

BIM Services

CAD Customization

CAD Data Migration

Process Automation

Machine Design

Content Creation

Product Design & Development

About Olilo

Olilo Technologies is an unit of SrinSoft Inc. company headquartered in Columbus, OH.

Olilo is a multidisciplinary IT and Engineering Services firm, having expertise in all aspects of Engineering Services from 2D drafting to complete product design & development. Engineering services is one of the Olilo's strategic business initiatives that provide end-to-end solutions to maximize the customer's efficiency in innovation, design, manufacturing and automation.

Olilo's dedicated engineering automation team has profound experience in developing custom application using CAD API ranging from small plug-ins tools to large and complex applications. Providing solutions in Designing and Programming needs on several CAD platforms like Autodesk, Bentley, PTC, SolidWorks etc., We have been assisting Engineering companies in automating their challenging design tasks by developing custom CAD applications.



Industry Expertise

Architecture
Construction
Interior Design
Structure

Automobile
Machinery
Oil & Gas
Power Energy

Design Process Automation

Business Challenges

- Quality issues related to usage of wrong design data resulting in erroneous design.
- Isolation of design team from manufacturing and procurement department.
- Manual data duplication and no data sync.

Solution

- Development of a controlled design environment for designers pertaining to customer accounts they work.
- Interface with ERP to fetch data required for design like cost estimation, stock availability, lead time etc.
- Centralized content management system for various custom families for designers.
- Quality Control check process based on customer/ account specific standards.
- Generation of detailed report and schedule with pricing.



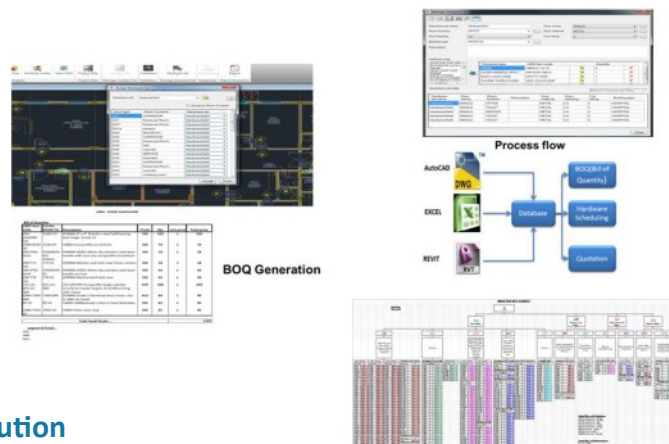
Business Benefits

- Reduction in design error by more than 50%.
- Unification of design team with other departments.
- Elimination of data duplication thus increasing accuracy & efficiency.
- Accuracy of Bill of Quantity (BOQ), aligned with procurement team.

Custom Scheduling Automation

Business Challenges

- Manual generation of tender documents based on various external data formats.
- Knowledge required for non-technical staff to read design information.
- Slower design iterations.
- Quality issues due to data inaccuracy.



Solution

- Development of an automated system to extract information from various data sources.
- Automatic selection of Master Data hardware/ hardware sets based on various door information.
- Bi-directional interaction with ERP system including cost information, product data, revisions etc.
- Automatic generation and Management of Sales Quotation.
- Generation of complete master key hierarchy system

Business Benefits

- Reduction of tender generation time by 70%.
- Less knowledge required for technical staff.
- Better interaction with external data.
- Faster design iterations.

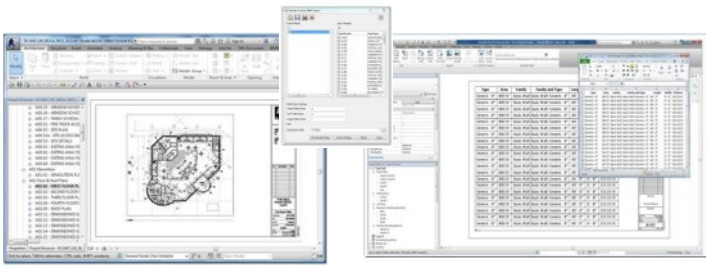
BIM Documentation Automation

Business Challenges

- Manual effort required for generating 2D detailing from Revit data.
- Manual creation of non-schedule data from excel spreadsheet.

