



## Engineering Software Development for pipeline engineering services

Your engineers are smart, and time counts. Don't let the wrong technology slow them down!

### THE CLIENT

Our client is a growing engineering consulting company. Much of their focus lies in serving the energy industry.

### THE PROBLEM

This client is hired on a regular basis to perform pipeline analysis. Their engineers use logic that has been programmed into a number of Excel applications to examine flaws in customers' pipeline, such as cracks and/or dents. They use the applications to assess whether flaws are growing and pose a threat of potential failure, or if repairs/replacements could be postponed.

The problem with using Excel applications for engineering analysis was that they were not user friendly and they did not scale for more than a few users at a time.

In addition, the application was so slow that most engineers set up an analysis and hoped that it would run successfully overnight.

These difficulties with their tools limited the engineer's capabilities, and our client did not have the software development skills in house to produce a solution that was a better fit for their needs.

### THE SOLUTION

Entrance incorporated the engineering logic from the existing Excel applications into the production of two new Windows applications. Each housed specific calculations and logic for assessing stress that were vital to producing a successful product.

As Entrance developed the applications, we worked closely with the in-house engineers to ensure that our results matched those they were currently receiving from the Excel applications. Learnings from these tests were applied so that users could easily confirm reliability and perform quality assurance (QA) on results going forward.

The look and feel of our client's new applications is much more user friendly, and calculations can now be performed in minutes, rather than hours.

The engineers now also get more information from analysis results, as the applications create charts with hover-over capability that were previously too difficult to produce. The effort has been so successful internally that the client is considering marketing it to other engineering companies.

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[bit.ly/1oiuaJY](http://bit.ly/1oiuaJY)

### Client Pleaser

Better analysis has resulted in improvements for engineers and clients alike.

The engineers like how much easier it is to get their jobs done.

And clients love how much more useful and actionable the results are for their business.