



Legacy software.

Amoco, Arco and BP had significant amounts of research software on their mainframe systems that were used on a day to day basis to help predict oil and gas reserves in the ground.

However the software was getting more and more expensive to maintain, mainly due to it running on aging computer systems.

These companies had been quoted 7 figure sums to rewrite and create PC versions of the software.

The software was written in Fortran which is well suited to mathematics and simulation.

I approached Microsoft with a plan to allow us to rebuild the software unchanged on PCs to create software libraries that could then be used within MS Windows based applications.

The Microsoft compilers were not entirely compatible with my approach, however by working with their compiler developers we were able to rebuild the research software with minimal change. The minimal change was the key to success. As soon as the software is subjected to change the change has to be extensively tested to ensure all bugs and defects are removed. A very small bug in this software could mean millions lost in exploration costs.

As a result of my approach, a series of MS Windows based applications were developed at a cost of approximately 1% of that originally budgeted.