

A Hole in One for Enterprise Automation

Overview

One of the world's premier membership organizations for touring professional golfers and sponsoring tournaments worldwide knew there was a better way to manage their business processes through automation.

The organization generates hundreds of thousands of documents throughout its organization each year. They realized they needed a solution to help manage their document-based business processes and eliminate unnecessary manual labor. They turned to [ArgonDigital](#), a systems integrator with a product management focus, for their digital transformation initiatives.

In 2012, ArgonDigital helped the organization implement [Alfresco Content Services](#) (ACS) to store, organize and manage documents. Since that time, ACS has been an integral part of their business, and they are currently managing close to 18 TB of data in the solution.

Additionally, they needed a system to automate their document scanning process. The solution needed to classify, assemble and intelligently extract metadata from scanned documents, which would then be saved into Alfresco.

Previously, team members were manually classifying and indexing individual documents, a slow and labor-intensive system. They knew there was a better solution than manual processing.

After looking at a variety of solutions, Ephesoft Transact was a natural choice that met their needs.

Customer

Premier Golf Organization

Industry

Sports and Events

Use Case

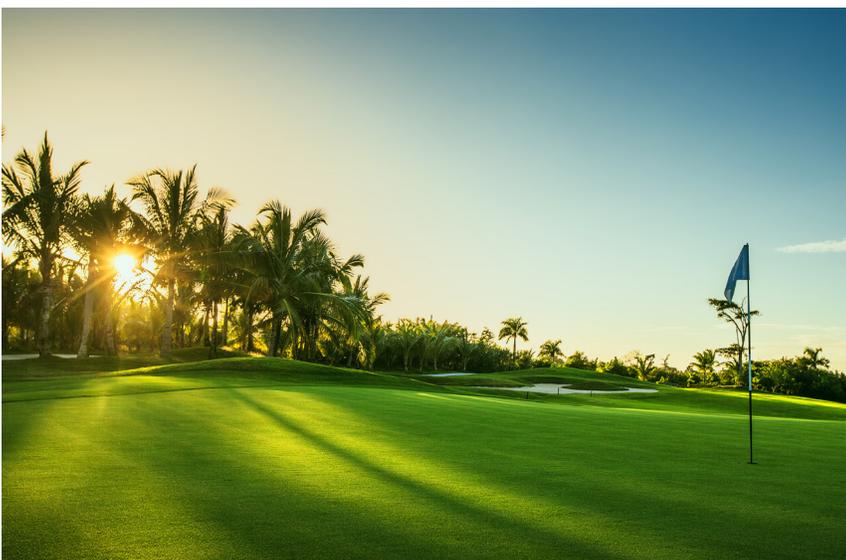
Human Resources, Finance and Certificates of Destruction

Partners

ArgonDigital and Alfresco

Results

- Implemented intelligent capture across multiple departments including HR, Finance and Compliance
- Employee file management went from hours to minutes
- Eliminated manual processes resulting in accuracy, efficiency and cost saving
- Ability to access data in seconds with best-of-breed solution



Challenges

The data capture software had to meet a variety of requirements. First, the solution had to integrate easily with their existing Alfresco Content Services solution. The process needed to be seamless from scanning to storage in Alfresco: the captured content would be recognized by type and transferred into Alfresco with its metadata. Alfresco rules would then rename and file the content based on that metadata, which made it easy for a business user to find.

The golf organization wanted to start with a few key use cases and add departments over time. Thus, the architecture of the solution needed to support expansion and be flexible enough to adapt to the needs of a variety of departments. In addition, the software needed to be robust enough to handle large batches of documents at once.

The document content varied greatly, including, check stubs with supporting documents, player handbooks, records of document destruction, scanned player file folders and benefits, and various printed manuals.

Since the solution would be used across multiple departments, it needed to support security that controlled who had permission to view and manage documents of a particular type.

Although some of the documents are single page, the solution needed to be able to assemble most documents without relying on manual sorting or separator sheets. For extraction, they needed to not only intelligently capture simple fields but also capture table data spanning multiple pages.





Why Ephesoft Transact was the Right Fit

The client chose Ephesoft as a best-of-breed solution that would be a simple integration with the existing system and scale to accommodate growth and security requirements. It was also seen as an accelerator to many of the content and data challenges they identified throughout the organization.

Ephesoft Transact extracts meaning from unstructured content—that is, takes input from a variety of sources, identifies that input, extracts any usable data, and releases that information to a downstream system or process so that it can add value to your organization.

Ephesoft is built around a Java-based workflow engine to provide flexibility in creating rules for processing different types of documents. A set of related documents, invoices or purchase orders, for example, are grouped into a Batch Class, and there is no restriction on the number of Batch Classes that may be created. Also, each Batch Class has its own set of access rules, so only specific User Groups have rights to review and manage document batches.

