



## Customer Success Story

# Leveraging Robotic Process Automation to mask 500,000 national ID numbers with 98% accuracy for Pramerica Life Insurance



Pramerica  
LIFE INSURANCE

**Customer:** Pramerica Life Insurance

**Country:** India

**Industry:** BFSI

**Our Role:** Process Automation



*Team Daffodil has provided excellent technical solution support in achieving project completion within restrictive timelines and in good success rate. Great support from the Daffodil IT team to the Pramerica team in overall progress.*

**Gagandeep Singh Gumber**

Head-IT, Pramerica Life Insurance

# Challenge

Pramerica is one of the leading global life insurance companies headquartered in Gurgaon, India. Having a clientele of over 20 million people, Pramerica has over 140 branches and 3000+ employees across India.

Under a new data security compliance issued by the Government of India, any organization that collects national ID numbers of their customers, needs to save the information in a masked format in their database. Following this mandate, Pramerica Life Insurance (PLI) wanted to mask the existing documents that had national ID numbers of their customers mentioned for compliance. However, this task, if done manually, would have taken a lot of man-hours of effort and was highly error-prone. Pramerica thus wanted to automate this process and approached Daffodil for the same. The requirement was to mask approx. 500,000 documents stored in their database and replace the original document with the masked version.

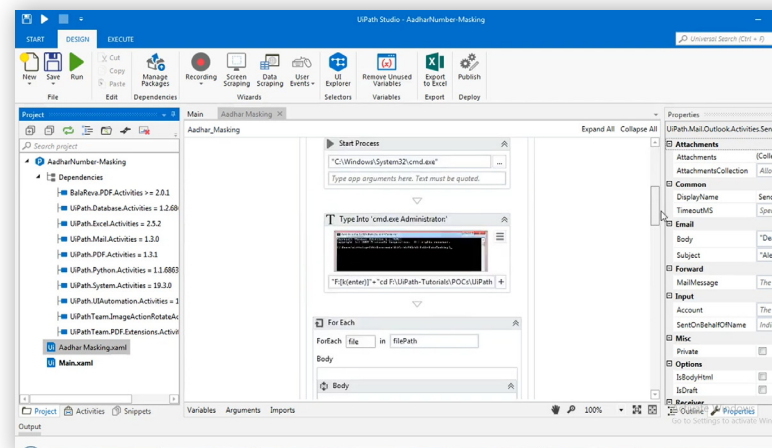


The documents were stored online on IBM FileNet, an ECM technology (Enterprise content management) that is used by enterprises for their document management. The challenge was to download each image from the FileNet eDMS, open the image in a photo viewer application, identify the ID number in the image, mask the ID number and save the copy back to the eDMS.

# Solution

Upon exploring the requirements further, Daffodil proposed UiPath Robotic Process Automation (RPA) as an ideal candidate for executing the project.

Daffodil leveraged UiPath's intelligent automation platform and developed a logic-driven utility on Windows OS for masking the ID numbers. The project started with a Proof of Concept (PoC) to evaluate the accuracy and feasibility of the solution.



UiPath bots were trained to download the unmasked image files from FileNet eDMS and open them in the Microsoft photo viewer application. One of the challenges was that a lot of image files were manually scanned and uploaded to their eDMS, hence the location of ID numbers was not consistent. In order to precisely identify the location of the ID number in the image, a different utility was developed using Google Vision API. Google Cloud's Vision API offers powerful pre-trained machine learning models through REST and RPC APIs that assigns labels to images and quickly classifies them into millions of predefined categories. This allowed us to detect objects and faces, read printed and handwritten text, and build valuable metadata into the image catalog. After detection of the location of the ID number, masking was done and the masked copy was uploaded back to the FileNet eDMS with the help of bots.

The custom scripts were made using Python programming language. After the project was completed, the utility was installed in desktops at Pramerica's premises to ensure secure access. By automating the national ID card masking process, PLI was able to comply with the Government deadline, which would not have been possible if the entire exercise was done manually.

