Investing in next-generation credit management to drive a competitive edge

CGI

Introduction

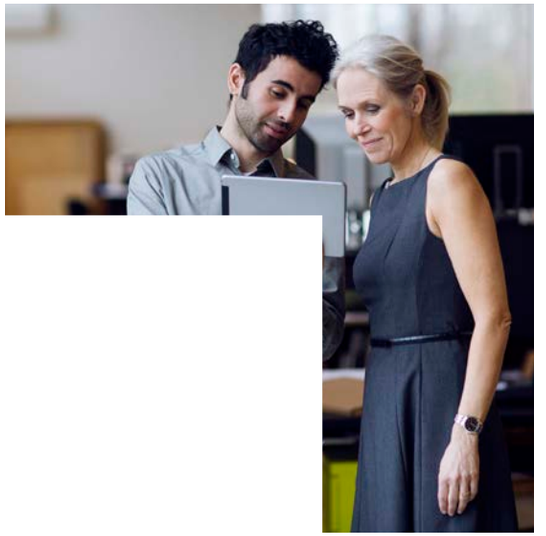
As the financial services world rapidly changes and customers demand services that are more accessible, faster and personalized, the need for financial institutions (FIs) to transform their legacy IT environments, move to new digital business models, and become more agile and customer centric has never been greater. Emerging digital technologies and the integration tools such as advanced data analytics, machine learning (ML) and artificial intelligence (AI) are transforming how FIs operate, and customers and employees have come to expect seamless digital channel integration and a cohesive digital experience at every turn.

In fact, findings from CGI's 2021 Voice of Our Clients research, based on 1,695 in-person interviews with business and technology executives, including financial services executives, reveals that accelerating digital transformation, as well as managing the demands of digital transformation on legacy infrastructure, are among the top priorities and trends cited by financial services executives.

Financial institutions have new opportunities to strengthen their foundations and thrive in today's digital-first world. As the COVID-19 global pandemic has shown, disruptions can happen suddenly, and even the most well-prepared FIs cannot predict their occurrence or impact. However, investing in the latest technology infrastructure and credit solutions can deliver the business agility required to ensure resiliency, agility and a competitive edge.

A strategic IT partner that understands the complex global challenges financial institutions face, as well as the best technologies to meet their rapidly evolving business needs, can help them adapt to any type of change and thrive, even in the most challenging conditions. The right partner can make the path toward transformation clearer and help FIs embrace today's new era of finance—driven by data and powered by open agile systems.

In this paper, we share insights for helping financial institutions become more flexible, agile and resilient, uncover how platform investments can meet evolving their customer needs, and show the key role that strategic IT partnerships play for long-term success.



Shifting to a microservices platform architecture for credit management

While new technologies abound in the financial services world, inefficient and outdated credit systems and manual processes can inhibit business performance, innovation and growth. In addition, legacy infrastructures, security issues and fraud, and the complexities of multi-vendor management often impede business agility. Embarking on a technology transformation journey requires investments in the right digitally-driven solutions for optimized performance.

CGI provides a unified credit management solution suite—CGI Collections360—that enables financial insitutions to balance the effective mitigation of bad debt and the customer experience, managing both credit risk and customer retention. This solution suite began as a single, custom-built, mainframe application and has evolved over time into an industry-leading, Java-based, digital platform that supports multiple solutions.

The web application industry has changed significantly, with a global shift toward microservice-based architectures. This, in turn, led CGI to transition CGI Collections360 to such a platform architecture. As a result, CGI Collection360's former monolithic architecture, which supported just one centralized server application, has evolved into a modern platform architecture that supports numerous small, discrete microservices.

Because each of our client's goals and customers are different, moving to a microservices platform architecture enables agility both in delivering new services and in tailoring implementations based on customer needs. Cloud-native microservices drive scalability and resiliency, and support the smallest banks all the way up to the largest global financial institutions.

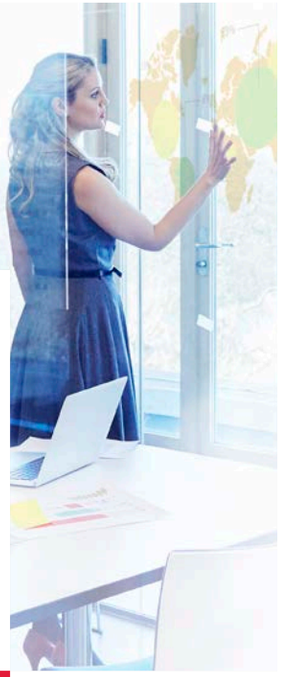
Shifting to a microservices platform architecture for credit management
(continued)

For example, if a bank with a large mortgage loan business decides to begin servicing auto loans, the bank can maintain its existing mortgage loan services while simultaneously scaling up to add the desired auto loan services. Switching to a microservices platform architecture supports business agility because changes in specific functions no longer affect the entire system. Microservices can be arranged and extended to quickly produce new modular services that address new market needs as they emerge instead of years from now.

