

Rapidly develop an application for forecasting from NAG routines – CACI finds it easy

CACI Ltd uses NAG numerical software at the centre of the latest generation of their rapid and flexible Contact Centre Forecasting application.

CACI is a large global organisation with over 11,000 people worldwide with CACI Ltd a wholly owned UK subsidiary. Within CACI's UK Customer Solutions Group is a team who support contact centres – providing simulation, forecasting and optimization products focussed on enabling best practice resource planning activities.

Due to increased demand this group recently updated and improved their 'Contact Centre Forecasting' application. The objectives for the new product were very simple: the application had to provide accurate results, provide an enhanced user experience and to support future development in a cost effective manner. The internal project team had additional objectives – to develop the new application to tight deadlines and budgets and, importantly, to finish on time.

A number of ways of addressing the diverse requirements of the application were considered. However the possibility of producing the required 'Regression', 'Neural Networks' and 'Optimization' algorithms in-house was quickly discounted as the elapsed time needed could not be accommodated within the timescales of the project. The NAG library was therefore the obvious choice. In addition, the extensive suite of numerical routines from NAG meant future enhancements to CACI's forecasting application could be done quickly reacting to market needs. The final deciding factor was a combination of NAG's proven track record of technical excellence and its reputation for close customer partnership.

All the application development was done, by a small team, using the .NET framework and by making software calls into the NAG library via software wrappers. During the development process the few technical questions were answered expertly and quickly as the quirks of the typical target market data sets were incorporated into the new product design.

The resulting application now has a visibly faster response time for forecasting calculations, with a simple interface for selecting between models and has the ability to be exactly tailored to future customer requests for alternative forecasting methods - thanks to NAG code.

The CACI Forecasting tool is currently licensed to some important users who are very happy with the results – such as Royal and Sun Alliance, British Gas and QVC. Tracy Rice, Head of Contact Centre at QVC says that *“Support following implementation is excellent and you are still able to work with the team for advice and adjustments to the system. CACI are a very customer focussed dedicated team of experts”*.

Meanwhile the NAG routines do the key mathematical work. *“We decided that the heart of our application had to come from the best technical source.”* said Dr Matt Gardner, Associate Director CACI Ltd, *“So selecting NAG was a ‘no-brainer’. CACI pride themselves on delivering ‘best of breed solutions’ and NAG is without question a technical authority that provides the advanced numerical components that we must have for this market combined with simple, great value for money, licence terms. The fact that NAG people are partner orientated is just a bonus.”*