## Business Impact

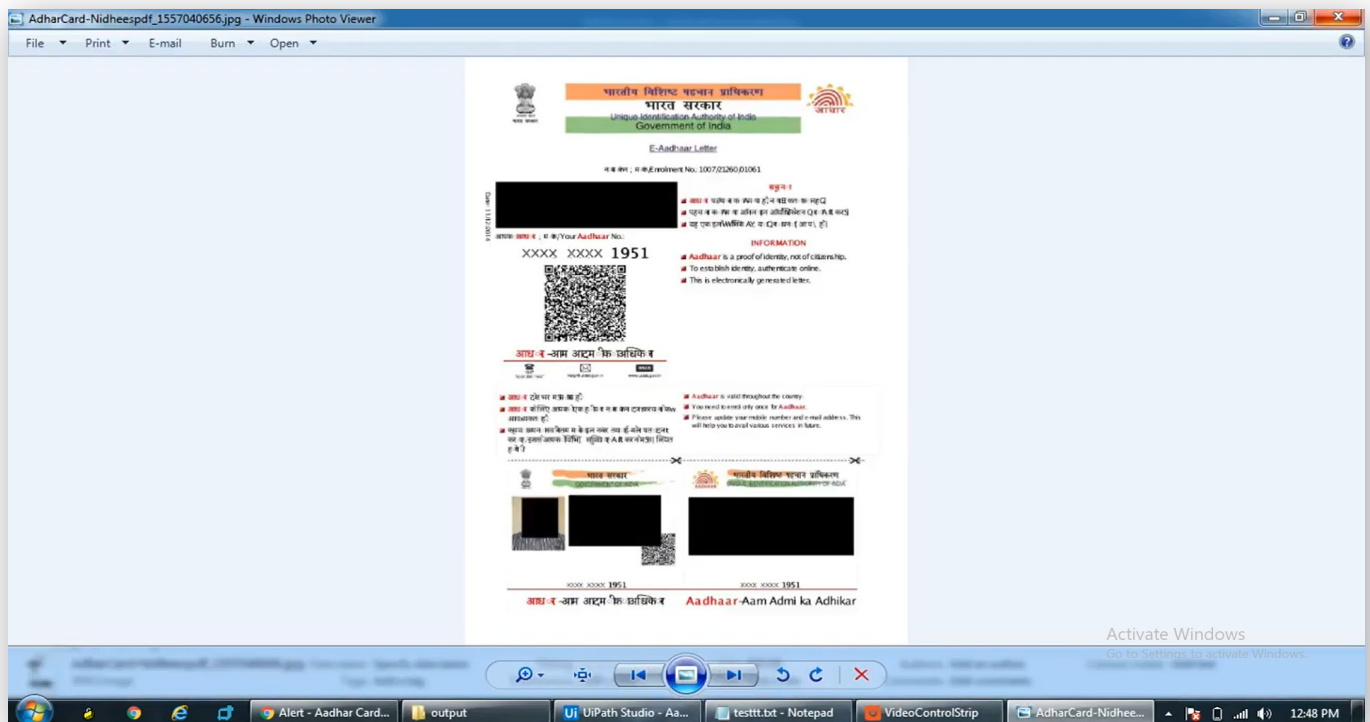
By automating the national ID number masked using RPA, Pramerica Life Insurance was able to mask the 12-digit uID of more than 500,000 customers saved in PDF and image formats. The average time that the utility took to mask a document was close to 10 seconds and the entire project was completed with more than 98% accuracy rate.

**500,000+**  
Documents Masked

**10 Seconds**  
Average Job Completion  
Time

**> 98%**  
Accuracy

**5 Million+**  
Jobs Executed by Bots



## Technology Stack













- UiPath
- Google Vision API
- Python

# 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.

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