Solution

- Custom DWG export with automatic cleanup of 2D data including conversion of tags as attributes, maintaining complete view XREF shared across all sheets.
- Maintaining XREF for complete view as per each category like all annotations , geometry, etc. as separate XREF.
- Custom naming conventions for export of views, blocks, files etc.
- Bi-directional excel data exchange for creating drafting views from Excel sheets retaining all formatting information.



Business Benefits

- Reduction of 2D detailing time by more than 70%.
- Reduction of error by more than 50%.
- Faster design iterations.

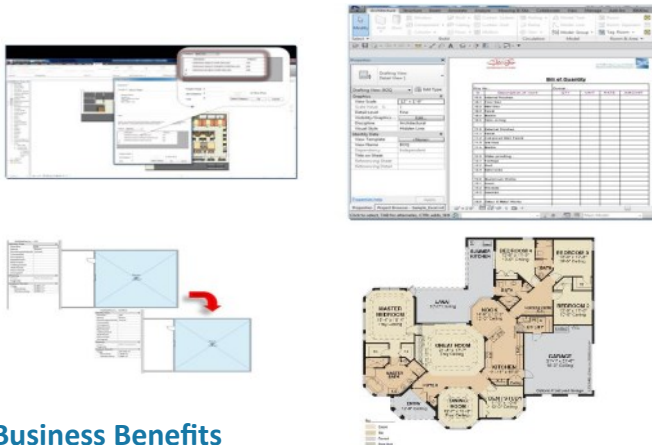
Cost Estimation with Custom Quantity Take-off

Business Challenges

- Manual calculation of required quantity take-off.
- Less interaction with external data sources.

Solution

- Custom quantity take-off from Revit with an option to define custom rule for fetching required data.
- Creation of region specific custom areas and calculation of paint area.
- Option to define Excel like formulae to define custom schedule data including connectivity to external sources like excel, database or ERP system.
- Generation of custom schedules including formatting option and addition of pictorial representations to schedules.



Business Benefits

- Reduction of error by more than 90%.
- Better interaction with external data.
- Fast design Iteration.

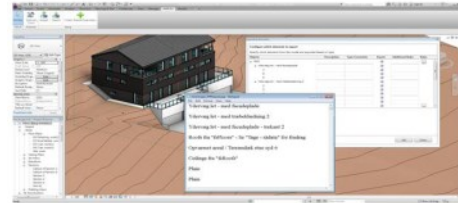
Energy Automation

Business Challenges

- Manual calculations, manual modification in design to accommodate results based on analysis.
- Knowledge required to manipulate map data to generate required layout.
- Less optimized calculations.

Solution

- Automation of energy calculation based on Passive house design principles
- Automatic modification in Revit model based on the results from energy calculations
- Calculation of shading vectors for various weather stations using predefined NSRDB weather data.
- Automatic building of roof layout based on data from Pictometry Java API including automatic detection of RTU and obstructions.
- Automatic solar panel layout based on roof layout, obstacles and shadow area.



Business Benefits

- Reduction of design cycle time by 50%.
- Optimized design solution.
- Faster design iterations.

Structural Design Automation

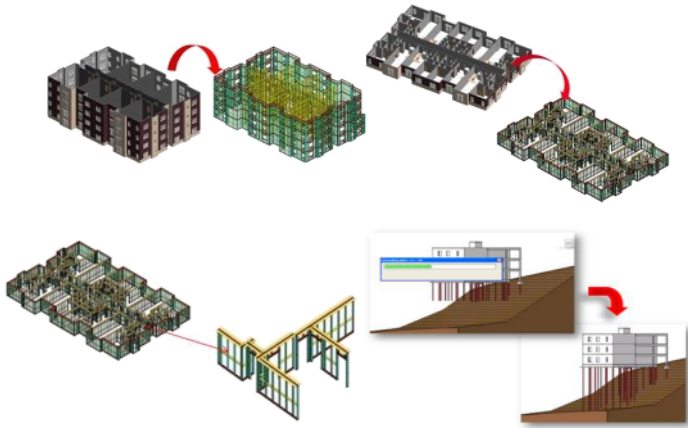
Business Challenges

- Manual generation of steel framing.
- Knowledge required of complete design standards for steel framing.
- Slower design iterations and Quality issues.

