Visualization is no longer simply a presentation tool, it is a design tool as well.

—Larry Malcic
  Director of Design
  HOK London

Autodesk®
Design Visualization for Architects™

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Explore more designs, confirm their validity, and communicate their impact with Autodesk design visualization tools for architects.

Specialists have long used design visualization to create beautiful presentations at the end of the design process. Now architects, designers, and engineers can also use visualization to make informed decisions throughout the BIM (Building Information Modeling) design process. From exploring complex organic forms, to studying how light interacts with a design, to validating designs for planning and public outreach, visualization plays a role at every stage of development, from schematics to final presentation.

Powerful Creative Tools
Autodesk gives you state-of-the-art 3D design visualization tools that help you gain a deeper understanding of the project before it is real. You can see how it works and uncover areas where it may not work. The earlier in the design process this is done, the easier errors are to fix. Ultimately, design visualization helps you create better designs, and that sharpens your competitive edge.

Explore, Validate, and Communicate
At the heart of Autodesk's design visualization solutions is Autodesk® 3ds Max® Design software, a comprehensive 3D application that allows you to visualize with the utmost efficiency by providing integrated workflows and extensive data interoperability with Autodesk's leading design software, including the AutoCAD® and Revit® software product families.
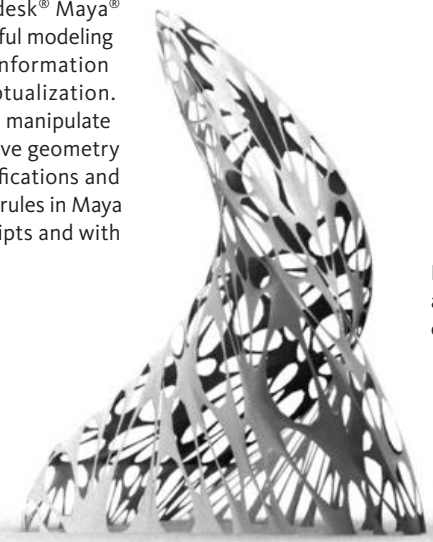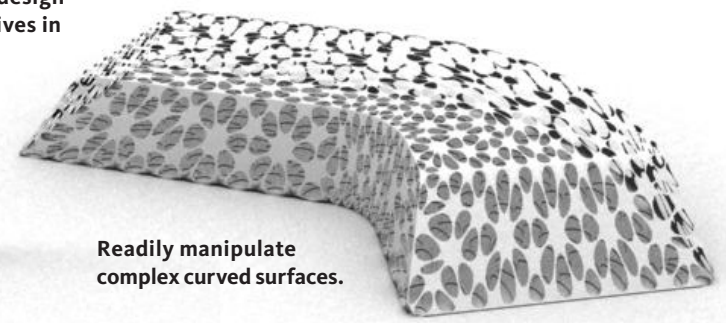

Image courtesy of Visualhouse.

Explore Design Concepts

Create unique organic forms, generate and control architectural form procedurally with scripts, and explore your concepts' impact early in the design process.