1. Organize your transformation around a set of modular microservices.
2. Each microservice consists of independent business logic and associated technology that delivers a specific goal.
3. Microservices can be assembled and swapped in and out, driving business agility.
4. Avoid dependence on a single solution with microservices.

A microservices platform architecture drives flexibility and agility, enabling financial institutions to quickly respond to evolving customer needs and changing business requirements.

Having a vision for the future



Technology transformation journeys for large existing solutions can feel daunting in the beginning. As with any journey, financial institutions should start with a destination in mind. Without a clear vision, the outcome can become a mishmash of disjointed parts that prevent a cohesive customer and employee experience.

Evaluating each business need individually helps significantly in finding the right technology solution for the need instead of forcing everything into a one-size-fits-all architecture. In addition, starting fresh with distinct integration points to legacy applications supports the introduction of new tools, and, in particular, tools that fit well in an agile development life cycle. From this point, FIs can start building desired microservices in smaller, manageable steps.

CGI's vision for the future is to empower financial institutions to succeed and grow through flexibility, modularity and digital experiences across the credit management life cycle. In line with this vision, we invested in a new credit technology platform and made sure it was not simply a reorganization of old code from the past. Instead, we took a fresh approach with our future vision in mind.

Our approach to building a modern credit management platform

As we looked toward the future evolution of our credit management solution suite, we initially started with an evaluation of our CACS Enterprise collections solution, and it was clear that moving to a microservice-based platform was the next step. While it was important to build upon the knowledge and expertise that went into the current version of CACS Enterprise, creating a next-generation platform would require rethinking and rebuilding much of the application, and partnering where appropriate to ensure we developed a best-in-class solution for the marketplace.

To achieve this goal, we embraced a transformation roadmap that emphasized three factors: process, partners and platform.

Process

Our organization already was well on the path of adopting agile development using the Scaled Agile (SAFe) framework. Ensuring success in an endeavor of this size required not only fully embracing SAFe development, but also focusing on some key learnings from our experience with agile transformation:

- Define the vision, and don’t be afraid to refine the vision as you learn.
- Define (and refine) the minimum viable product (MVP), delivering the most valuable functionality first and incrementally building from there.
- Incorporate DevOps from the very beginning, both in the development and deployment of the platform.
- Use test-driven development (TDD) to improve your development speed and quality.

Our approach to building a modern credit management platform (continued)

Partners

Developing a modern platform required leveraging the shared knowledge of our experts and clients, and working with industry-proven tools and technologies. Our partnership approach included the following:

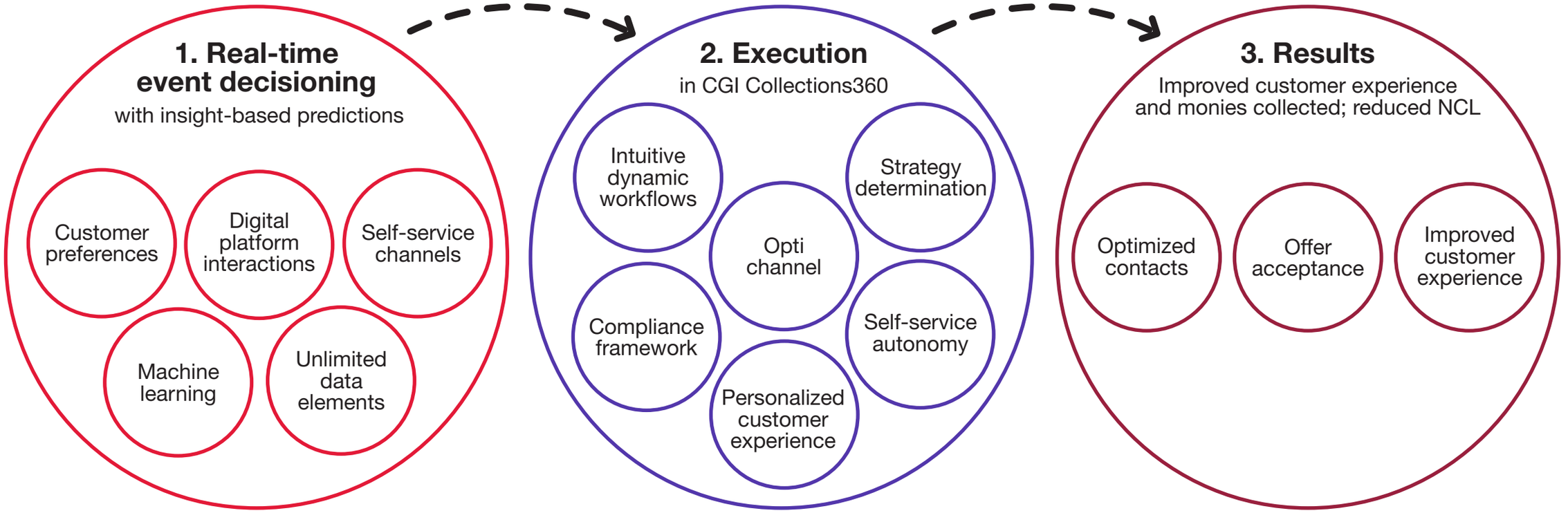
- Partnering with clients (interviews, working sessions, feedback)
- Partnering with CGI experts (teams that implement and support the CACS Enterprise for our clients)
- Building a digital partner ecosystem and leveraging frameworks and components with proven track records in the market (e.g., Spring, Camunda, Kafka)

