



Customer Success Story

Daffodil helps ZeusIP to modernizes its legacy case management system and improve operational efficiency by 30%



Customer: ZeusIP Advocates LLP

Country: India

Industry: Legal

Our Role: Product Engineering

About Client

ZeusIP is a law firm, specializing in intellectual property laws with a global presence. Represented by professionals specializing in diverse spheres of Intellectual Property Laws, ZeusIP works in a team structure to efficiently deliver services as per global quality standards. They bring together professionals from a diverse range of skills and backgrounds, including engineering, physics, chemistry, economics, etc.

30%

increase in operational efficiency

1.5 TB

of data migrated

2x

faster development

67%

reduction in turnaround time of a task



We are extremely impressed by the way team Daffodil approached the problem we were facing. They first deeply understood our internal operations before even initiating the development process. And once the schema was ready, they developed and implemented the solution at an amazingly fast speed.

Gunjan Dhoreliya

Managing Partner (ZeusIP)

Problem

Documents are core to a law firm's business. They use documents all day, from contracts, letters, emails to pleading and what not. There are multiple documents associated with every case, with each document having multiple versions, modifications, and owners. Hence, managing this grapevine of documents becomes imperative for legal business success. In order to maintain the data of their cases, ZeusIP was running a legacy application built using MS Access. Some of the key challenges that ZeusIP faced were:

Manual entry of case data

The legacy application involved manually copying emails, attachments, and other documents to the system. This solution was time-consuming and was prone to errors. As the quantity of documents increased, the software started showing limitations and was not able to keep up with business requirements.

No central hub for case information

ZeusIP lacked a centralized repository of data for their cases. The data was saved in several independent data silos and that was difficult if not impossible to integrate, making it quite challenging to obtain a complete picture of a case for the management team. In case a new lawyer was assigned to an on-going case, reviewing the older case documents was a major challenge

More than 1.5TB of disorganized data

ZeusIP had 1.5 TB of case data stored in various file formats such as text, images, videos and PDF documents. With such a humongous amount of data, searching for relevant information about a particular case was quite a challenge for ZeusIP, leading to large TAT for business operations and inefficient efforts.

No provision for disaster recovery

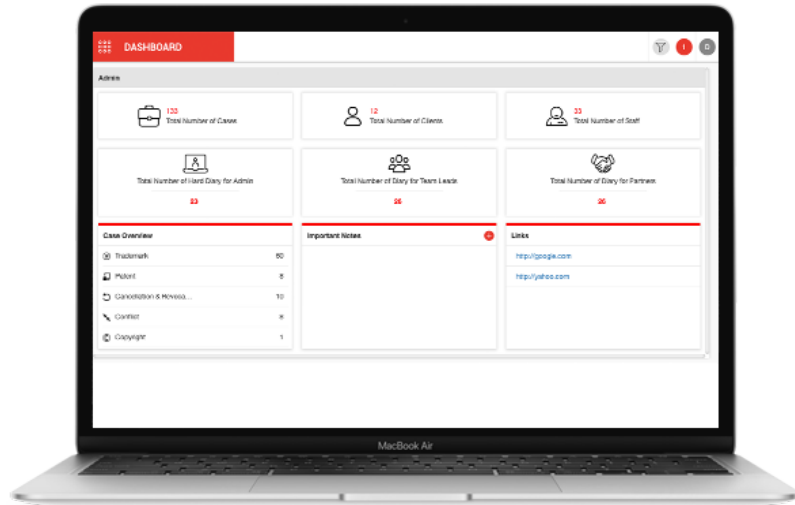
The legacy software lacked any sort of functionality for backup of data or data recovery. ZeusIP had to separately store a replicated file for each document, image, video or email that only led to inefficient utilization of storage capacity and eventually slowing down the entire system.

Taking all these challenges into account, the need was to build a new case management solution which could automate the entire case management process and allow their workforce to focus more on core business rather than non-essential tasks. Since the business was suffering due to technical and functional limitations of the legacy software, ZeusIP wanted to get the new solution developed in minimum possible time.

Solution

Analyzing the scope of the solution, technicalities involved, and time-to-market, Daffodil proposed a low code development approach using reusable components. Low-code development is a modular approach to application development that significantly reduces a product's time-to-market. It uses a reusable, component-based architecture for development that boosts the app development and delivery cycle. In the case of ZeusIP, reusable components were expected to reduce development time by half.

Daffodil initiated the development process by understanding the core business process and data flow within the organization. The roles of different departments and their data requirements were apprehended to create a flowchart for the entire organization. Daffodil developed a case management system that allowed ZeusIP to manage their records, making data searching, lookup, and collaboration easy. In order to make data searching and lookup convenient, each case was associated with a unique case id. The web application made the data accessible to all the departments, over a public network. Some of the major challenges that Daffodil overcame were:



Automating email processes

Automation of the email process on the basis of case and client, and allowing all users to read emails simultaneously in near real-time.

