

PopChart helps deliver important statistical data to policy makers, businesses and citizens across the United Kingdom

Background:

The Office for National Statistics (ONS) is responsible for providing the United Kingdom with a range of key economic and social statistics. It collects, processes, analyzes and distributes official statistics at national, regional and local levels across the United Kingdom. Since its creation in 1996, ONS has been delivering statistics to central and local government, businesses and citizens to help them easily assess the state of the nation. Government policy makers also use statistics from ONS to create evidence-based policies and monitor performance against them.

ONS employs more than 4,000 people. For the past two years, ONS has been developing a revolutionary new version of one of its Internet services, the Neighbourhood Statistics Service. This promises to transform the availability of statistics and other information for thousands of areas across the UK. Its primary aim is to supply the information needed for the UK government's National Strategy for Neighbourhood Renewal, a program designed to reduce pockets of social and economic deprivation across the country.

The users of this service include local communities, local authorities, government administrations and departments, health, police and fire authorities, analysts, businesses and citizens. The site was launched at the end of April 2005 and may be accessed at: <http://www.neighbourhood.statistics.gov.uk>

The Challenge:

A report published in 2000 in conjunction with the National Strategy for Neighbourhood Renewal said, "The absence of information about neighbourhoods has produced a series of failings at national, local and community levels...important trends have been missed by national and local government. Too often problems simply go unnoticed until they reach crisis point."

The challenge ONS faced with the Neighbourhood Statistics website was to offer its users ready, easy access to a wide range of social and economic aggregate data that relates to small geographic areas, such as regions, counties or cities. ONS assigned the responsibility of creating the Neighbourhood Statistics website to a group of employees working in the Information Management Group at ONS. This team, led by Gerry Hammond, spent two years generating a website that provides geographically specific, statistical information for neighborhoods across the United Kingdom.

The objective was to enable visitors to the site to search through several topics that would help them access local information about crime and safety, access to services, economic deprivation, people and society, physical environment, work deprivation, and other things.

One team in this group, led by Rob Hawkins, was responsible for creating the software components that display the statistical data on the website.

One of the major challenges facing Hawkins was how to present the data in a clear, comprehensible and visual manner. The nature of the website required that the presentation be customizable, allowing users to generate charts and graphs that illustrate statistics based on specific topics in specified regions of the country. The website also needed to allow its users to pinpoint more detailed information from the data.

Any tools the team applied to perform these functions needed to have the ability to integrate seamlessly into the existing servers at ONS and to pull data from the Oracle databases employed by ONS to produce statistical information. Additionally, with the ability to compare dozens of variables, ONS faced the challenge that these variables could display an almost unlimited variation of different charts and graphs, necessitating a very fast and very powerful data visualization solution. Lastly, on a technical note, Hawkins' team needed a solution that supports Extensible Markup Language (XML) as an input.

"There is trend in the statistics marketplace around the world to provide a better visualization outlet for the data," Hawkins said. "Visualizing the data allows people to understand the information more quickly."



The ONS team knew what was needed, but it was a challenge to find the right software that didn't require extensive or complex development, yet still fitted well within the ONS technical environment.

The Solution:

Hawkins and his team found a solution that met all their needs and requirements in Corda Technologies' PopChart® Enterprise 6.0, a server-based data visualization and charting tool. The team found PopChart near the beginning of its work on the Neighbourhood Statistics website. After testing an evaluation copy of PopChart and seeing the results it produced, Hawkins knew he had found the right tool for the Neighbourhood Statistics Service. He and his team have been using PopChart ever since.

"PopChart is straightforward to use and customize and is fit-for-purpose," said Hawkins. "There is a wide variety of chart styles available, as well as the support for a variety of technical formats, ranging from JPEG to SVG. This feature enables us to support our wide user-base."

Corda's PopChart provides fast, robust, and versatile data visualization and charting capabilities to the Neighbourhood Statistics Service. Its tools are written in 100 percent Java, so they can run on any platform. Moreover, PopChart is flexible enough to take multiple data sources and put all the information into a single chart or graph.

A visit to the Neighbourhood Statistics website illustrates PopChart's capabilities. Users of the site can create customized tables, charts and maps by selecting specific cities or regions and topics and generating dynamic images using that data. PopChart allows them to have immediate access to clear, visual representations of statistics related to crime and safety, economic deprivation, health, housing, education, training, access to services and a number of other topics.

Conclusion:

For Hawkins and his team at ONS, PopChart has provided an efficient, effective way to carry out the goals of the Neighbourhood Statistics Service. Through its use of PopChart on the Neighbourhood Statistics website, ONS can deliver a wide range of statistics to policy makers, businesses and citizens across the United Kingdom. By providing access to vital statistics at a very local level, ONS is supporting the UK government's effort to reduce social and economic deprivation. As ONS continues this effort and moves closer towards achieving its goals, PopChart will continue to play a pivotal role in providing statistical information via the Neighbourhood Statistics website.

According to Hawkins, "The performance and scalability features of the PopChart server mean that the software will support growth and peaks when accessing the website." In other words, ONS will continue to rely on PopChart even as the Neighbourhood Statistics website gains popularity and its number of users increases. Likewise, PopChart will continue to play its part in delivering important data that may someday help to improve social and economic deprivation in the United Kingdom.