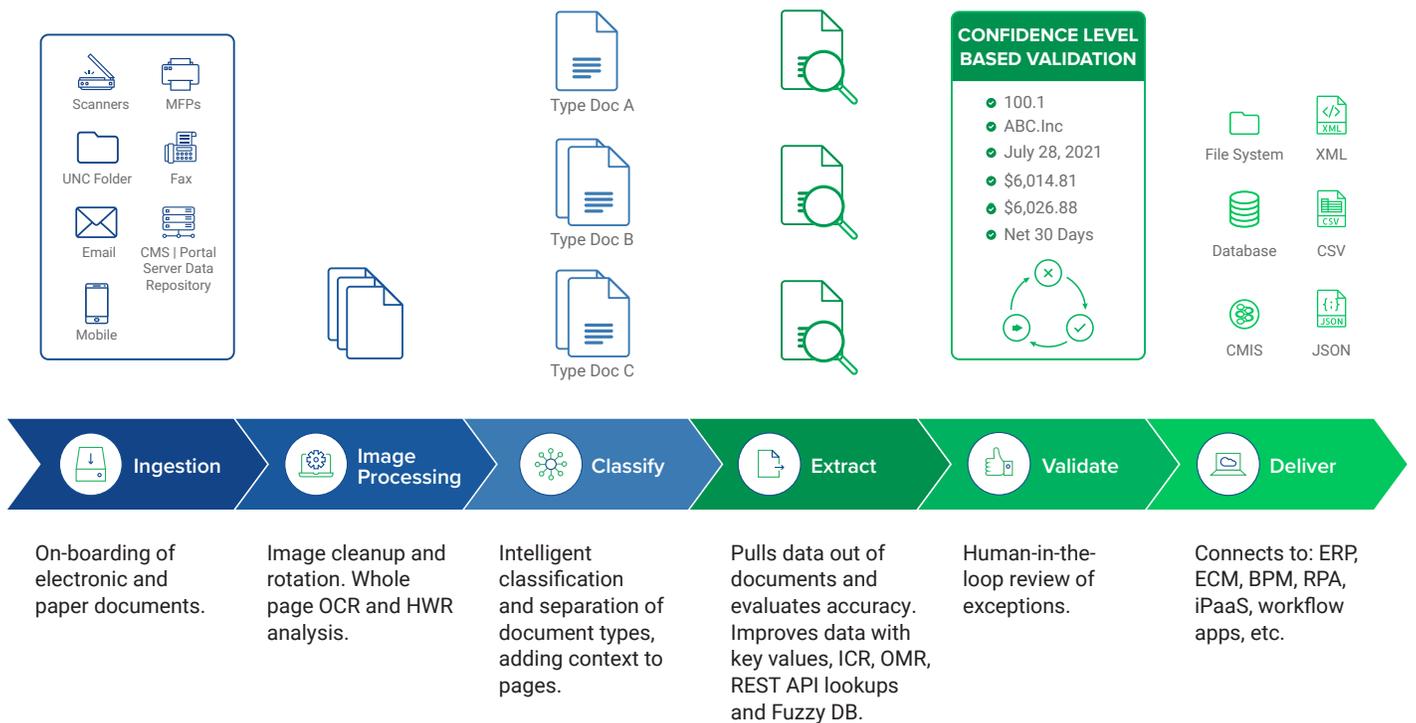
The diagram below provides an overview of the process flow of a document batch:

Each department within the organization imports documents into Ephesoft from a variety of sources that best suit their workflow. These include scanning documents to a folder directly monitored by Ephesoft, as well as creating monitored email addresses and folders that instantly load attachments into the system.

Once ingested, Ephesoft performs image processing (cleans up the images by sharpening, adding contrast, etc.) and turns the images into searchable PDFs. This was critical to the golf organization because even though the most important information is extracted as metadata, once the document is released to Alfresco, the full text of the document is searchable, making it easy for users to find exactly what they need.

Because the customer utilizes Alfresco, Ephesoft's built-in support for Content Management Interoperability Services (CMIS) in the export module made setting up document exports a simple process. They currently only require a single Ephesoft server, however, Ephesoft has a flexible deployment architecture that allows for a clustered deployment for high load and high availability applications. They are confident that their solution can grow as demand requires.

Intelligent Document Processing with Ephesoft



On-boarding of electronic and paper documents.

Image cleanup and rotation. Whole page OCR and HWR analysis.

Intelligent classification and separation of document types, adding context to pages.

Pulls data out of documents and evaluates accuracy. Improves data with key values, ICR, OMR, REST API lookups and Fuzzy DB.

Human-in-the-loop review of exceptions.

Connects to: ERP, ECM, BPM, RPA, iPaaS, workflow apps, etc.

Example Use Cases

Ephesoft and Alfresco have drastically improved the organization's ability to manage their scanned content, and they recognize the benefits of intelligent data capture throughout the organization. Here are some examples:

Human Resources

Ephesoft Transact has transformed the way Human Resources manages employee files. The filing and managing of paper documents that would take hours when done manually, is now automated and streamlined, taking only several minutes. For example, when a new employee is hired, their entire folder is scanned into the system automatically creating a profile, folder and subfolders to house all relevant information like tax and payroll information.

