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Case Study:

International Credit Union leverages mainframe data with Connect to build market-leading solutions

Overview

Just about every consumer-focused banking and financial services company will say that they are committed to providing friendly and personalized service to their customers. But unlike companies who serve the general public, credit unions serve people who share something in common, such as being employees of a particular company or being members of a not-for-profit social group. As member-owned financial cooperatives, credit unions are tangible and purposeful extensions of a group's shared commitment to mutual support. And so, members expect their credit union to be just as fully committed to them.

The professionals managing this major credit union serving millions of Americans understand how critical and valuable such commitment is, especially for its thousands of customers living and working abroad on long-term assignments. Managing and protecting their money and investments in a large, U.S. based credit union not only helps them maintain a sense of financial security, it also serves as a friendly and comforting connection to home.

But, like every other credit union, they still have to compete with larger banks and financial services firms. And their members expect them to provide at least the same levels of financial strength and safety as their biggest competitors, along with better interest rates on their savings, lower rates for loans, and extremely personal and attentive service. The only way they can fulfill its mission is to be more efficient, more innovative and even more technologically nimble than their competition.

Business challenge

Serving nearly 10 million members across the U.S. and in dozens of countries, with assets and transactions handled in just as many different currencies, requires a truly global presence and technological capabilities. This credit union has 22,000 employees working at its three operations centers and over 4,000 branch locations globally. And its core IT is likewise expansive and complex. So, like thousands of other global financial firms, it relies heavily upon IBM mainframe systems to run its business.

Client profile

- Full-service Credit Union
- 10 Million+ members
- Assets of over $130 Billion USD
- 22,000+ employees in over 300 locations around the world

The first and most urgent issue was getting past the restrictions of mainframe systems in order to build truly data-driven, AI powered and cloud native operations.

While mainframe systems are unsurpassed in their ability to process millions of banking transactions at millisecond speeds, their complex and unique architecture and data formats make it extremely difficult to access and use the data they generate for business analytics, ITOM or to manage enterprise IT security in an integrated way. So too, building and running applications on mainframe to provide the kind of mobile and online services that people expect is more than challenging. The specialized skills and extremely long development and testing cycles required are just impractical and costly.

So, when the credit union's Data Governance and Management team embarked on a three-year effort to modernize its systems and services, one of their first and most urgent issues was getting past the restrictions imposed by mainframe systems in order to build truly data-driven, AI powered and cloud native operations.

The higher-level objective driving that architectural transformation was to be able to run advanced analytics on huge volumes of customer data, to derive meaningful insights that could in turn guide and accelerate the creation and deployment of innovative new services. As the executive team leader explained, "Data driven is all about understanding our members' genome, the DNA that defines their preferences and needs under changing circumstances and at various stages of life, so that we can provide truly personalized and responsive support."

Solution

The team understood from the start that not only was it critical to have access to all their mainframe-generated customer data, it was just as important to be able to deliver it to their other core systems, developers and data scientists as quickly and continuously as possible.

To achieve this, the team built a Microsoft Azure Databricks environment which it dubbed the "Data Ingestion Factory." The objective was to feed all their customer data streams into the Databricks data lake as soon as it was created, cleansing, curating and making it accessible to developers and data scientists "ahead of demand," that is, avoiding reactive, ad hoc data collection efforts each time a new application or service was being developed.

To make all this possible, they implemented Precisely Connect as their mainframe data collection and forwarding solution.

Connect uses efficient and flexible change data capture (CDC) and batch ETL capabilities to deliver mainframe data, including Db2/z, IMS, and VSAM files, to cloud data lakes and analytics platforms. Connect's graphical interface makes it fast and easy to create flexible and re-useable data transformation and delivery models, with no need for specialized skills, coding or tuning, even when working with complex mainframe data.

Benefits

After implementing Connect, the credit union is able to collect, curate and deliver over one terabyte of ready-to-analyze customer data to the Data Ingestion Factory in the space of just 8 hours. This speed and efficiency resulted in another valuable benefit. Per the executive team leader, "Before we built the Data Ingestion Factory using Connect, our data scientists and developers spent 80% of their time on data wrangling and engineering specific application features. But now that is closer to 20%, because the data they need is automatically collected, transformed and loaded into Databricks in advance."

"So, now they can concentrate on applying machine learning and performing advanced analytics, spending more time thinking about the models that they would like to build and the new insights they would like to gather from the data. The net result is that we have strengthened our competitive capabilities and offerings and, more importantly, our ability to serve our members."

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> Executive Lead
> Data Governance and Management Team