Solution

- Automatic generation of structural framing plans, Bill of Materials & CNC data of all panel.

- Automation of complete steel framing based on Rosette System of manufacturing to panelize Cold Formed Steel (CFS) structures.
- Automation of framing for various building elements like walls, floors, roofs, trusses etc. including creation of MEP installation and structural connections.
- Automatic shop drawing generation in Inventor and Option to perform automatic Structural analysis with interface to Staad.Pro.



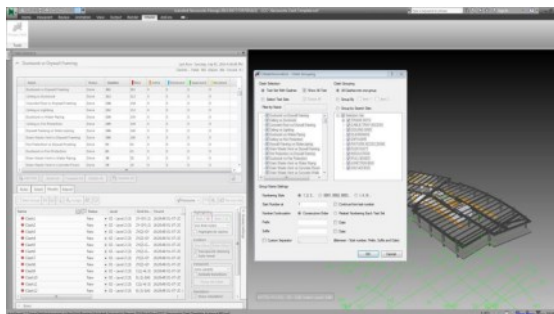
Business Benefits

- Reduction of design cycle time by 50%.
- Reduction of design errors.
- Faster design iterations.

Project Collaboration Automation

Clash Grouping

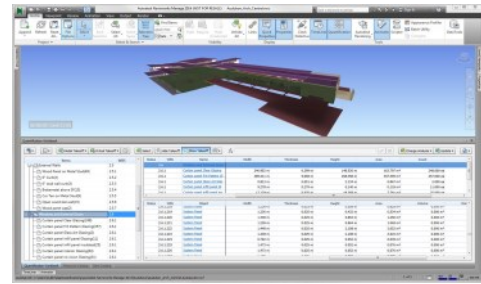
- Automates the grouping of clashes based on user selection of a member in clash group.
- Custom clash selection based on category.
- Automatic clash group numbering.
- Grouping based on selection, category, search sets etc.



WBS Automation in Navisworks

- Automate the linking of items in the model with WBS items in the quantification module.
- Automatic association of model objects to QT Tree node.

- Automatic Takeoff Model item to Quantification workbook based on WBS value available in properties.
- Automatic Item Group creation in Item Catalog.
- Change management with comparison of quantification catalog with custom report generation.



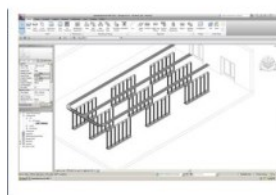
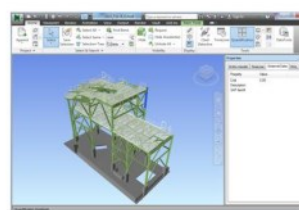
Custom Property Manager for NavisWorks

- This tool creates custom properties in NavisWorks objects based on external data.
- Bi-Directional data exchange between NavisWorks and external data.
- Option to set object data mapping with external data source.



Other Automation Projects

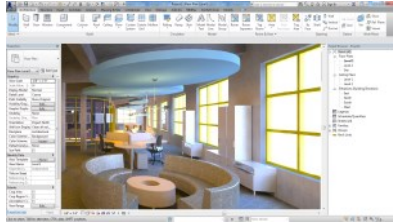
- Automatic rerouting based on collision.
- Pipe Offset tool.
- Room based Clash Grouping for NavisWorks.
- Geometric Converter for NavisWorks.
- Document Management System.
- Auto-routing of pre-term cabling based on user selected.



Design Services-BIM

Interior Design

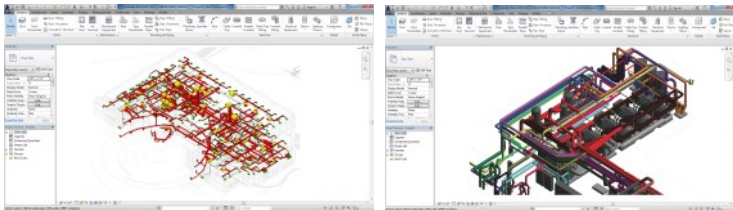
- Design with concept development, such as space planning, color concept, material selection and furnishings selection.



