

KEY PLAYER IN MOLECULAR MEDICINE AND DIAGNOSTICS IMPLEMENTS eINFOTREE ELECTRONIC DOCUMENT MANAGEMENT SYSTEM AND INCREASES PRODUCTIVITY



## Background

Unstructured data is one of the biggest challenges facing businesses today. The number of documents, images, and emails are all growing at an astonishing rate. Within corporations, unstructured data currently accounts for the majority of a company's overall data. With multiple locations spread across the globe, an organization spends valuable time and resources to collect information and distribute it to the required personnel, which could instead be used for maximizing profits.

Effective Information Management is the key to an organization achieving higher performance and enhanced productivity. The cost of data management has increased, and finding the right information is becoming increasingly difficult. The inability to effectively distribute information amongst employees is creating a number of challenges for senior management.

To solve these problems, many businesses are implementing Enterprise Document Management Systems that provide tools to create, manage and exploit business insights from an organization's unstructured content.

## The Customer

With over 70 distributors across 47 countries, this international client is a technology leader in Molecular Pathology and provides a total solution for the complete automation of cell and tissue

testing. Through its cutting-edge and patented technologies, it enables disease diagnosis at the molecular level, (primarily targeting DNA, RNA and protein), which allows for early and preventive diagnosis of genetic and infectious diseases.

## Business Drivers

With a massive volume of data including documents, reports, office documents from various locations and paper-based forms, this client was looking for an Enterprise Document Management Solution, a Workflow System and a digitized format of the forms that would assist daily business processes, reduce response times, and streamline the existing documentation procedures at the same time.

With teams in the US and India, the main focus was to eliminate the need to manually synchronize documents sent/received from each of these locations. The review-approval process also required automation; in addition, their custom designed "Engineering Change Order" (ECO) forms were also required to be processed through the Document Management System.

Prior to implementing the system, documents sent/received to and from the US/India offices were required to be manually synced to the VSS database, which was tedious and time-consuming.

Other issues were the manual workflow processes and storage of paper-based forms.

Optimizing the company's business processes electronically was also important.

A few other issues the client faced included:

- A proper folder structure was not defined in some departments, which made it difficult to locate some documents.
- Changes made to documents could not be tracked. There was no system in place to monitor version control.
- Confidential documents and other important documents were sent for approval via email. Hence, there was no process in place to identify the status of the flow, which is critical for evaluation.
- Paper-based forms were stored in the storeroom making them less secure and prone to unauthorized access.
- Searching for files and content in the VSS and storeroom was a tedious process.
- There was no way to easily identify changes made in different versions of the documents, thus additional time was required to identify changes.
- There was no specific process for receipt or sending of documents to/from US and India offices.
- E-mail was used for internal routing of documents for review and approval, thus creating the inability to track the work in progress.

## Solution

CIMINFO's work with the client included a Business Process Study, Digitization, and Installation and Configuration of an Enterprise Document Management Solution.

CIMINFO recommended eInfortree, a web-based solution for the client since the organization required that its teams from US and India be able to access a single database from multiple locations.

Based on the client's requirements, CIMINFO offered its proven eInfortree™ Document and Workflow Management Platform that could be easily extended to address the needs of the client. eInfortree is a web-based integrated document management solution that allows users to upload and share documents in a highly secure environment. The solution replaces the organization's manual system with a more efficient one that eliminates the need to manually synchronize documents from its US and India offices. Users have access to the software based on the rights provided and are able to access documents from across the globe.

CIMINFO also configured the application to cater a digitized format for the paper-based forms.

CIMINFO provided the client with a web version developed on the .NET platform with SQL Server 2008 as its backend database. A high range IBM Server was installed with the application software and placed at the client's office. Mirroring of the hard disk was done to keep the downtime of the server to a minimum in case of failure. A back up was made on a daily basis on an external tape-drive as a disaster recovery step.