Create Free-Form Designs
The freedom to experiment during the conceptual stage enables you to quickly explore design alternatives and gain a better understanding of the impact of your ideas early on. Both 3ds Max Design and Autodesk® Maya® software offer robust platforms with powerful modeling toolsets that complement the building information modeling (BIM) workflow during conceptualization. These tools enable you to freely create and manipulate complex organic shapes and iteratively drive geometry procedurally via built-in rules-based modifications and constraints. You can also develop your own rules in Maya with Maya Embedded Language (MEL) scripts and with the Modifier Stack in 3ds Max Design.
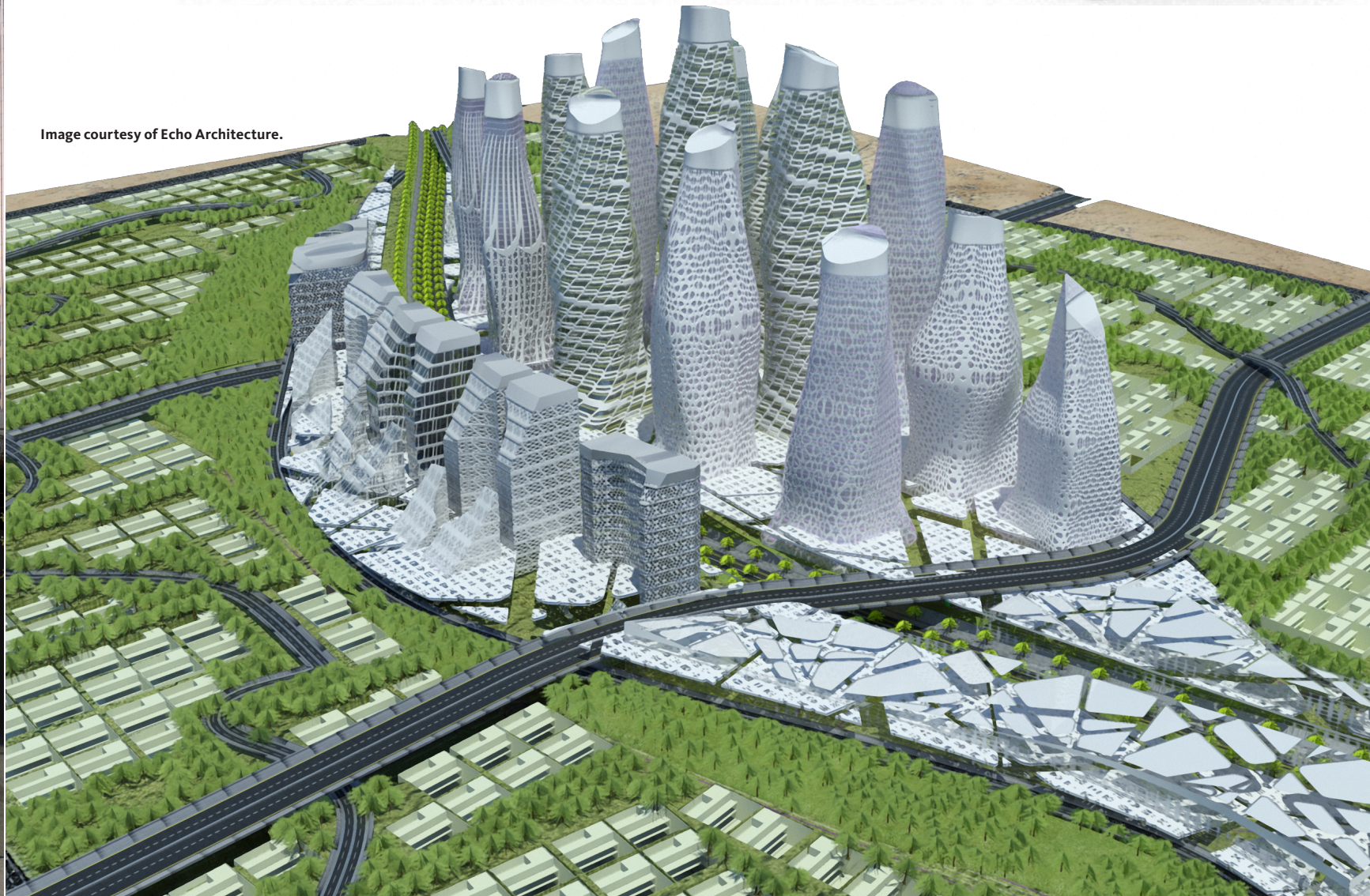

Explore design alternatives in context.

