Award-winning infrastructure projects with Autodesk Vault Professional

Kelprojektas maintains market and quality leadership through continuous process development and technology innovation

Image courtesy of Kelprojektas.

With the help of Autodesk Vault Professional and AutoCAD Civil 3D data references, teamwork became possible and efficient – not only for the employees of one office, but for the entire company as well. After the success of our first Vault project, the stretch on the highway A4 Vilnius-Varena-Grodno, we have expanded Vault to other projects such as Rail Baltica. We currently have more than 45 active projects, where Vault is used. Kelprojektas made the right decision by choosing Vault.

— **Darius Šimkūnas**
   Chief Programmer
   Kelprojektas

Overview

Kelprojektas is the largest group of transport infrastructure engineering companies in the Baltic States that designs transport infrastructure, public buildings, engineering systems and regional planning. Established in 1956, Kelprojektas has successfully delivered more than 6,000 infrastructure projects and has more than 300 employees working with the most advanced software; included among them, the biggest number of Autodesk certified specialists in the Baltic States. The company has received several innovation and quality awards in Lithuania for its continuous investments to innovative design technologies and improvement of business processes and people.

Kelprojektas has been using Autodesk software for more than 15 years – solutions such as Autodesk Vault Pro, AutoCAD Civil 3D, Autodesk 3Ds Max Design, Autodesk Robot Structural Analysis – to great results in many projects. Kelprojektas has been a member of Autodesk Developer Network (ADN) since 2008 and is the only engineering company that is part of ADN in the Baltic States. This membership has given Kelprojektas the advantage to tailor Autodesk solutions for the market needs of the Baltics.

The Challenge

Kelprojektas needed a sophisticated and effective document management system (DMS) solution that would enhance their operations for continuously improving client service, project quality and business benefits. The selected DMS solution would have a central role in Kelprojektas' daily operations and would need to fulfill an extensive list of requirements. Most importantly, Kelprojektas wanted a DMS solution that improves operational efficiency by enhancing international collaboration.

Since Kelprojektas has several offices in different Baltic country cities, smooth teamwork and optimal use of resources across boundaries are major efficiency factors. The selected DMS would also be used for automation of certain functions in the refined digital modeling process. In addition, the DMS solution was required to be compatible with the existent tools but also flexible to include new tools to suit the growing requirements of Kelprojektas' projects. In 2012, Kelprojektas became the first engineering company in the Baltics to introduce Autodesk Vault Professional – one of the most advanced DMS solutions in the world.

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Vault Professional enables Kelprojektas to effectively manage data development, modeling and documentation processes for improved work efficiency and higher quality.

The Solution

After numerous analyses and pilot projects, Kelprojektas chose Autodesk Vault Pro to best suit their business needs. Vault enables faster and easier management of work processes and exploration of every aspect of design software solutions. During the implementation of Vault, Kelprojektas configured and prepared the system in cooperation with Autodesk. In 2013, Kelprojektas started its first project with Autodesk Vault system—designing the reconstruction of a stretch on the highway A4 Vilnius-Varena-Grodno, from 39 km to 69 km. Kelprojektas was responsible for extensive design works such as geological, hydrometeorological and economic surveys, preparing environmental impact assessments, preparing a road reconstruction project and designing engineering traffic safety facilities. Kelprojektas work was completed in April 2014.

More out of data and BIM

Vault brings new ways of organizing, managing and supervising data development and modeling processes. Vault also enables taking advantage of the possibilities of the design software. In addition to Autodesk solutions, Vault integrates with other solutions used by Kelprojektas. This makes Autodesk Vault an integrator, for example, in building information modeling. Vault helps managing and obtaining the intelligence created during the design process for different BIM outputs for the construction stage and infrastructure asset management for owners, operators and other users.

Improved efficiency and teamwork

Vault Professional helps to create faster problem-solving and organization-wide collaboration between teams. All Kelprojektas offices now operate in one system, highly enhancing efficiency. With Vault and Civil 3D, teamwork became more efficient for the entire company. Vault also successfully assists Kelprojektas' administration. With Vault, Kelprojektas implemented document registers, a search system, reports and notification systems. Effective document notifications and search

options eliminate time-consuming manual processes and improve work efficiency. In addition, Vault Professional interface with the cloud computing system Autodesk Buzzsaw enables more efficient work with subcontractors, partners and other parties.

Better document management for higher quality

Vault Professional improves operational and project quality with effective documentation processes. With Vault's functions, Kelprojektas' experts always know the latest document versions and have direct access to them. Vault also makes accessing previous document versions simple. In major projects, Vault's file life cycles play an essential role as they enable identifying clear responsibilities for the document modifications. Vault shows the modifications in DWG files immediately, which saves a lot of time and helps avoid human errors and misunderstandings. Vault also improves the accuracy of consolidated reporting by ensuring that output data remains unchanged.

The result

The Lithuanian Business Confederation acknowledged Kelprojektas' application of Vault in road and street design with The Service of the Year 2014 award in Most Intellectual Workplace category. Vault Professional has improved efficiency resulting in higher quality customer projects and better business. Kelprojektas has increased the use of Vault immensely. By autumn 2014, Kelprojektas had approximately 20 life cycles, approximately 40 categories and over 150 custom attributes and 45 running projects in Vault. Among these projects is Rail Baltica, a nearly 1,200-kilometer long railway line for passengers and goods moving between the Baltic States and Poland, and also between the Baltic States and other European Union countries through Warsaw. To be completed in 2020, Rail Baltica is expected to have major positive economic and social effects for the region. Kelprojektas is responsible for many design projects for Rail Baltica. The success in other projects resulted in Kelprojektas using Vault extensively in Rail Baltica projects.

We have been using Autodesk software for more than 15 years and have been a member of the Autodesk Developer Network since 2008. Our close partnership with Autodesk allows us to continuously develop our business processes and offer the best solutions and technologies to our customers. With Autodesk solutions, such as Vault, we deliver superior quality and value to our customers in the form of award-winning infrastructure projects.

—**Arvydas Čibirka**
Deputy of CEO/Technical Director
Kelprojektas

For more information, please visit http://www.kelprojektas.lt/en/content/design-rail-baltica-railway-stretch-estonia For more information on the Service of the Year 2014 award, visit this site.

For more information on Autodes data management for civil infrastructure, visit www.autodesk.com/vault.

Arvydas Čibirka – Deputy of CEO/Technical Director, Kelprojektas

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