TCG|||
ENABLE THE DIGITAL ENTERPRISE

Automated information extraction from millions of balance sheet documents

Arco
digital paperflow

Atos

Sector: Financial Services, Government

Highlights:

▶ Processing of close to 7 million document pages per year (currently)

▶ High levels of automated processing and simplification of manual tasks (less user interventions)

▶ Improved consistency checking and monitoring through dossier validation (required pages, correct order, languages)

▶ Fast processing and delivery of verified (correct) information (lower turn-around times)

▶ Shows true strength of clever, service-based inter-operation of DocProStar and DOMA

Background

The National Bank of Belgium (NBB) is Belgium's Central Bank. Among many other things, NBB collects and subsequently publishes the annual financial accounts (balance sheets) of almost all legal entities in Belgium. The information collected is available for download and is used for the compilation of statistics and financial analyses. The complete balance sheet data is collected by the Central Balance Sheet Office (CBSO) and provided free of charge to anyone interested. The balance sheet data is a valuable source of information, especially in terms of financial transparency (most other countries only make this data available for a fee or restrict access to it).

Since its establishment in 1978, annual accounts have averaged only 4 pages. But in 2021, nearly 500,000 filings were averaging 14 pages, with daily peak volumes between April and September ("peak reporting season"). Both legal and process requirements increased over time and NBB needed to respond with the implementation of a state-of-the-art process automation solution.

The Challenge

NBB came with high expectations around both data quality

"DocProStar plays an important role in ATOS' new service commencement of a new business-critical cloud based Central Balance Sheet Office (CBSO) application for the National Bank of Belgium as part of a ten-year contract to transform the Bank's key legacy application."

Frank Grognet,
Account Manager Atos

and the need for automation, The mandate:, "Capture the documents, extract and validate the data and perform all checks needed to create consistent and correct financial account information for public access and do this all with high automation rates."

NBB uses models to define multiple differing standard schemas (templates) depending on the type of legal entity reporting. While NBB provides multiple sample PDFs per schema, legal entities are not required to use them(!). Therefore in practice, legal entities often use Excel or an equivalent program, or they simply export the data directly from their accounting system and manually adjust the output produced. This means that the NBB needed a solution that was able to handle an almost <u>infinite</u> variety of formats.

Language was another hurdle. While Belgium has three official languages (Dutch, French and German), English is also accepted and needed to be identified. On top of that, and depending on the applicable model, Belgian legislation allows legal entities to file annual reports partly in their local language (multi-lingual documents), which can be in any official language of the European Union (EU).

Finally, the NBB needs to verify the validity of the structure of an account's submission and its content. Any missing or invalid data should result in the submission being rejected and trigger a message to the legal entity.

Complex annual account filings were having to be verified, mainly manually, and late filings created additional pressure to act fast in order to verify and store the financial accounts on time as required by law. As with all projects in the public sphere, there was strong (political) scrutiny meaning the project was in the spotlight and a successful project outcome was a must.

"A Team Effort"

The following partners jointly created the solution for NBB:
▶ ATOS Belgium (ATOS), part of the international ATOS Group, created the web portal application **CSAM** ('the gateway to the services of the government'). CSAM is based on XBRL, an open-source global framework for

exchanging business information, an enables highly agile core business applications that deliver optimum cost of ownership.

▶ Arco Information NV, Belgium (ARCO), with activities in the US, Canada and France, is the owner of **DOMA**, a leading modern Document Management system.

▶ TCG Process, internationally active in more than a dozen countries on five continents, is the creator of **DocProStar**, a best-in-class process automation product for document centric operations.

ARCO was elected as the business integrator for this project and skillfully brought together the features and capabilities of CSAM, DOMA and DocProStar, providing a combined solution for the secure processing of financial account information with high automation rates at NBB.

The Solution

All submitted annual account documents are routed from CSAM (portal) into DOMA for registration. Immediately thereafter, the documents are forwarded to DocProStar for processing. This sequence of events allows for a complete audit trail of the end-to-end process and full process integrity is demonstrable at any time.

In the first step, DocProStar classifies the documents into various document types and updates the registration information in DOMA accordingly. Then DocProStar conducts automated, comprehensive consistency checks across the entire dossier of submitted documents.

Afterwards – thanks to DocProStar's unique dossier handling capabilities – specific checks are performed (for example, are all required document types included?, are they in the correct order? and in one of the four accepted languages?). On a document level, many data fields are subsequently extracted, and their contents are checked against various rules and/or restrictions (e.g., validity of VAT number, validity of dates, etc.). DocProStar cleverly combines content understanding with the ability to act based on the outcome;

"This project was highly complex due to the high number of document variations and languages used inside of the documents . A new milestone in document management has been achieved through the clever combination of DocProStar and our DOMA."

Laura Cornette,
Account Manager Arco

"Every time I am amazed at how elegantly and reliably DocProStar solves even the most difficult cases of information extraction, such as with the NBB here."

Arnold von Büren,
CEO TCG Process

for example, sending automatic rejection messages or initiating a "human in the loop" step if additional reviews are required.

When certain parts of the process cannot be automated, DocProStar is easily able to include one (or multiple) step(s) where human intervention is happening with the support of artificial intelligence (AI) and/or self-learning. Check+Act is DocProStar's graphical user interface (UI), which optimizes the information that is presented to the operators, providing an ergonomic and intuitive interface for fast and efficient processing.

Once all data is extracted and validated, the information is transmitted back into Arco's document management system DOMA.The combination of **DOMA** and **DocProStar** greatly facilitates the follow up on problems and errors in the annual reports. Error messages are flagged directly in CSAM (web portal) when DocProStar rejects a certain annual account document. The legal entity (owner of the faulty document) is informed automatically and can then take corrective action.

About Arco Information NV:
Arco Information NV was founded in Mechelen (Belgium) in 1993 and has a global (Canada, France, USA) experienced workforce of over 100 and a customer base of over 1500. They are a reliable partner with their proprietary platform DOMA, which helps in automation of their customers document and data solutions They are GDPR certified and comply with the strictest security standards.
www.arco.be

About TCG Process:
TCG Process is an international organization solving business process automation (BPA) challenges with its DocProStar platform. Digitizing incoming content and automating complex processes across enterprises like banking, finance, insurance, healthcare, public administration and their business process outsourcers or shared services organizations has never been easier. TCG markets its solutions direct-to-customer, and via partners, on five continents
www.tcgprocess.com

About NBB:
The National Bank of Belgium is the central bank of Belgium since 1850 and a member of the European System of Central Banks.
www.nbb.be