BETTER BY DESIGN
Three-dimensional rendering of a real downtown metropolitan area with a fully imagined tower inserted in the foreground.

Rendered in Autodesk® 3ds Max® software. Model courtesy of Spine3D.
Opportunity is everywhere.

Change is all around us, from a global population boom and spiraling energy costs to worldwide commoditization and climate change. The environment in which we live is rapidly shifting, and that change means opportunity. Now more than ever, design is the great competitive differentiator.

As a world leader in 3D design, engineering, and entertainment software, Autodesk helps customers address these challenges by providing the tools to help seize opportunities created by a new global business environment.
Technology, design, and a better way

By enabling architects, designers, engineers, manufacturers, and digital artists to create digital models of their projects, Autodesk helps customers fully experience their ideas virtually, so they can design in better ways. More than 10 million professionals globally are using Autodesk® products to save time and money, design more sustainably, and change the way ideas are brought to life.

Whether your workflow involves Building Information Modeling in architecture and construction, Digital Prototyping in automotive and manufacturing, or Digital Entertainment Creation in film and video games, Autodesk provides software that enables a faster, more efficient, and more iterative design process. More than just providing a competitive advantage to its customers, Autodesk provides the tools to help create a better-designed world.
Visualization of the proposed eastern span of the San Francisco–Oakland Bay Bridge.

Bridge image courtesy of the California Department of Transportation. Design and 3D rendering by the Parsons Brinckerhoff Project Visualization Group.
Then

In the same year the computer was named *Time* magazine’s Man of the Year, Autodesk and its 16 employees used the technology of the day to change the world of design with the introduction of AutoCAD® software.

In 1982, Autodesk linked technology innovation to the idea that design can dramatically change our world and the ways in which we live. Today, what began as an important 2D innovation has become so much more.
Now

Addressing all phases of the design process, from 2D design to 3D modeling, Digital Prototyping to Building Information Modeling, Oscar®-winning visual effects to model-based mapping, Autodesk offers the broadest and deepest product portfolio in the design world.

- More than 6,600 employees worldwide
- Product portfolio comprising more than 80 products
- Over 10 million users
- 1,900 reseller partners
- 3,400 development partners
- 1,900 Authorized Training Centers
Make it right. Then make it real.

Autodesk has always helped customers work more efficiently. Today, the Autodesk portfolio of technologies is helping customers change the way they work altogether.

Creating digital models and workflows enables customers to not only see their designs, but also see how they will work in the real world, making increased efficiency just one of many advantages.

With the Autodesk solution for Digital Prototyping, automotive manufacturers can better conceptualize, model, and test designs before they are ever built, bringing together design data from all phases of the development process into a single digital prototype.

Rendered in Autodesk® Alias® software. Image courtesy of Technicon Design.
Is it real?

Digital models can capture and shape how a project will look in the real world. This capability helps architects, designers, engineers, and manufacturers see their projects as they will appear, long before they are built. That way, crucial decisions can be made early in the design process, saving countless hours of redesign.

And what’s more, striking photorealistic visualizations allow clients to see what the project will look like, such as a bridge that doesn’t yet exist or a stunningly realistic reptile. That makes the idea much easier to sell. Then marketers can use those visualizations to create compelling sales materials for prospective customers.
How will it work?

The ability to see what a project will look like before it is built is only the beginning. Digital models can also depict how a project will behave in the real world.

In the past, design problems were discovered only after the design was built, resulting in costly redesign and manufacture. The ability to see what the project will actually do before it is created helps customers to identify and correct potential defects early in the design process.

For example, a designer can analyze design concepts such as basic form and building orientation to determine the optimal location of a building based on environmental factors such as daylight, overshadowing, solar access, and visual impact.
How well will it work?

Where simulation captures a project’s behavior in the real world, a digital model can help designers analyze that behavior and predict that project’s performance—and then measure it.

It’s better than the real thing because manufacturers can measure the strength of their products and how they will respond to the various stress levels of everyday use. By putting a video game controller through its paces virtually, they can break it, rebuild it, and keep doing it until it’s perfect—without building it first.
Aesthetics is but a small part of a design. Whether it will work as it should is another. But the ability to predict how well it will perform and then optimize that performance before a project is even built is what Autodesk offers.

Through Building Information Modeling and Digital Prototyping, Autodesk software helps designers predict performance and makes design easier and more efficient across industries by helping customers to substantially reduce material waste, increase energy efficiency, and more accurately evaluate project lifecycles. The result is a significant reduction in time, resources, and costs—not to mention a better-designed product.

In no area is this advantage more crucial than sustainable design, where designing for an environmentally responsible future isn’t maverick thinking—it’s an essential step in the process of building and manufacture.

So whether it’s a green skyscraper with a drastically reduced carbon footprint or the latest consumer gadget that’s made it to market 30 percent faster and with far fewer physical prototypes, there is no aspect of the designed world that Autodesk software does not touch.
Architecture, Engineering, and Construction
Building Information Modeling enables architects, engineers, builders, and owners to explore a digital project’s key characteristics such as cost, scheduling, and environmental impact—before the project is actually built.

Automotive and Transportation
Automotive manufacturers and suppliers use the Autodesk solution for Digital Prototyping to design, model, test, and market products before building them.

Manufacturing
From industrial machinery to consumer products, the Autodesk solution for Digital Prototyping helps manufacturers accelerate product launches and optimize global supply chain collaboration by connecting all phases of the product development process without the need for a physical prototype.

Media and Entertainment
Whether in film, video games, or television, Autodesk provides digital artists and animators with technologies that are redefining digital content creation.
Utilities and Telecommunications

Utilities and telecommunications providers are using Autodesk infrastructure modeling tools to more easily handle customer requests, respond quickly to outages, and effectively provide information for reporting and decision analysis.

Government

Autodesk products and solutions enable both federal and state agencies to meet crucial objectives such as replacing and rebuilding an aging infrastructure while facing the challenges of shrinking budgets and changing regulations.

Industries

Autodesk and its portfolio of products are transforming the way people work. More than 10 million architects, designers, engineers, manufacturers, and digital artists use Autodesk products throughout the most diverse collection of industries in the design world. Only Autodesk can offer its customers the depth and breadth of experience gleaned from supporting design professionals in virtually every area of industry.
Designing what’s next

Spending nearly a half-billion dollars annually on research and development and committed to supporting the next generation of design professionals, Autodesk remains focused on technological innovation and the advantages it holds for our customers.

Partnering with secondary, collegiate, and career and technical educators, Autodesk is helping prepare over 1.2 million of tomorrow’s architects, designers, engineers, and digital artists with the software used by design professionals, and helping to supply a trained and ever-growing workforce to firms the world over.

As our world moves relentlessly forward and design continues to play a pivotal role in how we live, work, and play, Autodesk software will enable those who face the coming challenges to do so with the most powerful and innovative tools that today’s technology can generate. And that, in turn, will ensure the realization of the most daring and important ideas that today’s minds can conceive.

Rendered in Autodesk Alias software, courtesy of Natalie Chusa.
The printer needs to build a dieline for the pocket (for holding the brochures).