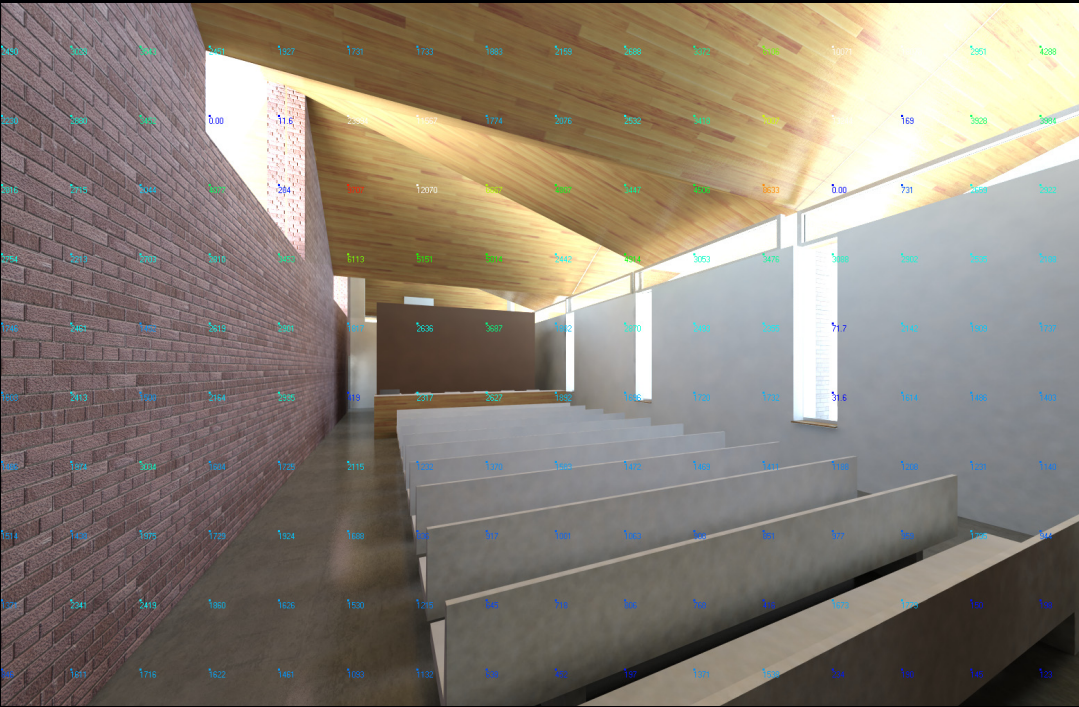**Readily manipulate complex curved surfaces.**

Image courtesy of Echo Architecture.

Validate Design Concepts

Put your design in context, so you and your clients can better understand how it functions.

Communicate Design Concepts

Helping customers make crucial decisions during design reviews helps you gain valuable buy-in at every stage.

Generate Detailed Contextual Studies

Design visualization tools such as Autodesk 3ds Max Design software can help you generate detailed contextual studies. Revit® Architecture software building information models can be quickly and accurately imported into 3ds Max Design and rapidly manipulated in the viewport. 3ds Max Design then allows you to visualize your product in its full context—which is crucial to making informed design decisions. Using the software's new Exposure™ technology for simulating and analyzing sun, sky, and artificial lighting, you can even accurately visualize how light will interact with your building. The ability to evaluate light intensities in designs may also facilitate the evaluation of indoor environmental quality for LEED EQ 8.1 certification.

Communicate design intent in context with photo-realistic renderings.

Model courtesy off BNIM Architects

Image courtesy Aedas Imaging.

