



AUTODESK **CONSTRUCTION CLOUD**™



How KEO International Improved Design and Structural Value with Cloud-based Collaboration

Imagine this: Elegant design coordination and collaboration with connected construction workflows and a common data environment (CDE) shared across all stakeholders. For many contractors, this vision feels like an unachievable dream. But for KEO International (KEO), cloud-based collaboration has made it all possible.



Customer Snapshot

FIRM SIZE: 1000-5000
FIRM TYPE: GENERAL CONTRACTOR
REVENUE: \$31 MILLION
FOCUS AREA: COMMERCIAL
HQ: SAFAT, KUWAIT

PHASE:



PRODUCTS:



VALUE DRIVERS:



Building Better with Connected Construction Workflows

KEO is a leader in planning, design, engineering, and project management solutions. Their projects across 11 international markets represent a leading-edge aesthetic combined with meaningful and practical design and constructability. Their design excellence, high standards, and delivery quality have led to their involvement in many of the world's most ambitious and iconic projects over the past 50 years.

KEO's design excellence and creative vision complement their innovative use of cutting-edge technologies to improve and optimise workflow efficiencies. As their core technology, they use BIM 360 within Autodesk Construction Cloud™ to improve design and increase structural value across remote teams.

Using Cloud-based Collaboration Tools to Drive Innovation

KEO's projects include the four-million-square-foot Aykon City Towers complex at the heart of Dubai, and Kuwait's Business Town Tower in the center of Kuwait City's Financial District. Their teams are responsible for designing and implementing cutting-edge projects in major cities and involve intensely complex logistics.

Without a CDE and cloud-based collaboration tools, these logistics would be extremely labor-intensive





and costly. This includes working across a spectrum of highly varied environments, each requiring unique structural and aesthetic solutions. It also involves an enormous number of stakeholders, each with individual interests, needs, and demands.

Sharing information and collaborating in this environment can be complicated and has the potential to lead to significant cost and timeline overruns, as well as potential quality issues. With stakeholders dispersed across multiple locations, KEO's digital strategy is centered around using cloud-based collaboration tools to design, plan, and construct.

BIM 360 provides a CDE, enabling consistent communication around complex design and constructability issues to deliver consistent products.

"Over the last few years, KEO's IT Digital Strategy pivoted towards a simple goal – empower our digital worker to be able to securely and effectively collaborate and communicate anytime, anywhere, on any device, within or outside the KEO organisational boundaries," says Damir Jaksic, Chief Information Officer at KEO International. "The seamless integration of BIM 360 across multiple tools saves time and enables better communication, accuracy, and efficiency."

Connected Construction Workflows Enable Communication Across Projects

"BIM 360 has been especially important in providing a unified platform that promotes integrated, collaborative, connected workflows between architecture, engineering, and

construction teams," says Jaksic. "BIM 360 has allowed us to better collaborate and securely share data with external stakeholders, saving us more than 90% of the time it would normally take to do so in other disconnected platforms."

BIM 360 is the thread that holds all contributions together, helping all stakeholders speak a common language within a CDE. On projects the size of KEO's, the amount of data and files is enormous. Despite that, with BIM 360, users can quickly find the latest version of any design model or drawing.

"Finding the required information, such as the right files, models, and drawings, has become more efficient," says Juan Tena Florez, Regional Digital Design Manager, KEO International. "We've calculated an improvement of about 83% in terms of time savings, in that regard."

BIM 360 also improves construction productivity by automating mundane tasks and providing a platform for collaboration. Its AI-driven mitigation and other productivity functions help the KEO team to apply their creativity with greater impact.

In addition to time and productivity gains, using BIM 360 improves quality as well.

"With information at our fingertips," says Jaksic, "we use connected construction workflows to validate quality, and once that is done, it is transmitted to third parties. The whole process is workflow-driven and automated. We also oversee this process on a project or company-wide level."

Cloud-based Collaboration Across the Project Lifecycle Drives Successful Outcomes

KEO uses Autodesk Construction Cloud and Autodesk's AEC Collection across the project lifecycle, from design to operations. For instance, BIM technology played a vital role in connecting the different design and construction environments on the Aykon City Towers project.

"This helped bolster group interaction while refining complex workflows into a structured, just-in-time chain of responsibility and delivery," says Florez.

Autodesk Revit is KEO's primary design tool, improving both the design process and constructability. Every intelligent model created with Revit represents a complete project, conveniently stored in a single database file. This allows changes in one part of the model to be automatically propagated to other parts, dramatically enhancing design coordination and collaboration.

KEO also uses Autodesk Navisworks to manage inter-team and inter-department collaboration. Additionally, AutoCAD supports and supplements blueprint envisioning and production.

BIM 360 is critical for providing a CDE that promotes integrated, collaborative workflows between architecture, engineering, and construction teams.

The Next Generation in Cloud-based Collaboration

KEO's commitment to intelligent innovation means it is continually looking forward to the next project and the next generation of technology and processes to support its projects.

For companies that want to embrace forward-thinking technology and improve their ability to deliver on complex projects, Jaksic offers some advice:

"Focus on a task that can provide significant outcomes in a year. Then, in turn, focus on the one process that matters the most, the one most essential to delivery of your customer value proposition. Do it right, and then repeat it. While you're at it, champion inclusivity and collaboration. Micro-organizations within organizations create new intellectual properties that can then open up new favorable strategic options."

Autodesk's portfolio of products will continue to form a core part of KEO's strategy and approach, to connect, convey, and simplify the way they approach design collaboration and coordination, as well as connected construction workflows, as they take on new projects with massive logistical challenges.

The extreme design complexity and multi-layered delivery protocols that KEO's flagship projects demand are possible only with an elegant and layered approach, including effective technology. The challenge for the future is to maintain and increase delivery levels while consuming fewer materials.

With Autodesk as a partner, KEO is up to the task.



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Chief Information Officer,
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