CASE STUDY

SURYA
INSURANCE COMPANY

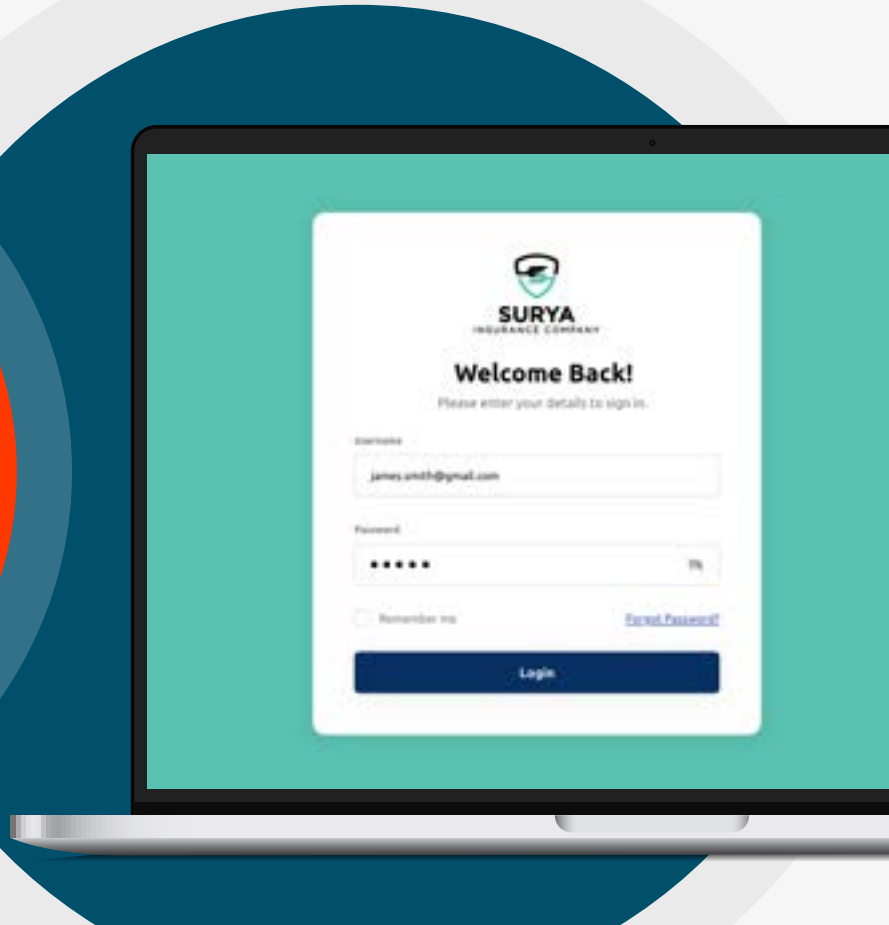
See How Inadev's AI/ML-Powered Solution Enhances Efficiency and Accuracy for Surya Insurance!

Transforming Insurance Form Processing for Efficiency, Cost Reduction, and Error-Free Operations.

Capabilities covered:

Artificial Intelligence and Machine Learning (AI/ML)

Amazon Web Services (AWS) Elastic Kubernetes Service (EKS)



