

Spark Vision
(www.spark-vision.com)
Mölnadal, Sweden

Autodesk® 3ds Max® Design software

Autodesk 3ds Max Design software is the heart of our modeling process.

—Patrik Larking
CEO and Founder
Spark Vision

A Better Way

Sweden's Spark Vision Uses Autodesk 3ds Max Design to Help Automotive and Manufacturing Customers Achieve Better Imagery, Faster.



Image courtesy of Spark Vision.

Summary

Based in Mölnadal, Sweden, Spark Vision was co-founded in 2004 by Patrik Larking, a visionary who had previously founded Opticore, one of the first companies to provide heightened design visualization possibilities by leveraging existing CAD (Computer-Aided Design) data to produce believable, highly interactive 3D digital versions of products that had yet to exist. Opticore's biggest customers emerged from the automotive industry, and it wasn't long before Larking saw the technology's potential for a wide range of sales and marketing purposes, including online virtual showrooms.

"We started Spark Vision by targeting marketing departments instead of design development departments," says Larking. "We saw that we could provide an extremely valuable alternative to traditional photography and filmmaking by replacing the need for a physical camera and product with a virtual camera and 3D software. We can provide photorealistic and interactive images of real products that don't physically exist. By doing so, we knew we could save customers time and money, while enhancing their creativity and their imagery."

In conjunction with several of its own proprietary software products, Spark Vision uses Autodesk 3ds Max Design software as the heart of its 3D modeling process.

The Challenge

Upon founding Spark Vision in 2004, co-founders Larking and Tobias Bodin found their first big job in an industry they already knew well. Famed Swedish

car makers Saab and Volvo remain dedicated clients, but it was Saab who first approached Spark Vision looking for a new way to promote and sell its new 93 Sport sedan. Spark Vision proposed creating what was then a unique online configurator to allow potential buyers to design their own Saabs, even before the car itself had been built.

"It was a new concept for them," says Larking. "Basically, the first thing we did was populate their online configurators with a vast variety of digital assets and images. We produced roughly 500,000 digital images for Saab, in order to show the complete range of features and options for a product that didn't yet physically exist. In turn, customers could choose the exact car they wanted, and Saab could sell the cars built-to-order. Obviously, this technique was a huge advantage compared to traditional methods."

Still, in a world that is so rapidly changing, skepticism and trepidation ran rampant at the popular car maker's headquarters:

"The team at Saab was very nervous in the beginning, to be honest," says Larking. "After all, this was a radically new way of doing something they'd been accomplishing quite successfully for three decades or more. The problem was that they were spending a great deal of money to develop and design cars with a multitude of options, but they couldn't show them all to their clients. Once our internet configurator was in place, however, they could suddenly show this vast range of products and possibilities online."

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The response was overwhelmingly positive, and they were very happy."

With the success of the online configurator, Spark Vision then created similar configurators for Saab showrooms -- where a high-definition, touchscreen display allows customers to select their cars -- as well as digital images for their printed catalogues.

The Solutions

The success with Saab was rewarded with work from other prestigious automakers, including Volvo and Audi, but the Spark Vision team soon felt the need to spread its wings a little further:

"We became very focused on the automotive industry because of our background," says Larking. "But we could see how well this could be applied to other industries. Around 2006, we began looking for clients who didn't make cars. We found that Electrolux was looking to create all-new marketing materials for its major appliances, especially for the kitchen and laundry room. They wanted to show refrigerators, freezers, ovens, washing machines and more in different environments. We knew we could help."

The traditional method for creating marketing materials went a little something like this: Electrolux defined its new product range. To get images of that product range, the company needed to build a prototype of each product in different variations to be photographed in different environments and contexts.

The traditional photographic process became particularly complicated and time-consuming when products were to be viewed within their potential environments. Once a multitude of construction workers, carpenters, movers, stylists, and photographers took pictures of the environment, it would be summarily destroyed and a new one would be built. This process could go on for months, and yield relatively few useable photographs.

The Results

Spark Vision had a better way. Creating an online configurator for Swedish store chain Ballingslöv http://www.ballingslov.se/se/KOK/design_kitchen gave them an ideal chance to show it.

"Our customers didn't have to take a single photo or build a single physical set to photograph," says Erik Gabriellson, Head of Production at Spark Vision. "We did it for them, faster, using Autodesk 3ds Max. In just 15 weeks, we created 18 Ballingslöv kitchens in parallel. That is much, much faster and there is no waste. In all, we have created these digital rooms with approximately 150 million configurations. Obviously, it is not possible to build and photograph that many rooms. And, of course, we don't throw



Image courtesy of Spark Vision.

anything away, we just store the data on our servers for later use. Our clients can go back to the images to update handles or hinges or other elements much more easily."

"Initially, our clients were worried about getting the same image quality as photographs," says Larking. "In the end, however, they said they were happier with the 3D imagery than the photographs, not just for the superior look but because they actually create the images they really wanted at a fraction of the time and cost. Autodesk 3ds Max is the heart of our modeling process, and it made it much easier to create the look of natural sunlight, which is very difficult to replicate with traditional photography."

In addition to using Autodesk 3ds Max, and since 2008, Autodesk 3ds Max Design software, the Spark Vision team has also created Spark Booster™, the online configurator making it possible to configure and show literally millions of product variants on a regular computer or as an online service, and Spark Photo Studio™, an application that employs the 3D models created in Autodesk 3ds Max and, more recently, Autodesk 3ds Max Design software.

With Spark Photo Studio, users can examine products from a variety of angles and light conditions to determine the best angles, lens settings, panning sweeps, and more.

"We developed this process that goes all the way from digital data to image production using Autodesk tools," says Larking. "Using MAX Script to automate our processes, and easily customizing the 3ds Max Design interface have been very helpful to our team. The results have been invaluable to our clients."



Image courtesy of Spark Vision.