Migrating data into DBMS

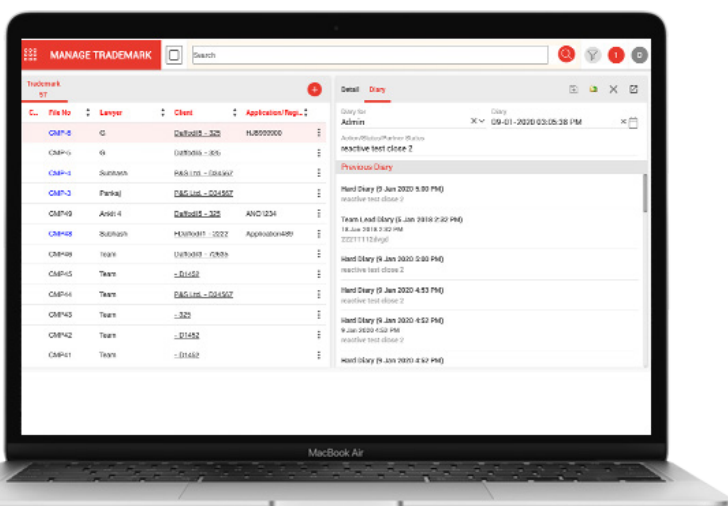
The entire 1.5Tb of disorganized business data was migrated into DBMS with relevant metadata and tags. Existing business data, which was unorganized in MS Excel and MS Access was migrated into MongoDB DBMS.

Making data search trouble-free

Daffodil incorporated a user-friendly search functionality using MongoDB full text search in the application that allows users to locate content by searching for specific words, phrases or case id.

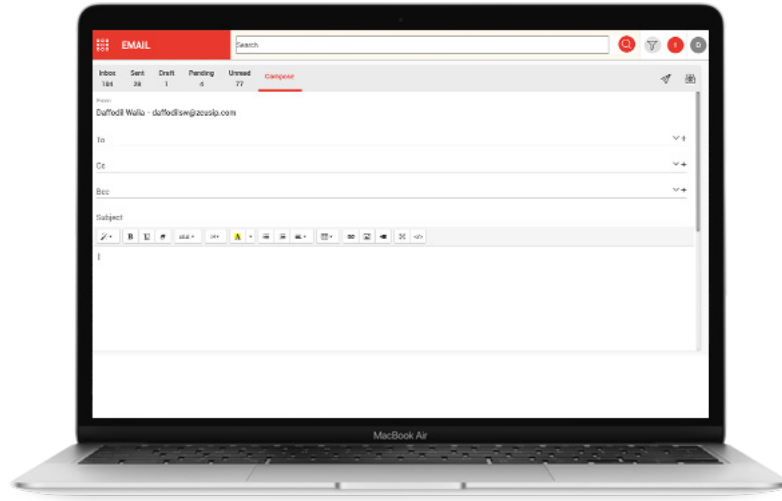
Making data backup easy, fast and lightweight

Incremental data backup was integrated with the application in order to make the data backup process fast and lightweight. Since incremental backup copies only data that was changed since the previous backup, it reduces the storage requirements, bandwidth load, and provides the necessary level of data consistency and availability.



Keeping the solution robust and scalable

The final solution developed was highly scalable and can be upgraded with minimum efforts. For instance, the files attached to the patent and other cases were expected to be <500KB in text format, initially. However at the time of UAT, there was a change in business requirement and the ZeusIP team wanted to have all types of files i.e. videos and images to be saved. To make this change, team Daffodil just changed the saving strategy of the respective Technology Extension and the whole process was completed within a couple of hours while it would have taken almost 1 week in a traditional scenario.



Impact

By recreating the architecture and following the low code development approach, Daffodil was able to save about 800 hours of development time.

The process of 'Trademark Journal' lookup which previously took 10 man-days of effort every month, was completely eliminated by the automation of the task. Users need to just download the journal from the government website and upload the PDF in the system.

Integrated email solution automated the entire email process. Now, no efforts are required in arranging the data according to clients and cases. Emails can now be exchanged within the application, without the need of an external email client.

The lookup process is automatically executed by the application and if any matching data is found, it is displayed in a window. Zeusip has reported a significant increase of 30% in the efficiency of their operations.



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Technology Stack



- NodeJS
- ExpressJS
- ReactJS
- MongoDB

About Daffodil

Daffodil Software is a software engineering partner to 100+ organizations across the globe and has been helping them in making their software products more robust, teams more productive and processes more efficient. Our ability to look beyond technologies to deliver innovative solutions with scale and speed has been lauded by our clients as well as the tech community worldwide.

Since our inception, we have invested in organic growth; building on our engineering capabilities, organizational processes, and culture required to deliver a truly collaborative ecosystem for solving technology challenges. At the core of Daffodil lies a culture rooted in innovation, learning and a result-oriented mindset.