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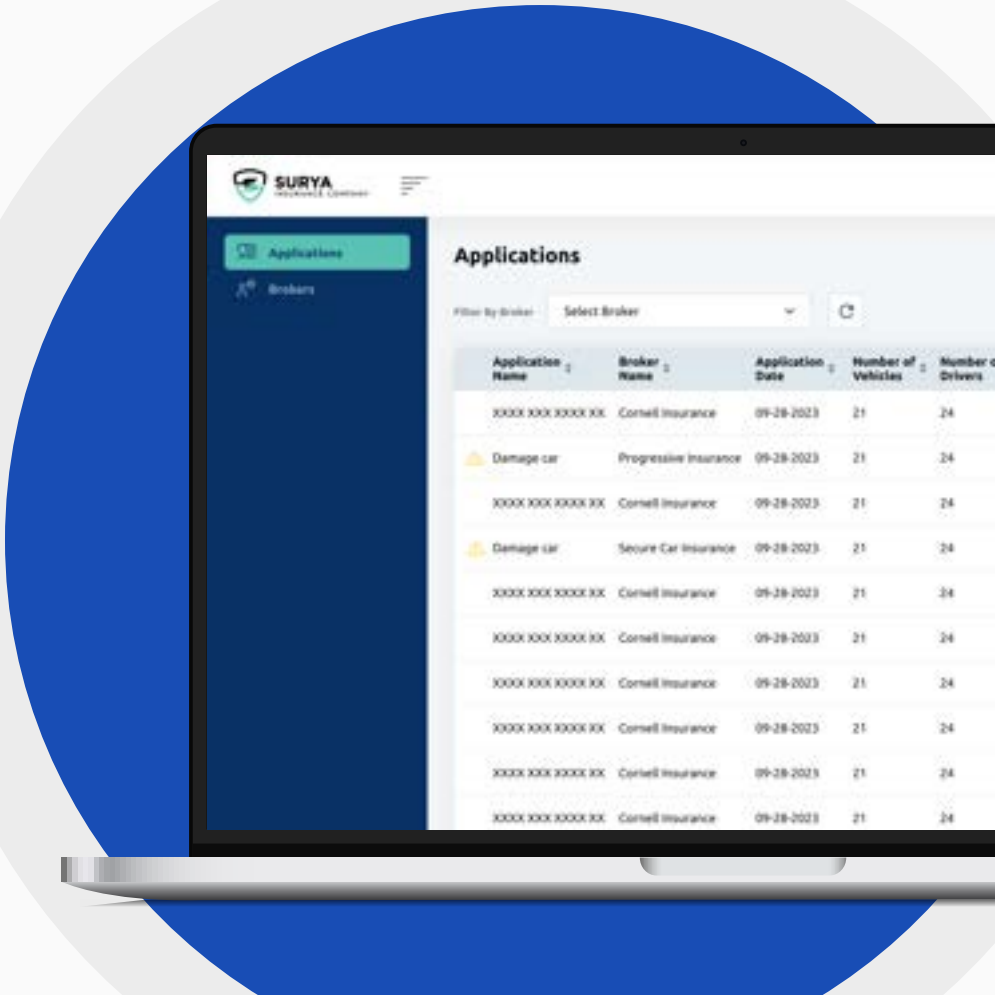
Surya Insurance Company (SIC), Inc., RRG employs a sophisticated risk management protocol that allows the company to minimize insurance costs for its clients.

They also specialize in providing commercial automotive liability insurance for the commercial auto industry. The credibility and riskcapacity of their clients are bolstered through strategicpartnerships with reinsurance companies.

SIC's flexible business model for commercial automotive liability insurance serves various sectors, including public livery, limousines, NEMT (Non-Emergency Medical Transportation), and other non-trucking vehicles.



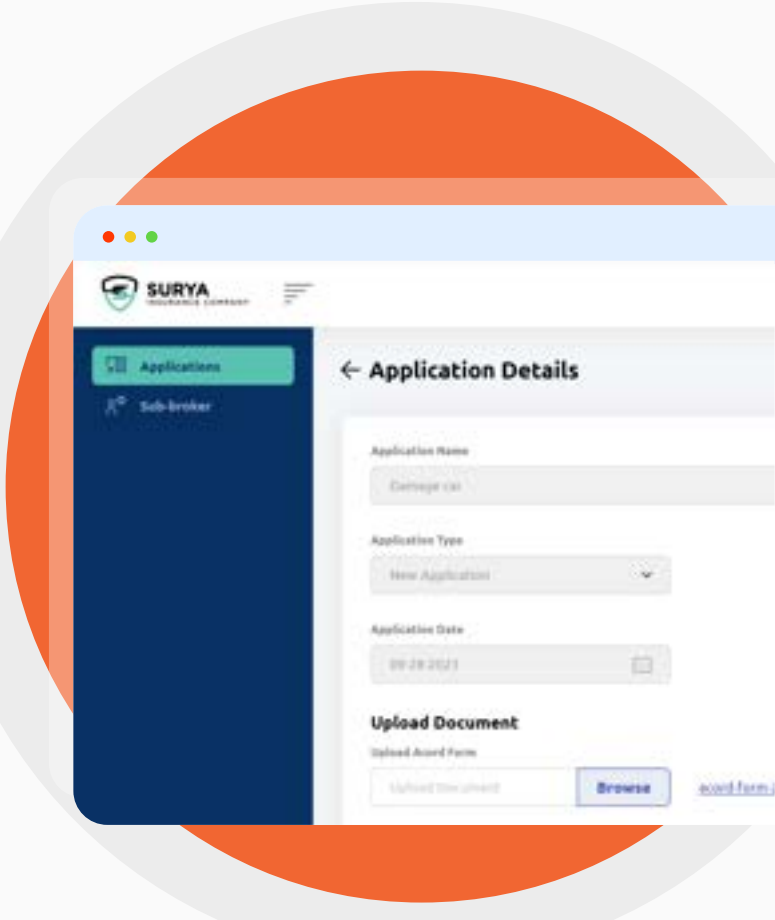
SIC relies on brokers to assist clients in completing insurance forms.