Communicate and Persuade

Autodesk design visualization tools can be used collectively to help you tell colleagues and clients the whole story of your design—as early or late in the process as you like. Communicate the full scope of your creative vision by bringing Revit Architecture building information models into Autodesk 3ds Max Design software and adding animated characters, props, weather, musical scores, voice-overs, and more. Using the world-renowned 3ds Max Design animation and visual effects tools, you can communicate a great deal of information quickly, compellingly, and persuasively.
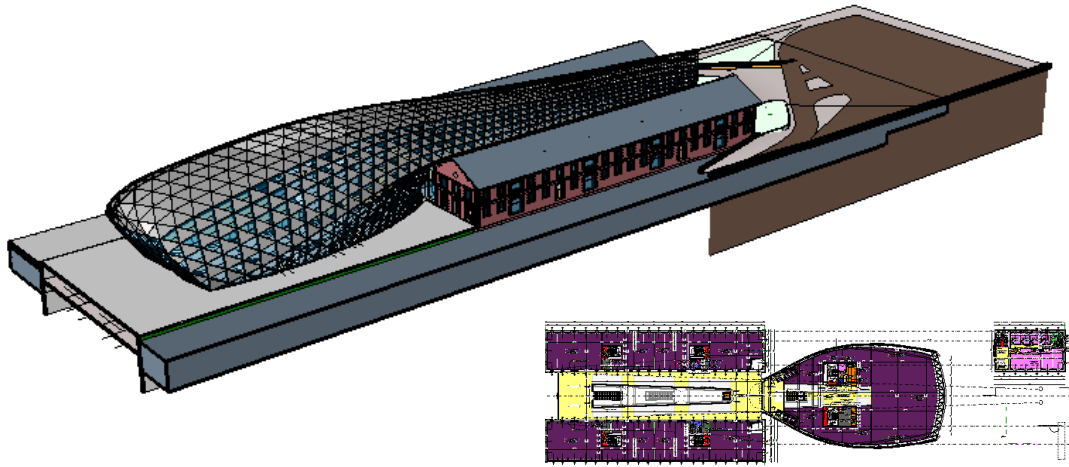

Image courtesy of Red Vertex.

Image courtesy of Smoothe.

The Autodesk Advantage

Let Autodesk design visualization tools for architects sharpen your competitive edge.

Autodesk 3ds Max Design software enables architects, designers, engineers, and visualization specialists to fully explore, validate, and communicate their creative ideas—from initial concept models to final, cinema-quality presentations. 3ds Max Design offers these same professionals digital continuity with the AutoCAD, Revit, and Autodesk® Inventor® families of software products.

The latest release of this comprehensive 3D modeling, animation, and rendering solution, Autodesk 3ds Max Design 2010 delivers tools for exploring unique designs, validating them, and creating advanced visualizations. Learn more at **www.autodesk.com/3dsmaxdesign.**

Autodesk Maya software is an integrated 3D modeling, animation, and visual effects solution with roots in the film and games industries. The power of Maya for architects and designers lies in its flexibility for generating architectural forms and shapes. Architects are able to drive geometry via built-in rules based modifications and constraints—or they can create their own rules with the powerful embedded scripting language in Maya called Maya Embedded Language (MEL). Learn more at **www.autodesk.com/maya.**

Autodesk® ImageModeler™ photogrammetric software is an image-based modeling and design tool. With ImageModeler, architects can create photorealistic 3D buildings from photographs and view their design in context. In addition, ImageModeler is a powerful measurement tool that helps reduce the need for complex laser measurements on site. Learn more at **www.autodesk.com/imagemodeler.**

Autodesk® Stitcher™ Unlimited panorama-creation software allows architects to put their designs in context. Stitcher Unlimited applications include the creation of virtual tours to show project achievement, the creation of panoramic backdrops for integration of CAD projects in real life, and the georeferencing of panoramas in the Google™ Earth virtual globe program. Learn more at **www.autodesk.com/stitcher.**

Autodesk® Combustion® software is a comprehensive solution for adding broadcast-quality motion graphics, compositing, titling, and visual effects to design visualizations. Users can quickly make color changes, lighting and texturing variations, and composite 3D animations with live footage or images. Learn more at **www.autodesk.com/combustion.**

Autodesk® Cleaner® software is a high-quality, flexible media-mastering and encoding solution for architectural design reviews and customer presentations. It is used for compressing animation files and maintaining small file sizes without compromising image quality. Learn more at **www.autodesk.com/cleaner.**

Dataset courtesy of ONL [Oosterhuis_Lénárd].

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