

Capgemini successfully helps Tax and Customs Administration with refactoring to support new technologies

“ The best thing about this project is that, as three different parties, we succeeded in pursuing, maintaining and achieving one common goal from start to finish. That’s something you don’t see very often. ”

Peter Straatsma

**Deputy Director of Service Control,
Tax and Customs Administration**

From old to new

An important priority for the Tax and Customs Administration is keeping its application landscape up to date in order to increase its agility, safeguard the long-term continuity of its IT and reduce the costs of maintenance. At the same time, however, crucial processes with high businesses value must be able to continue without interruption. In this regard, the Tax and Customs Administration was faced with a challenge in its PowerBuilder domain. The goal was to convert ten PowerBuilder applications to a web-based Java platform through an automated process that also adhered to the Tax and Customs Administration’s standards.





Automated conversion in accordance with standards

Following the European tendering procedure, Capgemini began tackling this question as the main contractor on July 1st, 2017. As a specialist in modernization solutions for legacy applications, Blu Age was recruited by Capgemini to convert the applications. For each application in the PowerBuilder domain, a strategy was then defined for its refactoring to a web-based Java platform. The applications were converted in an automated manner, precisely according to the Tax and Customs Administration's standards. As a result, the likelihood of errors was minimized and the functionality of each and every application remained unaffected. The major advantage of this approach was that end users were able to start working in the new environment right away without any extensive training or instructions, which in turn allowed business processes to carry on smoothly. The refactoring project for the PowerBuilder applications was completed successfully and on time in March 2019.

Joint expertise

Refactoring projects are rare. Frank Hagedoorn, Refactoring Project Manager at the Tax and Customs Administration: "Automated conversion of an application into another source language is not done very often. There are only a few parties worldwide that are able to do this, and in that sense, it is a unique project and a first for the Tax and Customs Administration. One after the other, Capgemini and Blu Age processed all PowerBuilder applications that were eligible for conversion. It was actually a sort of "assembly line" with technology that wasn't yet widely used, and that makes the project unique."

It is important to have the right parties on board with both the right experience and the right expertise for the job. With Blu Age, Capgemini has found a partner that is a specialist in the field of refactoring and has a great deal of experience. But experience alone is not enough. Each of the three parties – independently of one another – state that the collaborative aspect was key to the successful execution of the project.

Frank Hagedoorn: "In collaborating with Blu Age and Capgemini, everything was up for discussion and anything was possible. The regular meetings in particular ensured that bottlenecks were avoided." Capgemini Project Manager Jeen Landstra adds: "What sets us apart is our approach. We brought all the parties together at different locations. The lines of communication were short, and everyone was in the right role." All three parties regularly met face-to-face throughout the project, which greatly enhanced the communication between the staff involved. Potential issues were eliminated early on and therefore prevented from growing into stumbling blocks.

Manageable and transparent

The refactoring project within the Tax and Customs Administration's PowerBuilder domain has proved that automated conversion of applications from one language to another is possible, allowing end users to immediately start working in the new environment without any problems. Other crucial factors for the project's success were the implementation approach and collaboration model. The project was manageable and transparent for the Tax and Customs Administration, and adhered closely to the Administration's guidelines. The project contributes to the Tax and Customs Administration's aim of improving the continuity of its IT landscape through increased agility, without compromising crucial business processes. The exceptional match between the people in the project, everyone's skills and expertise and the common goal ensured a smooth project that delivered the desired result for the Tax and Customs Administration.

“ We have successfully refactored more than one million lines of code into a modern Angular/Java architecture that meets the quality and security criteria of the Tax and Customs Administration.

Imad Bernoussi

Technical Project Manager, Blu Age

Capgemini Nederland B.V.

Postbus 2575 - 3500 GN Utrecht

Tel. +31 30 689 00 00

www.capgemini.com/nl-nl