Platform

To deliver the flexibility, agility and scalability our clients need from a credit management suite, we shifted to a platform that uses a shared suite of cloud-based services (the “horizontals”) to deliver business functionality (the “verticals”) in an agile manner. Some key aspects of this platform include:

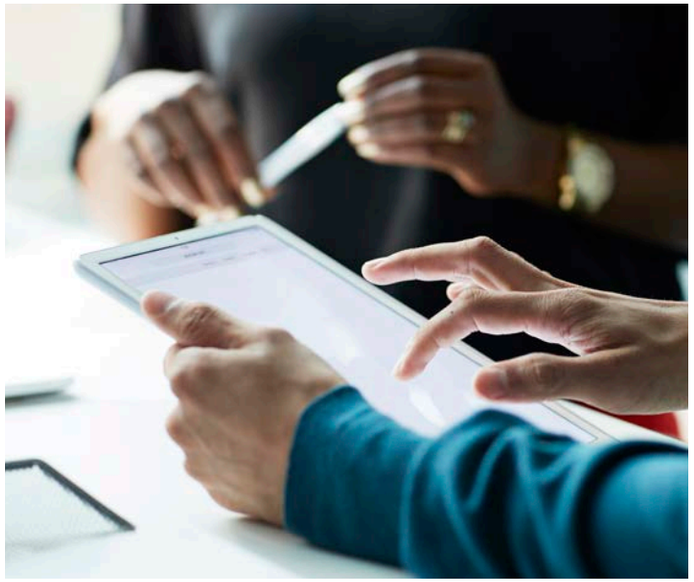
- Real-time, event-based decisioning and processing of business events
- Integration of machine learning and prediction into the decisioning process
- Execution of business strategies using microservices designed and developed as true cloud-native applications
- Use of industry-standard business process modeling notation (BPMN) and decision model and notation (DMN) for modeling and implementing complex business processes
- Use of supporting multiple channels of digital communication

Our approach to building a modern credit management platform (continued)



CGI's ongoing commitment in the transformation of our credit management platform enables our clients to stay ahead of emerging technologies and quickly pivot their business priorities as needed.

Meeting the need for personalization



Beyond business processing, the future includes a focus on hyper personalization, both in terms of approaching customers, as well as in presenting information to them. To meet this need, our credit group partnered with CGI's Human-Centered Design team to plan out a modern user interface with a focus on customizable persona-based views and built-on micro front-ends.

For both customer and agent-facing applications, the goal was to provide intuitive, easy-to-use pages that allow users to perform tasks quickly. This includes incorporating insights driven by machine learning and artificial intelligence into collection processes to optimize decisions for the business and enhance customer service. Partnering with CGI's Emerging Technologies Practice, we implemented machine learning models using comprehensive customer data to determine the most effective channel and the best time to reach customers.