Brokers sent completed forms to SIC via email, and the data from these forms was manually entered into SIC's system. The manual data entry process was the method used to update and record the information provided in the insurance forms.

SIC encountered several challenges in its process of handling insurance forms with broker involvement. These challenges are as follows:

Time-Consuming: The manual data entry process was time-consuming, making it inefficient for handling a large number of forms. Only a small number of forms could be updated in the system within a given time frame, resulting in delays and operational bottlenecks.

Increased Person/Hour Costs: Since details from the forms were entered into the system manually, SIC incurred higher financial costs in terms of workforce. The manual data entry process was not cost-effective and strained the company's budget.

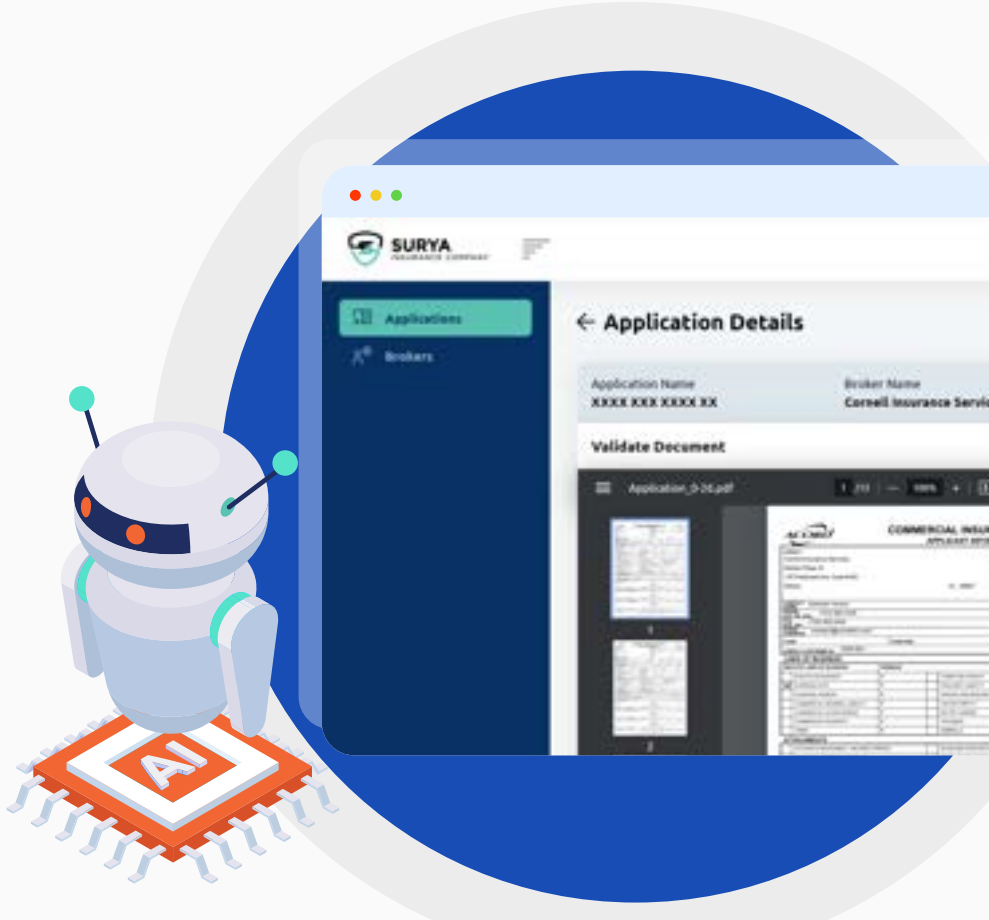


Scalability Issues: Manual data entry was not a scalable solution. This led to operational inefficiencies as the business grew.

Erroneous Data: The manual data entry process was susceptible to human error, including typographical mistakes,omissions, and inaccurate data entry.

To solve the challenges above, Inadev implemented a solution which utilizes Artificial Intelligence and Machine Learning (AI/ML) algorithms.

In this solution, brokers upload insurance forms through a dedicated portal. These forms were then processed by the OCR(Optical Character Recognition) system, which automatically extracts the information from the forms. The extracted data is structured and transmitted to SIC systems.



