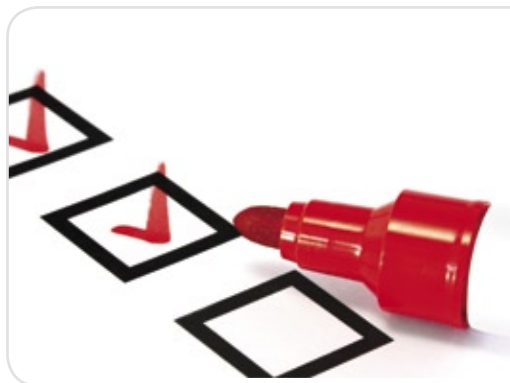


## HQB S.A. Embraces ABBYY Data Capture Technology to Digitize the Presidential Elections 2009-10 in Chile



*“We have successfully coped with all designated processes and services meeting the stipulated time frames. We can affirm that the share of entire digitization output, that is, a proportion of documents that didn't require human involvement, was better than originally expected and has a capacity for possible improvements in the subsequent processes.”*

*Sergio Muñoz, Minister of the Supreme Court and President of TRICEL*

### Background

At the end of 2009 the first round of the Chilean presidential elections was held. Since none of the candidates secured the absolute majority of votes the second runoff took place in several months. The center-right candidate from political coalition Alliance for Chile (Alianza por Chile) won with 51.6% of votes. The parliamentary elections were held on the same day.

The presidential elections in Chile are based on a two-round system (also known as the runoff voting or ballotage) – a majority voting system used for electing the single winner. If no one polls an absolute majority of votes on a first round, the president will be determined among two leading candidates on a second round. This is the way the presidential elections 2009-2010 were held.

The main responsible public authority for organization and counting of the votes at presidential elections is “Tribunal Calificador de Elecciones” (TRICEL). This is the supreme electoral justice court that holds all the public elections in the country. It is common knowledge that the key duty of this organization is to qualify and verify the electoral processes and thus ensure democratic, transparent and efficient public voting. TRICEL should provide timely and comprehensive result which is an essential condition of a democratic policy.

### The Project

End of 2009 – beginning of 2010 was a rush season for TRICEL when three different types of national voting were held. Two of them, second presidential runoff and parliamentary elections, were scheduled for the same dates. A considerable number of ballots should be processed and counted in a short time while providing the highest level of scrutiny and accuracy.

It was decided to outsource services for digitization and capturing data from ballots in order to speed up the election process and to ensure the reliable outcome with minimum risk of human mistake. The previous out-of-date and time-consuming manual digitizing was replaced by automated processing to handle the results of the first president elections, deputies and senator's elections, and 2nd round president election. After a number of demonstration sessions the public officials of TRICEL have chosen an optimal data capture solution presented by HQB S.A, a Chilean technology provider. Mainly specializing in document management projects, HQB has developed a complete range of tools and services producing a system which is able to manage the elections confidently.

HQB designed a highly efficient digital solution tailored to enable a smooth running of the election process. The document processing software powered by ABBYY, a leading provider of document recognition and data capture technologies, stood at the core of the project. Award-winning software ABBYY FlexiCapture 9.0, which delivered extraction of data from



### About HQB

Based in Santiago, Chile, HQB S.A. is a software company specializing in end-to-end Document Imaging and Management Solutions. It offers a wide range of services from simple data capture to implementation of Workflow tools. These services are divided into following areas:

- Document digitalization
- Data Capture (OCR/ICR/OMR)
- Digital Storage
- Physical Storage and Administration
- Development of Ad-hoc applications
- Implementation of Workflow Systems

More details are available at <http://www.hqb.cl>

documents via flexible and expandable architecture that allowed processing of the large scale tasks of national elections. Even the turnover was excellent and the number of forms from the polling stations exceeded 160.000 the HQB system enabled TRICEL to deliver the final results within 72 hour.

## Solution

HQB solution was designed as a combination of powerful recognition technologies and multilevel data verification to ensure superior accuracy of data extraction and document conversion. This is the ideal solution for national elections processing where the accuracy of data is vital.

The project had a rigorous timeframe and had to be completed within 72 hours, with official results finally counted and opened to the public.

When the voting was over, TRICEL collected all completed forms from the polling stations and passed them to HQB professionals for processing. The implementation of the project went like clockwork and consisted in the following stages:

1. Scanning. HQB converted all forms into digital format using two Scanning Stations with 16-core Servers HP and two scanners FUJITSU FI-5900, and then sent them back to TRICEL.
2. Recognition. Powerful ABBYY FlexiCapture technology allowed processing of all forms in a single stream. It automatically and accurately located and extracted the key-data from digital images. All documents were automatically read and indexed due to powerful OCR technology replacing time-consuming and expensive manual indexing which was used by TRICEL before.
3. Verification. ABBYY FlexiCapture technology provided an optional step of verification which was intended for manual check of the recognized data and document structure. Required information was separated from the main document stream and routed for verification by qualified operators.
4. Single storage. After the validation the data was exported to a single confidential database. Then the official results were published in a public web portal intended for online consulting.

In the closing stages before the final announcement of the election results data from HQB was compared with election certificates prepared by the Tellers' Colleges.



## Results

Eventually HQB digital solution based on intelligent ABBYY FlexiCapture technology enabled the fast, accurate and cost-effective count of electoral results. The document processing including validation stage was successfully completed within the given time limits. The essential reduction of manual data entry and risk of human errors increased the processing quality and lead to a considerable labor savings with personnel reductions of up to 60%.

The TRICEL public officials were satisfied with outcome as it was a huge success to deliver clear and accurate results in such a short time - a striking example of accurate, time critical and intelligent data capture technology that significantly reduced the number of expected claims and clarification requests due to the transparency of information that was publicly exposed as it was processed.

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