Salesforce

Case Study

gslab

Reducing data archival costs with end-to-end process automation on Salesforce

An NGO improves its data storage mechanism through customization and integration of Salesforce and Microsoft Azure

Executive Summary

Our customer is a non-government organization (NGO) who uses the Salesforce Platform and AppExchange applications to manage to manage their donor information & keep track of funds. Due to increasing volume of donor data & regulatory compliance, the amount of data in Salesforce had increased many fold. This was not only impacting performance, but was also exhausting Salesforce storage capacity. GS Lab helped the customer improve performance while reducing storage costs by using Azure-Salesforce integration to introduce an automated Salesforce record archival & retrieval mechanism.

Overview

Our customer is an NGO known internationally for offering holistic family support to neglected children. They are extremely dependent on generous international funding to accomplish their goals and continue this community service. They use the Salesforce platform to manage end-to-end donor data and AppExchange application for acknowledging donor funds/payments.

With the increasing volume of donor data, the customer was worried about the limited storage capacity and app performance challenges. Increasing storage space on the Salesforce platform would result in higher costs.

Challenge

The customer was using the Salesforce platform extensively for a few years to manage data such as accounts, contacts, donations and funds.

Salesforce being a cloud-based (SaaS) service offering works on pay-per-user licensing. Salesforce also imposes certain governance and storage limits to preserve resources for other users. Over time, as the volume of donor data increased, it severely impacted the available storage space and reduced application efficiency. Although more storage could be purchased by increasing the allocated budgets, the governing limits would still remain and impact some functions.

Hence our customer wanted to analyze and automatically archive essential data from Salesforce in a cost-effective third-party database. The solution would also have to enable their business users to easily view the archived data in the Salesforce application UI and use historical data in BI tools for analytics.

Our customer needed a solution that could overcome the following challenges:

- The high volume of data was impacting some functionalities of Salesforce due to governance limits getting breached.
- Additional storage needed additional funding which would impact annual budgets.
- Older data from Salesforce which was outside the compliance window needed to be archived while still allowing searching and viewing of data when needed.
- The solution had to enable BI tools to analyze historical archived data.

Solution

Great Software Laboratory leveraged experience in Salesforce customization & integration to design and build a solution. Based on the customer's subscriptions and potential integrations with other applications, we selected Microsoft Azure to address the challenges.

Our solution provided a custom UI in the Salesforce portal to search and mark records that needed to be archived. Backend processes helped wrangle archival data in the Azure SQL database using the Azure pipeline. We implemented checks and balances to ensure that data met the right criteria before being moved to the archives. The solution ensured that data from Salesforce got deleted after archiving successfully.

Our solution also provided a custom UI to Salesforce users for searching and viewing archived records. This functionality also correlated the archived records with the Salesforce objects while preserving the relationship between them.

Implementation

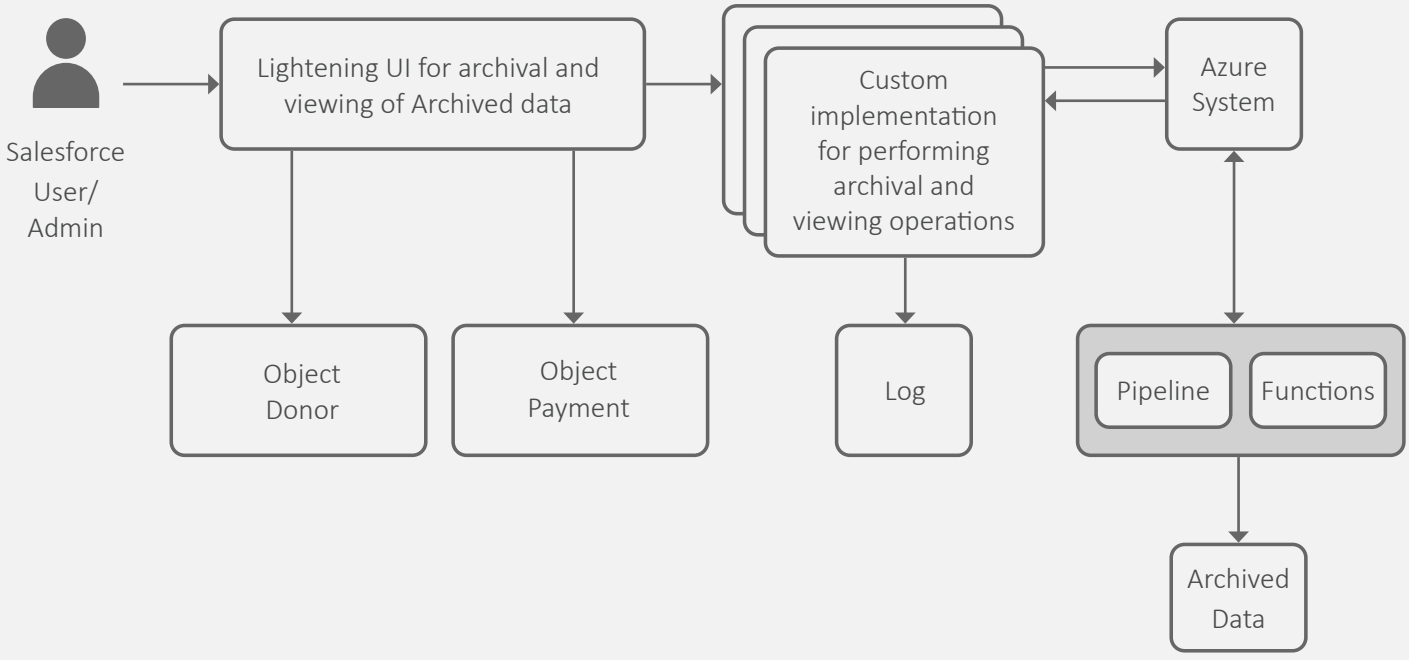
We analyzed the existing standard and custom object relationships, data accuracy, and permissions, which helped us in:

- Differentiating qualitative and quantitative data
- Identifying objects which increased rapidly
- Listing inactive data for archival

GS Lab designed an end-to-end solution that included archival data architecture.

We built custom UI using LWC in Salesforce. Different batch jobs were configured to copy, check and then delete the data from Salesforce.

We also used various Azure platform services like Data Factory (Pipeline) and Azure functions to store and retrieve archived data from SQL Server.



Solution architecture

Our solution also ensures that audit logs are present for all archival operations and detailed status of each stage of the archival process is available in real time. It also maintains all the logs. In case of any failure, the admin gets notified, and detailed logs remain available for quick debugging. This allows the issue to be resolved without any help from the developers.

Impact

20% cost saving on storage

End-to-end automation

Improved performance

- Our solution created and seamlessly automated an end-to-end data archival process.
- It significantly reduced Salesforce object data size and directly saved storage costs.
- It improved the application performance.
- The solution allowed business users to easily view archived data with related business context.

Great Software Laboratory (GS Lab) has been the technology partner of choice to 100+ organizations across North America, Europe and Asia-Pacific for over 17 years. Leveraging our expertise in 130+ tools & technologies, we have created 300+ 'first-of-its-kind' solutions to real-world problems. Our 'Beyond code' philosophy ensures that we not only push boundaries of existing technologies but also try out newer problem solving approaches to keep our customers one step ahead of their competitors. Our global team of 1200+ employees is adept at creating 'real value' at each stage of the customer growth journey, right from proof-of-concepts to completely scaled up products. For more information about our solutions & offerings, please visit www.gslab.com