



THE 5 MOST IMPORTANT WAYS IN WHICH CLOUD COMPUTING IS TRANSFORMING MODEL COORDINATION



Introduction

Cloud computing is a relatively new phenomenon in the construction industry. In recent years, cloud computing has exploded, with businesses of all sizes and across all industries shifting to Platform as a Service (PaaS), Infrastructure as a Service (IaaS), and Software as a Service (SaaS) models.

Cloud computing enables the delivery over the 'cloud' (the internet) of a variety of computing services, such as storage, databases, networking, servers, software, and analytics, giving building professionals access to faster and more flexible resources.

BIM is no exception to this trend.

There are numerous advantages to creating, managing, validating, checking and sharing BIM models in the cloud for the architecture, engineering, and construction (AEC) industry.

Cloud-based BIM in construction projects isn't just about remote work; it's also about dispersed teams and collaboration. Individuals from a variety of organizations, such as architecture firms, engineering firms, general contractors, and specialist subcontractors, make up project teams. These teams can benefit from cloud-based BIM whether they are working from home, in the office, or on-site.

The construction industry is investment intensive due to which they are hesitant to experiment with new technology. While cloud computing has a lot of potential in the construction industry, such applications are not widespread. There is a knowledge gap that must be filled to assist the construction industry in adopting cloud computing technology. And while the thought of cloud-based software may seem intimidating to those in the construction business who have been utilizing pen and paper, spreadsheets, and other manual methods for communication and project management, there are other construction perks to consider.

Cloud computing – How is it transforming data validation?

Cloud computing is gaining traction in the construction industry as companies realize the advantages of cloud computing such as flexibility, dependability, security, convenience, and efficiency over on-premises solutions. [The 5 most important ways cloud computing is changing data validation in the construction industry are as follows:](#)



1. Improved model coordination:

A significant part of the classification and checking of building models is still performed manually, costing a lot of time, effort and is prone to error. Although every project is different, the most common challenges are model coordination and the lack of interdisciplinary coordination between designers, engineers and contractors. These challenges lead to rising demand for better model coordination between teams, as the industry is still lacking an integrated workflow. [Verifi3D](#) bridges the gap between the design and the construction stage. Through an integrated workflow, Verifi3D empowers customers with a set of options that can help them classify their input data, validate and visualize their building model, report possible flaws and share them in real-time with the whole team. Teams can manage the whole model coordination workflow including classification, rules and checks, and issues management in one environment. Manage clashes and assign issues using issue trackers such as BIM Track and BIM 360 Issues to various members of the team. All the teams need in one great cloud solution! With improved model coordination, find and resolve conflicts between building components before they become costly to change orders.

2. Better collaboration:

There are several stakeholders with whom project-related updates need to be shared. To meet project deadlines, it is also necessary to collaborate with different teams at the same time. In today's highly competitive business world, lost productive time equals lost money. This is where the cloud can come in handy. Through browser-based interfaces, all interested parties can promptly and securely access and work on the same cloud-based file from their location at any time using PCs, laptops, and tablets. All you need is access to the internet. For example, using Verifi3D enables project managers to easily share content with subcontractors, vendors, building owners, and investors to keep them in the loop about a project's progress. As a result, each of them can work more efficiently to complete the project on time. Additionally, architects and engineers can collaborate on a BIM project that is being carried out in an architectural and engineering firm's office using cloud computing, even if they are at different locations.

3. Enhanced data security:

Project data must be handled carefully, whether it is related to a construction site design, frequent updates, or concerns that arise. It is an important component of a project's timeline till it is completed. Keeping this information on the office's local computers renders it vulnerable to situations like system failure, data theft, and so on. The loss of data connected to a construction project is a mistake for the contractor who is working on it. To keep the clients' data safe and secure, most cloud service providers employ data security technologies such as data encryption, intrusion detection and firewalls. With Verifi3D users can load models locally or sync models automatically with Common Data Environments (CDEs) such as Autodesk Construction Cloud and Autodesk BIM 360. Having all the project data in one place simplifies analysis and reporting while also increasing accuracy. Housing the data in the cloud as a backup ensures that they are protected in any situation and are only accessible to authorized users. Furthermore, cloud-based systems process data at a faster rate than on-premises systems, saving project managers time and allowing them to quickly and easily share results across teams and regions.

