Defra partners with CGI to apply Intelligent Automation to Flood Risk Reporting
The Department for Environment Food & Rural Affairs (Defra) is the UK Government department responsible for safeguarding our country’s natural environment, Defra sponsors the Environment Agency (EA), a non-departmental public body, which has responsibility for managing the risk of flooding from England’s main rivers, reservoirs, estuaries and the sea.

This crucial task is delegated to the EA’s Flood and Coastal Risk Management (FCRM) group; by collating and analysing flood risk data, Defra and the EA can accurately report the likely impact of a flood event to properties and other important assets. This information is also used to support policy analysis and respond to queries from MPs, local government, businesses and the public.

Flood risk reporting relies on accessing large amounts of diverse, complex data involving millions of records; manual processing and analysis can take many hours and requires a considerable, intensive effort from the department staff involved. This ad-hoc arrangement, and the fact that FCRM teams were often not co-located, occasionally led to old data being used and inconsistent results being reported as a result.

CGI partnered with Defra and the EA to develop and deploy the Flood Risk Reporting service to provide an efficient, unified means of accessing and analysing accurate and up-to-date flood risk data. With over 30 years’ experience developing software and networks for industry, local and central government, CGI was engaged to leverage its breadth of knowledge and deep domain expertise to offer Defra an intelligent, cost-effective solution.

THE SOLUTION

Because of their long-standing collaboration with numerous government departments and agencies, CGI innately understood the need for solutions to embrace the UK Government’s digital agenda, in particular the use of open architecture and cloud-based solutions.

Once the CGI team had defined the initial cloud-based solution, they focussed on combining an enterprise-ready database with a powerful business intelligence platform. This advanced and complimentary combination of technologies and services, enabled the Flood Risk Reporting service to ingest and process complex datasets into a single view, efficiently refresh key data, and produce advanced reporting products and analytics. The solution, and supporting application support service, were operational within 5 months.
THE BENEFITS

As a result of CGI and Defra’s partnership, the diverse range of users who rely on the Flood Risk Reporting service now have access to a consistent, accurate and up-to-date analysis of crucial flood risk data. The automated initial processing of data insures accuracy of analysis by reducing the scope for human error; analysis can now be completed in seconds rather than hours, thus reducing the response time for urgent enquiries.

The CGI solution now means that the resulting data is presented in an intuitive, user-friendly application making it accessible to users with any level of technological knowledge; results can also be exported in a number of widely-readable formats to ensure it can get to the right person at the right time.

CGI’s use of open-architecture will allow future enhancements to the service to be deployed cost-effectively and with minimal disruption to the enterprise continuum.
About CGI

Founded in 1976, CGI is among the largest independent IT and business consulting services firms in the world. With 77,500 consultants and other professionals across the globe, CGI delivers an end-to-end portfolio of capabilities, from strategic IT and business consulting to systems integration, managed IT and business process services and intellectual property solutions. CGI works with clients through a local relationship model complemented by a global delivery network that helps clients digitally transform their organisations and accelerate results.