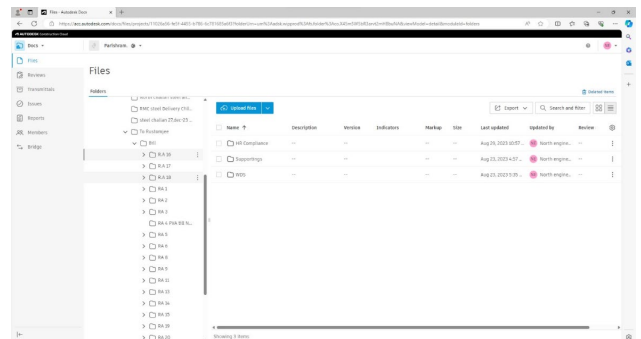


Fig. 4. HR Compliance

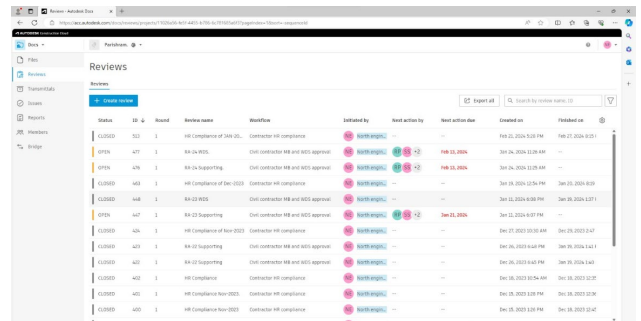


Fig. 5. Submitted for reviews

8. Conclusion

- Progress on the issue can be communicated to everyone in real-time as the work is being actively addressed.
- Efficient document management is achieved through streamlined processes.
- Effective communication strategies minimize the scope of miscommunication, fostering clearer understanding among individuals or teams.

References

- [1] <https://construction.autodesk.com/products/autodesk-docs/>
- [2] <https://ntidiatcc.com/blogs/case-study/autodesk-construction-cloud-case-study>
- [3] <https://thecadmasters.com/autodesk-docs-what-it-is-and-how-you-can-use-it/>