4. Lower costs:

Cloud computing's versatility allows businesses to select the storage, processing, and sophisticated services that best suit their needs. Firms can invest in their digital infrastructure rather than purchasing computers and backup drives, which depreciate quickly. The best thing is that when technology advances, new software versions and updates are provided in real-time through the internet, allowing companies to take advantage of them right away. The exorbitant expense of hardware is eliminated with cloud computing. For example, [Verifi3D offers three packages](#) which are monthly subscriptions that can be activated anytime. Choosing the best cloud solution based on needs will result in a higher return on investment and increased productivity.

5. Save time:

One of the most compelling reasons to migrate a business to the cloud nowadays is the ease with which specialist software/solutions can streamline the data migration process. Businesses that sign up for a specialized platform receive support during the move and can contact service teams at any time. With cloud computing, time spent updating and patching software, distributing client solutions to end-users, and other more tedious IT activities is significantly reduced. The cloud enables businesses to significantly reduce the requirement for full-time IT workers and, in some situations, get more work done with fewer resources. Savings can be realized nearly immediately. Furthermore, because there will be considerably fewer service outages, employees will save time and be more productive.

Conclusion

Aside from the previously mentioned advantages of cloud adoption, cloud computing has a promising future in the construction industry. Not only can cloud computing help cut costs, but it can also increase collaboration between teams, management, and stakeholders, allowing for speedier decision-making and more efficient resource utilization. As a result, construction projects are completed faster, with lower overhead and higher profitability. Companies in every industry, including construction, are turning to the cloud for these reasons.

Verifi3D by Xinaps is the spell checker of your BIM models. It is cloud-based and tackles many of the issues by providing pre-construction teams with model coordination, automated clash detection, and workflow integration that simplifies collaboration and minimizes manual work. With an intuitive and easy interface, Verifi3D is web-based and eliminates the need to purchase software or manage IT infrastructure. It helps professionals deliver work in quality and time, reduce rework, and leverage their teams, so they can focus on bigger tasks.

With the implementation of CDEs such as Autodesk Construction Cloud and Autodesk BIM 360, and added integrations with BIM Track and BIMcollab, teams can manage the model coordination workflow, including clash detection, validation, and reporting in one environment.

Verifi3D by Xinaps's vision towards digitalization is very simple: enhanced model coordination in the cloud, better collaboration and best-in-class quality. In short, Verifi3D helps to build a better building by keeping the whole team up to date, improving building performance and eliminating the need for rework.

The construction industry is evolving stronger than ever, thanks to the integration suppliers such as Autodesk, Nemetschek, Hexagon, Trimble, Bentley. The integration suppliers play a major role in providing cloud-based collaborations services, making APIs publicly available to create an ECOSystem quicker, thereby facilitating solution providers in the AEC industry to come up with specific solutions.

Cloud services are inevitable for the construction industry as it strives to digitize its processes through the use of BIM-enabled applications resulting in the emergence of new business models, allowing construction companies to conduct business in a new way. Cloud computing will become a cornerstone as the construction sector embraces digital transformation, enabling more efficient back-office processes and making it easier for project managers to keep costs under control and projects on schedule. The sooner companies accept and use cloud-based solutions, the better equipped they will be to tackle the issues that lie ahead for the construction industry!

About Xinaps

We believe in building better.

We believe that the design building process can be simplified and optimized with the power of technology. That's why we created Verifi3D, the spell checker for BIM models. Verifi3D simplifies the data validation process and enhances professionals' workflow - real time, in one platform.

Our clients play an active role in tailoring the features of our solution and therefore, we constantly strive to improve and to meet their needs and requirements. Hand in hand, we work hard on shaping an innovative model checking tool. Using our multiple years of construction tech software development experience we at Xinaps are preparing you for the next level of digitization. Together with you, the innovators in AEC, we would like to accelerate the adoption of smarter, more future-proof design methods and active collaboration in the built environment.

Let's build better together!

Where to find us



verifi3d.com



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