Ephesoft Transact also recognizes key metadata like an employee's name and ID and Alfresco uses the information to intelligently name and file the employee documents in the system.

Finance Department

The Finance department receives check stubs with support documents attached. These paper documents need to be converted to searchable PDFs, and metadata needs to be extracted so that the documents can be filed and searched for by different properties, like vendor, check date and payment number.

Ephesoft allows documents to be assembled without separator pages and begins new documents by identifying a new check image and creating a new page. This is done automatically and does not require any user input.

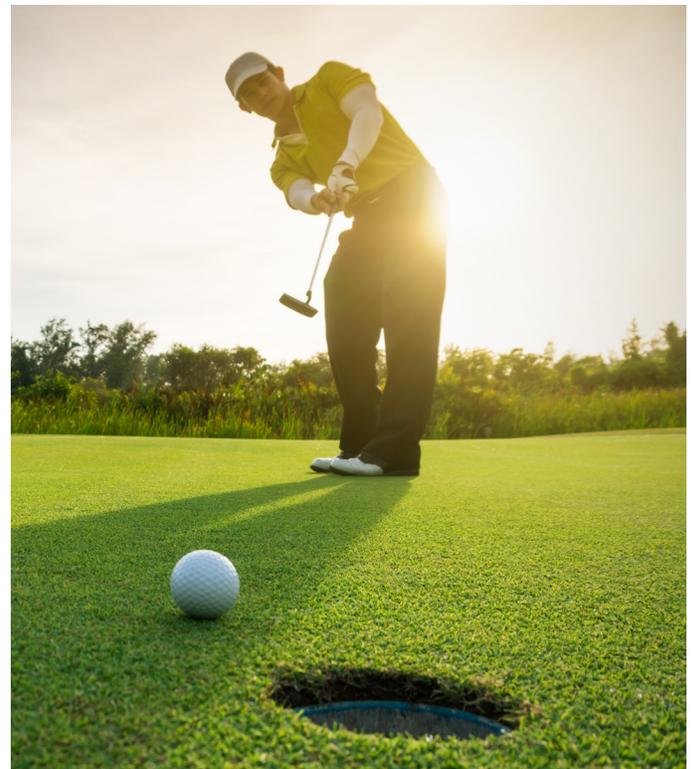
Important metadata fields are then extracted by Ephesoft and exported into Alfresco. Confidence threshold values and validation rules can be configured so that users can easily review any issues with extracted metadata. Alfresco's configuration allows searching for these fields so that documents can easily be retrieved, and the documents are named and filed in a logical manner.

Beyond the simple fields, the organization also needed to extract table data (specifically, line items on the check) and send that information to Alfresco. Unfortunately, the CMIS standard leveraged by the default CMIS export adapter does not support this sort of complex data structure. Luckily, Ephesoft provides hooks that allow for easy creation of custom Java logic when needed. evolving at such a rapid pace, that Ephesoft predicts that those that don't adopt cloud platforms will be at a major competitive disadvantage.

Certificates of Destruction

The golf organization requires records of document destruction to be tracked and maintained. They created a form to list documents that have been destroyed according to a retention schedule. Ephesoft made retrieving these forms a simple process.

The date ranges of the documents in the form are recorded using Ephesoft's table extraction process customized with a Java hook. An entire table of year ranges is extracted by Ephesoft from the document automatically. Then, the script hook translates them to metadata fields to then send and store in Alfresco with the forms. This process used to require manual filing and pulling out the correct information, but now users can find the right files within seconds.



Conclusion

Since integrating Ephesoft in 2016, the customer has efficiently processed hundreds of thousands of documents. Their ability to efficiently convert unstructured data into dynamic information has streamlined workflows and saved valuable hours of work time. Being able to digitally transform their data not only provides the ability to quickly access critical work, but it has eliminated slow, manual processes that resulted in employee satisfaction issues and frees those employees up to engage in higher-value work.

“When we work with a client, we take on their problems as our own and guide them towards the solution we would select if we were in their shoes. The intelligence and flexibility of Ephesoft make it the perfect solution for our customers.”

— Lisa Hill, Vice President of Technology Strategy



United States HQ

+1 (888) 515-8140
info@ephesoft.com

Ephesoft, Inc.
8707 Research Dr.
Irvine, CA 92618
United States

United Kingdom

+44 118 370 2661
info.eu@ephesoft.com

Singapore

+65 800 321 1430
info.asean@ephesoft.com

Germany

+49 (0) 800 180 1708
info.eu@ephesoft.com

Italy

+39 (06) 92947876
info.it@ephesoft.com

France

info.eu@ephesoft.com

Australia

info.au@ephesoft.com