

# A CASE STUDY IN ADDRESSING GOLIATH APPLICATION MODERNIZING CHALLENGES

CM evolveIT can scale up to enterprise environments, so you can trust it to handle your most complex challenges. Government agencies at all levels have several challenges that businesses may not face. Often, their budgets are limited and new requirements are set by statute with fixed deadlines, leading to a 'patch and plaster' mentality. Despite all this, their customers—you and me—demand modern services from these agencies.

A huge government agency faced a daunting application modernization challenge with code that was over 40 years old and incredibly complex. The system comprised more than 250 million lines of code and 250 major systems (many of which wereon the mainframe). Adding to the challenge was the fact that most of their budget was dedicated to maintaining these systems, not revamping them. Two critical requirements toeliminate technical debt and migrate the databases to DB2. And of course, there was a time crunch. The mandate was for certain applications to be significantly enhanced by a target date, which was set in stone by legislation.

The first step in a project of this nature is to analyze what each application does. The best way to do this is to first scan and parse all the code into a metadata repository so you can scope the effort and determine priorities. CM First's CM evolveIT and the CM MetaAnalyticsBridge for CA Repository software automatically analyzes and inventories software assets, significantly speeding-up this large first step. Once the code is in the repository, the product enables deep impact analysis, component reuse, code quality analysis and modernization planning to speed-up large modernization projects. For a gigantic project that spans language domains, requiring accuracy and speed, software is the only way to ensure the results needed.

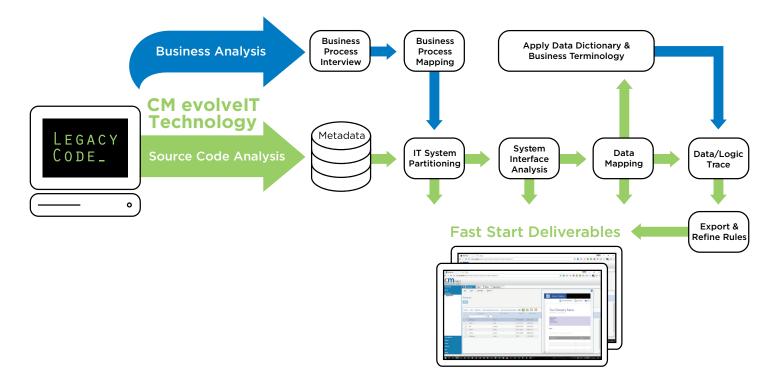
CM MetaAnalytics parses source code into structured XML to provide an analysis of software quality. You can also understand connectivity between components, where-used information, file I/O usage, SQL access and more. You can also see how to exploit parallel and multi-core processing for speed. Further the product's Bridge interfaces with the CA Repository using Universal XML Exchange, allowing you to use a repository to input this data.

The government agency knew that this project would take years and many phases. But with a repository, it was far easier for them to organize the project, focusing on the most critical areas first. Not only were they able to meet the mandated deadlines, they also found many opportunities to enhance their customer offerings, leading to a far better customer experience. These early, rapid successes ensured that funding would continue to complete the project.

What could you do if you had a way to truly understand your legacy code? What modernization opportunities (and compelling economics) are possible?

## Our Approach

Rules harvesting projects can be made practical with the use of the CM evolveIT automation and a proven methodology. Our proprietary methodology on slicing a system is unique in the industry. We have learned how to work with customers to understand how to extract rules in a variety of contexts and situations.



#### ADDING MEANING TO CODE

To complete a business rule extraction project one needs strong support for the business analyst. The analyst can then see the programmed influences on the result, and decide which ones are fundamental to the business and which are simply supporting technology coding. The key notion is to trace system output data backwards through the control and data flow paths that produce or affect it, using automation to handle scale and complexity. This lets the analyst focus on the essence of the computation and its conditions, while the tool handles the problem of navigating through complex mountains of code.

### CM evolvelT Benefits:

- + Enables building a business vocabulary.
- Finds unknown rules implemented within the application code.
- + Reduces risk with phased approach.
- Filters out non-relevant processing through the rules extraction process.
- Improves communications between IT and Business Analysts for as is process.
- Enhances new system object oriented design by isolating data objects and potential methods for new design.

### About CM First Products

CM First Group's powerful automation tools, augmented by services partners and professional services staff with many decades of software engineering and DevOps experience, ensure successful outcomes for even the most demanding modernization projects. Our products and expertise have helped over 400 customers in the public and private sectors reach their desired future state faster and more cost effectively than by using conventional approaches.

CM First software quickly analyzes, documents and re-platforms legacy code bases with minimal errors and rework, including those that are too large and complex for humans to tackle in any reasonable timeframe. The output is immediately usable by all team members, regardless of experience and knowledge of legacy software languages, accelerating application maintenance and modernization projects.

For more information, visit cmfirstgroup.com/products/CMevolveIT

### Request a Demo Today

Contact us for more information or to schedule a demo. Call 888-866-6179 or email us: info@cmfirstgroup.com



**CM First Group** 888-866-6179 cmfirstgroup.com 7000 North Mopac Expressway Plaza 7000, 2nd Floor Austin, Texas 78731

© CM First Group. All rights reserved. All trademarks, trade names, service marks and logos referenced herein belong to their respective companies.