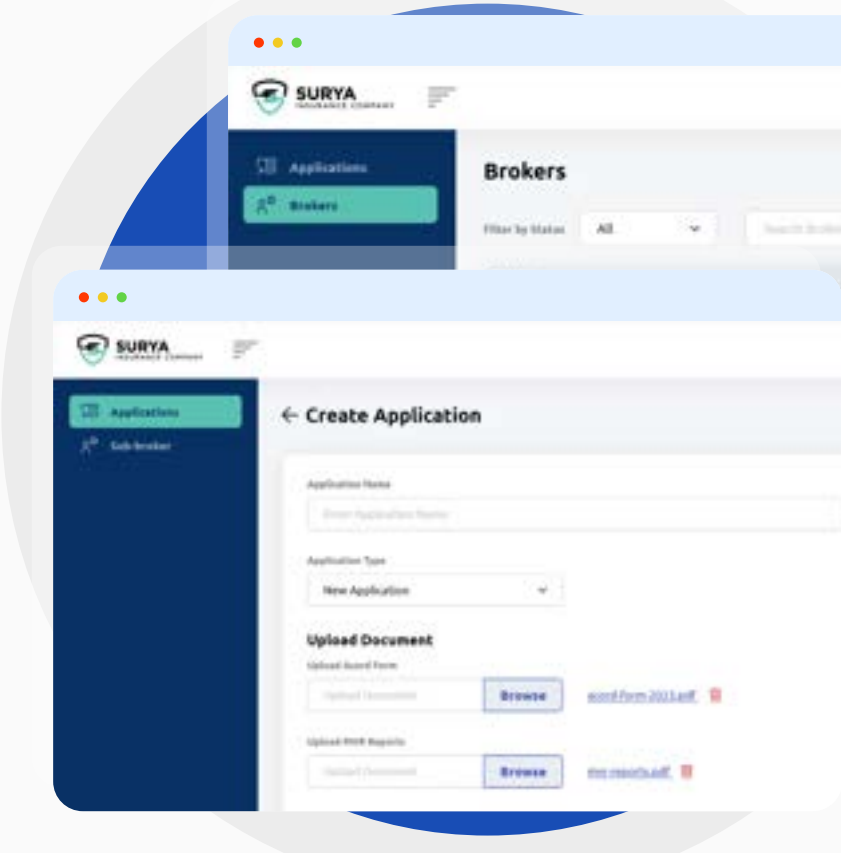
The solution comprises of two portals, one for brokers and another for Surya administrators. Brokers upload the forms through their portal, and Surya administrators review and approve or reject them via the dedicated administrator portal.

The entire solution is hosted on Amazon Web Services (AWS), leveraging its cloud infrastructure and native services.

The application portals are hosted on AWS EC2 instances, wherein DynamoDB is used for NoSQL operations and Postgres SQL for relational data, and Amazon S3 is employed to store customer data files, such as forms.

Elastic Kubernetes Service (EKS) is utilized to manage and orchestrate containerized applications. Docker images are stored in Amazon Elastic Container Service (ECS) to facilitate building and deploying applications. AWS Simple Email Service (SES) is used for sending email notifications.

In addition, AWS CloudWatch, API Gateway, SES (Simple Email Service), NAT Gateway, and Application Load Balancer are among the other AWS services utilized in the solution.



Adopting AWS Cloud based services offered numerous benefits:

- Easy access in the portal for broker and Surya admin user roles.
- OCR and automation in the form processing workflow for enhanced scalability vital for accommodating business growth and fluctuations in the client volume.
- Infrastructure-as-code (IaC) minimized human error in infrastructure provisioning and standardized infrastructure configurations across environments.
- DevSecOps embedded security throughout development, finding and fixing vulnerabilities early.
- Streamlined data entry reducing the need for manual data input and minimizing errors.
- Faster and more accurate data transfer into the SIC systems, improving insurance form and client information management efficiencies.

The solution enabled SIC to accomplish the following:

80% improvement in operational productivity, enabling Surya Insurance to handle up to 5X growth with the same OPEX.

Increased capacity by 60 insurance forms per day with significant reduction in customer wait time with cloud-based OCR and automated business processes (STP).

Efficient IT systems, scalable business processes, and improved customer satisfaction enabled SIC to target new customer segments and geographies.

IaC automated AWS infrastructure management, leading to faster deployments, lower costs, and more consistent environments.

Faster, more secure releases with fewer delays caused by late-stage security checks.