The Public Records Office of Northern Ireland (PRONI) is the official archive for Northern Ireland. Its role is to preserve records of historical, social and cultural importance and make them available for the information, education and enjoyment of the public. PRONI has significantly re-vamped the Street Directories website with a radically new User Interface and the latest Cloud technologies from Aetopia and ABBYY.

The Challenge

One of the most commonly used resources of the Public Records Office is the Street Directories that date from 1819 to 1900. These are valuable old books containing a listing of the names, addresses and occupations of the inhabitants of Northern Ireland as well as lists of commercial establishments operating in the cities and surrounding towns. They are a vital resource for historical and genealogical researchers and are an extremely useful source for all kinds of research such as tracing the location of a particular person or checking when a firm was in business. Genealogists can, for example, search for an address to find out who lived there many years ago.

These volumes, which were previously on open access in the PRONI Search Room, were very heavily used by the public. The paper in some of the volumes is very fragile and they are therefore at risk. Some pages had already been lost or damaged and further handling would have endangered their long-term preservation. Therefore, it was decided to scan the directories and to provide a search facility which would enable users to find key words in a section of a directory, in a particular directory or in any of the directories.

The Solution

Recently PRONI embarked on a project to digitise every page in the directories (approximately 20,000) and put them online, allowing genealogy researchers around the globe to search on every single word. The scanned documents are stored on the Cloud using Aetopia’s Digital Asset Management system, MediaCore, and every single word is digitised and positioned using ABBYY’s latest Cloud OCR SDK running on Microsoft Windows Azure.

“We provide cloud and on-premise installations, so were looking for a cloud-based OCR engine to avoid the need to install software in multiple locations,” says Aidan McGrath,
CEO of Aetopia. “An associated ISV who has used the ABBYY technology for many years recommended we look at ABBYY based on their reputation for the highest quality OCR.”

In addition to a more friendly and intuitive user interface the new site now includes ‘faceted searching’ which allows users to explore the directory set by applying various filters. It is also possible to apply ‘search equivalents’ which allows readers to equate “Jas.” with James or “Geo.” with George, for example, so that if they search for one the other term is also returned. Individual search terms are highlighted and users can un-tick the individual search terms to refresh the search results instantly.

The Results

The ABBYY Cloud OCR service was simple to integrate, effective, and fitted in well with Aetopia’s architecture, particularly that there was no need to purchase additional servers to handle the OCR processing. The service scales on demand, a true advantage when a project calls for high volume processing in a short period or occasional peak loads occur. In addition to the excellent quality of OCR results ABBYY was also able to de-skew and improve the visual quality original scans, which was seen as a major benefit to PRONI. The detailed OCR positional information (provided as XML) was invaluable to the project, as it allowed the Aetopia team of developers to create a sophisticated ‘Search Term Highlighting’ feature for the Street Directories application, leading to extensive positive feedback from end users.

“The ABBYY developer account was easy to set up and the portal provided all the required documentation and assistance in getting started, including a downloadable sample code,” says McGrath. “The pricing options suited us for PRONI Street Directories as it was a bulk process and we knew the exact number of documents that needed to be sent to ABBYY. ABBYY Cloud OCR has been a consistent win for us.”

The Street Directories online system complements the existing databases and records which are available electronically, such as the Ulster Covenant, the Freeholders Records and the Wills Indexes. The next chapter in the continuing work of PRONI is to make more of its resources available online.

To access the directories: http://streetdirectories.proni.gov.uk/

About ABBYY

ABBYY is a leading global provider of technologies and solutions that help businesses effectively action information.