- Design amusing furniture layout, lighting and interior elements.
- We provide interior design for commercial, institutions and hotels.

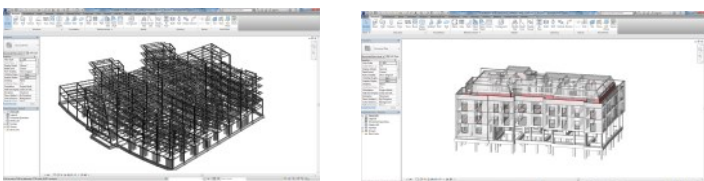
MEP Design

- Design and analysis with integrated analysis, detailed energy analysis, LEED and Energy Star analysis, Air and thermal flow simulation.
- Load Calculation (Cooling and Heating), HVAC Duct Design and Layout Design.
- Design with whole-building energy analysis to create more sustainable, energy efficient designs.



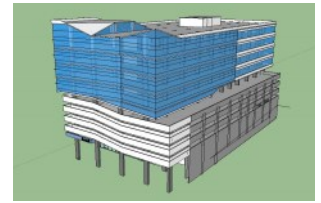
Structural Design

- Designs with high productivity, perform more accurate simulations, and collaborate more effectively with structural member.
- Designs with plan and result in the determination of the most suitable proportions, dimensions and details of the structural elements Produce a safer, cost-effective design with optimized steel cross sections and accurate amount of reinforcement for concrete elements according to national design codes.
- Model reinforcements in structural concrete elements.



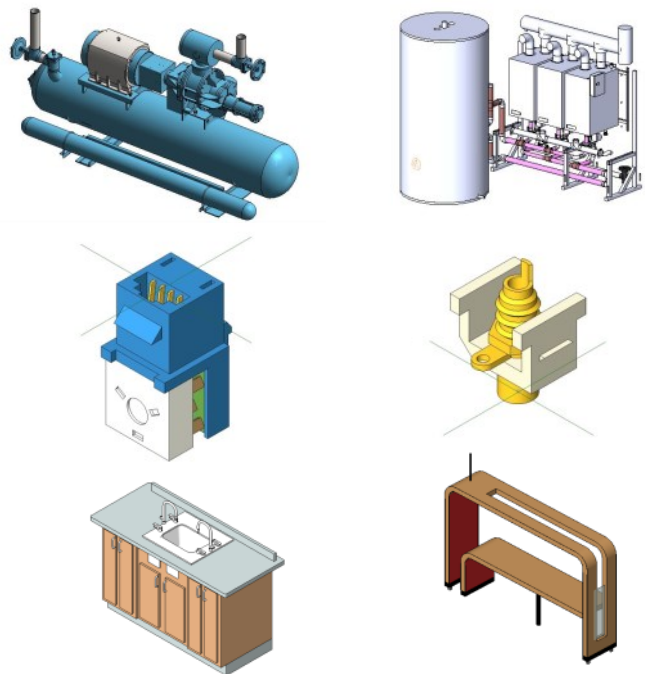
Conceptual Modeling

- Design with structure, properties and boundary conditions.
- Ability to organize and manage raw data into information for modeling.



Content creation for Revit

- Olilo has a dedicated team of experts to create Auto-desk Seek compatible Revit Content for Auto-desk Revit Architecture, Revit MEP and Revit Structure.
- Creating accurate, efficient building information models that conform to your company's standards.
- We create system family which can be used by a particular system and standard family which can be created and used by several users.



- We have expertise in designing
 - ◆ MEP Revit Families
 - ◆ Building System Families
 - ◆ Building System Components
 - ◆ Legends & Titleblocks, Fixtures
 - ◆ Structural Components
 - ◆ Partitions, Walls, Windows and Doors

Some of our Reputed Clients



Technology Partners



Olilo is a premium partner of software product companies like Autodesk, PTC, SolidWorks and Microsoft. This partnership enables us to have direct access to the support and technical architects in their product development team. We have the privilege to access beta versions of new releases of these software which helps us to educate our customers to overcome their existing design limitations and keep an edge over their competition.

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