

# Large Credit Card Company Successfully Migrates Two COBOL Applications in Record Time

Credit Card Company  
Renovate Case Study

RENOVATE



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### Business Challenge:

A tier-1 financial services company confronted a critical modernization challenge with two legacy applications. Extensive batch processing on a mainframe was utilized to generate extract files from diverse data sources, including DB2, VSAM, and QSAM. The urgency to shift from COBOL to Java and discontinue mainframe processing was precipitated by the escalating costs of mainframe usage and the diminishing expertise associated with legacy technologies.

The rising expenses of maintaining applications on the mainframe, coupled with a decreasing talent pool for legacy systems, presented a substantial business challenge. In this case, the client had outlined explicit modernization goals and was actively seeking a strategic approach to exit the mainframe. Continued reliance on legacy code and integration mechanisms posed a significant hindrance to modernization.



## Solution:

To address these challenges, the customer partnered with CloudFrame and GFT. The chosen solution, **CloudFrame Renovate**, facilitated the transformation of the application from COBOL to Java. The project included artifact gathering, analysis, gap assessment (3 months), iterative conversion, integration of the converted code with migrated data, deployment, testing of the full application (6 months), and a parallel run of the transformed application with the mainframe (3-6 months). The transformation of over 200 batch jobs covered not only the application, but also end-to-end testing, and validation.

The metamorphosis wasn't just a shift; it was an elevation. The legacy COBOL code transformed into highly maintainable Java, intertwining DB2 data definitions seamlessly with over 400 Oracle tables. The scope, close to a 1,000,000 lines of COBOL code, 1000+ GDG & VSAM output files, some requiring over 7 million records.

## Measurable Results

The success of the solution was measured based on several criteria:

- Achieving 100% functional equivalence.
- Completing the code transformation with minimal manual refactoring.
- Meeting performance standards within accepted SLAs.
- Deploying the transformed application using modern schedulers that matched the existing mainframe job schedule.
- Achieving a Cloud Native Application transformation.

## Reusability:

The project serves as a modernization pattern, showcasing a typical Mainframe Legacy Batch application transformation with 100% functional equivalence. The application is now highly maintainable and can be deployed using modern schedulers, providing flexible cloud deployment options for other transformed applications. Identified additional projects include delinking dependencies and expanding the transformation model to other business applications.

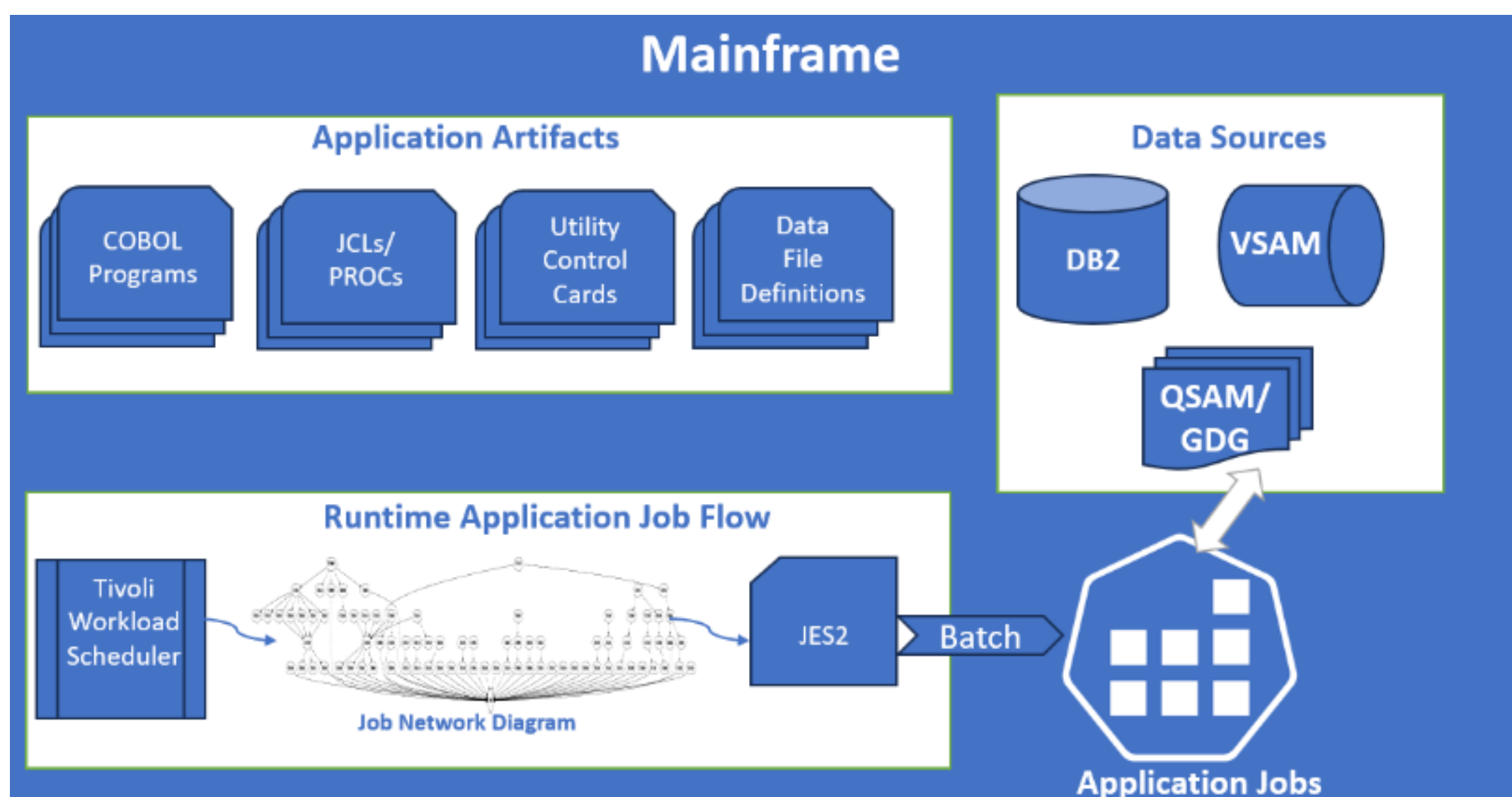
## Defined Outcomes:

The main outcomes included the migration and exit of mainframe processing for the application in a seamless, risk-free approach within a short timeframe.

Before the transformation, the customer relied on legacy mainframe processing with escalating costs and diminishing skills. After the successful modernization, the application became automated, cloud-native, and maintained its high-volume batch processing functionality.

The project involved overcoming both procedural and technical challenges, including close coordination with the customer, accommodating an expanding scope, addressing compatibility issues between DB2 and Oracle, and transforming complex JCLs and utilities.

The following diagram represents the existing state of the application architecture



The following diagram represents target architecture post application transformation using CloudFrame Renovate Solution

