zensar

Fortune 500 Firm Cuts Processing Time From 36 Hours to Just Two

Case Study

Overview

Stepping up time and cost efficiency

One of the world's largest commercial real estate services and investment firms, with an annual revenue exceeding $30 billion, decided to leverage emerging technologies to elevate time and cost efficiency and, in turn, business competitiveness.

Zensar's brief: :

- Automate the process of data entry and radically cut the time taken to log in agreements, leveraging generative AI capabilities.
- Enable efficient data extraction from different input source documents shared by customers, ensuring quality and accuracy.

Beyond the brief:

Guided by our commitment to "experience-led everything," we ensured that our focus was not just on technology, but more importantly, on the people who use it.

Challenges

Less accuracy, but more time and cost

The client's IT team had to content with multiple challenges:

- **More time and cost:** Manually extracting critical information from lease documents and commencement letters is labor-intensive, time-consuming, and costly.
- **Compromised accuracy:** Manual extraction is prone to errors, leading to inaccuracies in the extracted data.
- **Data variability:** Integrating various document formats, such as PDF and docx, is challenging and requires a preprocessing module.

Solution

Powering business efficiency with generative AI

With the goal of enhancing the speed and accuracy of extracting information from lease agreements and commencement letters and assisting users with the required information, we developed and deployed a generative AI solution.

Discovery: We started the engagement by gaining a foundational understanding of the client's business processes and the operational needs of the user base

- When a lease agreement comes into existence, there are three main parties: landlord, tenant, and brokers such as those working for the client's organization.
- As there are several brokers engaged by the client, there are numerous agreements that are regularly created; an application called Deal IQ helps keep track of these agreements.
- Brokers are required to manually enter the data regarding the agreements into Deal IQ; this process takes a lot of time — about 36 hours per agreement.

Planning and design: With the insights from the discovery process, we designed these key solution features:

- **Extraction accuracy:** Identifying and extracting key data points, such as dates, names, and addresses from the text, is crucial to avoiding inaccurate response generation. So, we factored in the need for the solution to understand each customer's specific needs and key data points from lease documents and

commencement letters; this includes the lease start date, the landlord's name and address, and tenant details.

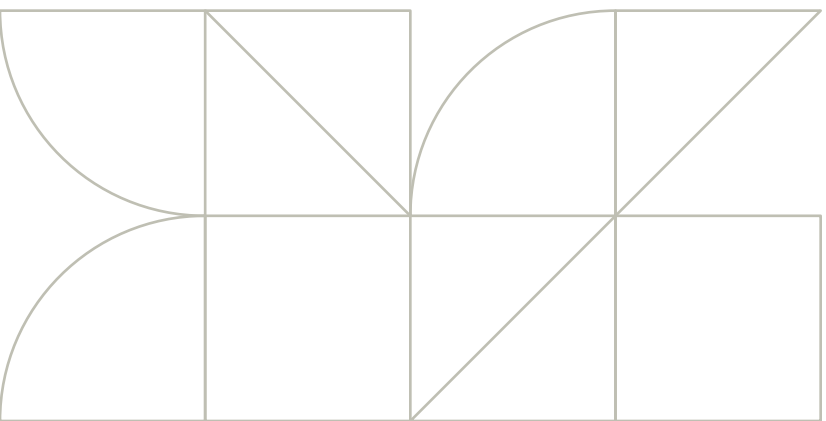
- **Seamless data integration:** Using OCR and text normalization, we designed a preprocessing module to handle various document formats, such as PDF and docx. The module was devised with the functionality to prepare the documents in a structured format for data extraction.
- **Response optimization:** We designed an analytical retrieval Q&A model to understand user-required entities and extract them from the vector database. Moreover, we trained this Q&A model on a diverse data set of lease agreements and performed rigorous testing to ensure high accuracy.

Enablement: Drawing on our AWS and Azure competencies, we put together a powerful mix of services to deliver the solution:

- **AWS S3 bucket** was used for its scalability, durability, and cost-effective storage solutions for vast amounts of data.
- **AWS SQS** was used for its reliable, scalable, and fully managed message queuing service that simplifies decoupling and coordinates distributed applications.
- **AWS Textract** was used for its automated, accurate extraction of text and data from documents, enhancing efficiency and reducing manual processing.
- **Azure OpenAI** was used for its advanced AI capabilities, seamless integration with Azure services, and robust security features.

Implementation: Leveraging generative AI capabilities, we deployed a solution that delivered on these business priorities:

- **Time and cost savings:** The solution helped cut time and cost by extracting information faster from documents, which lead to lower operational costs.
- **Accurate data extraction:** By ensuring consistent and precise extraction of key information, the solution helped improve data accuracy and maintain data integrity.
- **Data retrieval efficiency:** Storing data in a vector database enhanced retrieval efficiency, providing quick access to relevant information and enabling comprehensive analysis by aggregating data from multiple documents.



Impact

Greater business agility

According to internal benchmarks, these results were delivered:

- 40 percent lesser manual work
- 30 percent faster responses to user queries
- 30 percent better efficiency of the entire process

Business outcomes: The solution enabled sophisticated automation of the data entry process, which helped preserve data integrity and cut the time needed to complete the process — to just two hours per agreement, including the time taken for validation.

zensar

An RPG Company

At Zensar, we're 'experience-led everything.' We are committed to conceptualizing, designing, engineering, marketing, and managing digital solutions and experiences for over 145 leading enterprises. Using our 3Es of experience, engineering, and engagement, we harness the power of technology, creativity, and insight to deliver impact.

Part of the $4.8 billion RPG Group, we are headquartered in Pune, India. Our 10,000+ employees work across 30+ locations worldwide, including Milpitas, Seattle, Princeton, Cape Town, London, Zurich, Singapore, and Mexico City.

For more information, please contact: **info@zensar.com | www.zensar.com**