CIMINFO's eInfortree provided the client with the following features:

# Key Laboratory in Molecular Medicine & Diagnostics

APPLICATION NOTE

- A pure web-based solution, which can be accessed from anywhere using a web browser
- Configuration of Folders and Files in a systematic way with access privileges to all authorized users
- Digitization of complex paper-based Engineering Change Order forms by developing similar electronic web forms
- A facility to view the documents and the digitized forms from eInfortree itself without the need for downloading the file/forms to a local PC
- A tool for Commenting, Redlining and making Mark-ups in the document itself by internal consultants to visually show the suggested changes, thus making it more understandable to external consultants
- Automatic Version Controlling and Comparison to identify the changes made
- Collaboration tools like Notes and Discussion Groups for sharing comments and thoughts regarding the document among team members of both the US and India offices which is also attached with the document throughout its lifecycle
- File Associations to visually associate all related documents to be viewed from one location, as well as to identify which other documents/drawings will be impacted if any of the related documents are changed
- Automatic email notification to all related users for specific actions in the system, like adding a new file, changing a file, downloading of a file etc.
- An Audit Trail of each action performed on the file, including viewing of documents
- Printing of Redlined version from eInfortree
- Extensive Search functionality based on different criteria including contents within the drawing
- Search within an Audit Trail to get a clear idea of the dates when each person worked on the file
- An ad hoc workflow application, which automates the internal file approval process, which can be tracked and analyzed for process optimization
- Detailed Reports to track daily activities

CIMINFO deployed onsite engineers for the business process study, installation, configuration, and training of the employees to ensure user adaptability and familiarity with the software.

eInfortree's patent-pending ECM architecture allowed the client to mimic their business processes and drastically reduce their hassle for manual synchronizing of documents, manual workflows, and paper-based forms for better productivity, leading to a decrease in response time to their customers.

## Business Benefits

The benefits of implementing the new system included:

- Documents that were sent/received to/from US and India offices are now stored at a central location, which is easily accessed by employees of both the offices.
- Documents are stored in a central repository with access to all authorized users, thus reducing human dependency to access documents.

- Only authorized users can access, modify, and get a copy of the documents.
- All documents such as Word Documents, Spreadsheets and images are stored at a single location in a hierarchal manner, creating a knowledge base for the organization.
- A history of files including version and editor details is maintained.
- Easy retrieval of documents is possible with the extensive search provided by elnfortree.
- All users have access to the latest version of documents.
- Reviewing time of documents is drastically reduced with the file comparison feature.
- The Collaboration tool helps in sharing and discussing the views regarding documents more effectively among team members.
- The review and approval process for documents is automated with easy tracking and notification to concerned team members, thereby cutting down the instances of time overruns.
- The work in progress can be easily tracked, which helps the client achieve a timely response.
- Standardization is achieved throughout the enterprise with minimum effort.
- Business processes are optimized based on actual data to get the maximum productivity from the team members.
- All hard copies of forms are digitized and stored in elnfortree, resulting in a paper-less environment.
- Turnaround time is reduced.
- Faster review and approval processes.

## Added Value

By selecting CIMINFO, the client received tremendous value:

**Time:** CIMINFO delivered the solution in minimal time, thus helping the client's personnel to resolve their current issues and start following a standardized method of document management immediately. Being a user-centric solution, the users did not have to go for long training sessions thereby allowing them to quickly adopt the system in their business process.

**Productivity:** CIMINFO re-engineered and automated their business process with notifications to concerned individuals about the changes and jobs waiting for them. The review process became faster with the availability of collaboration tools and comparison features. Since ad hoc workflow tracking was possible, the client could easily optimize their business processes for better productivity.

**Cost:** The productivity cost for moving over to a new system for the company was negligible since the DMS was implemented in their existing IT infrastructure.

## About CIMINFO

CIMINFO Software, Inc. provides a wide range of software solutions and compliance services that reduce costs and improve operational efficiency while complying with 21 CFR Part 11 and GxPs. CIMINFO anticipates, defines, evaluates and solves the technical and regulatory issues that arise in a constantly changing environment to help clients achieve their business goals. The firm brings to bear 25 years of innovation, experience and knowledge in designing, developing and implementing technology solutions from the plant floor to the top floor.

### Worldwide Headquarters

239, Littleton Road  
Westford, MA 01886 USA  
Tel: + 1 (978) 464 9180  
Fax: +1 (978) 392 9869  
E-mail: [info@ciminfo.net](mailto:info@ciminfo.net)

### UK Office

40 Bank Street, 30th Floor  
Canary Wharf  
London E14 5NR  
Tel: +44 (0) 20 3102 7966

### Asia Pacific Division

801 SAKAR IV, Ellisbridge  
Ahmedabad 380 006, India  
Tel : +91-79-657 8639  
Fax: +91-79-657 8659

