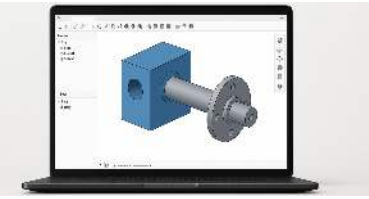
Case Study

Unstoppable SOFTWARE



3D WEB-BASED CAD SYSTEM

Results

Project Budget:

$1.1 million

Project Timeframe:

2 years

Estimated ROI:

The system reduced the company's labor costs, improved their sales team's closing percentage, and shortened the sales cycle by two weeks, leading to an estimated ROI of 1,000% by 2015.

Technologies Used:

ASP.NET, C#, AutoDesk Inventor API, Microsoft Silverlight, Windows Services, SQL Server, BIM, WCF, AJAX, jQuery

Challenge:

Unstoppable Software was contracted by the engineering department of a $6 billion company to develop a web-based front-end system that would allow sales people to generate their own structural engineering drawings. The main goal was to reduce the lead time required to complete CAD drawings. The average lead time was two weeks, which led to lost business if a competitor got their bid in first. A secondary goal was to provide end-customers with a modern BIM (Building Information Modeling) drawing.

Solution:

Our system reduced lead times for drawings from an average of two weeks to less than 10 minutes. Since the system handled most of the simple jobs, this allowed highly skilled employees to focus their time on more complex, custom drawings – ones that were also higher margin. This also meant that when the business grew, they did have not to hire as many additional engineers to handle the extra capacity, since the software did the majority of drawings for them.

With this project, we like to say that we "coded software to replace an engineer's brain" – which we discovered took about 600,000 lines of code to do.

As of 2025, this solution has been effectively running for 11 years. Its long-term reliability and adaptability have ensured sustained cost savings and increased profitability, reinforcing the substantial return on investment.