Taking the right investment approach

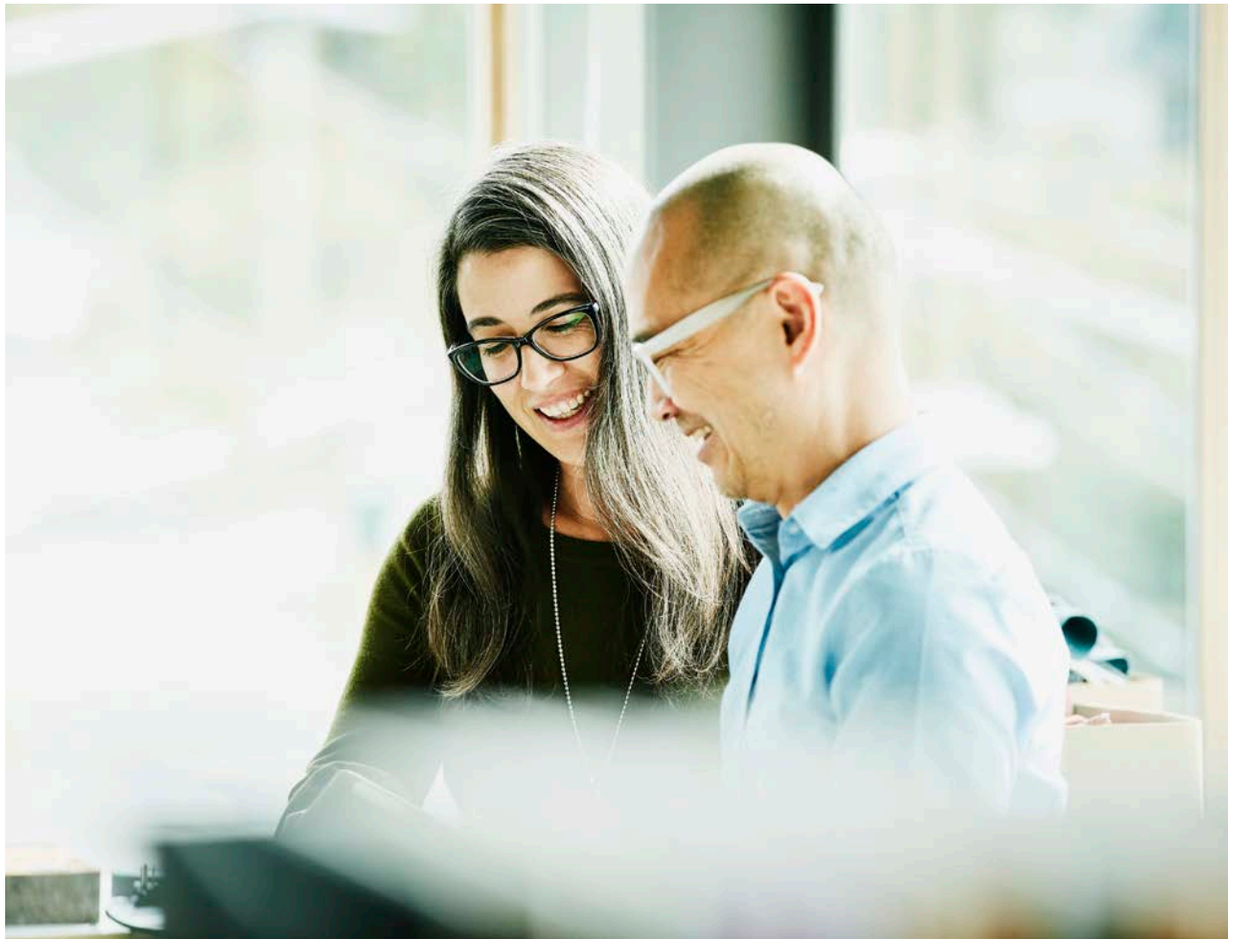
CGI's CACS Enterprise, an end-to-end default management solution, has been a key component of our CGI Collections360 suite for almost 40 years ago. Over time, CGI has heavily invested in the ongoing evolution of the solution—both functionally and technically—to help financial institutions drive innovation and transformation as their business needs evolve. Our investment approach includes:

- Investing not only in tools but also in processes
- Implementing cultural mindset changes throughout
- Rethinking how we deliver value by providing an extensible, microservices-based platform that can support more than just collections
- Leveraging well-established frameworks and toolsets, and moving away from proprietary frameworks

Meeting the need for personalization (continued)

Agility in action with our modern credit management platform

At the end of 2020, the Consumer Financial Protection Board issued a major regulation change to the Fair Debt Collection Practice Act (FDCPA), and CGI sprang into action. Using our modern platform, we moved the compliance features from our latest CACS Enterprise release into a compliance microservice to create a stand-alone solution—CGI Comply. CGI Comply uses real-time decisioning to apply compliance controls to communication channels in a compliant manner. Platform agility enabled us to deliver this new service in three months while maintaining flexibility to integrate with legacy systems and various communications partners. CGI Comply is a perfect example of the benefits of our modern platform vision and investment.



Conclusion

Leading financial institutions are investing in becoming more customer-centric. This requires changing how they operate and how they plan for next steps in their technology transformation journey. Financial institutions that successfully address the challenges of legacy IT and leverage the latest technology solutions can capitalize on the promise of digital transformation—optimizing business operations, delighting customers and reaping significant financial and business benefits.

Technology journeys are constantly evolving. As with any journey, businesses must continuously reflect and readjust plans, allowing for change along the way. Remaining flexible and planning for change enable FIs to remain relevant in today's rapidly changing world and handle the unexpected with readiness.

As a longstanding partner for leading financial institutions globally, CGI understands the challenges of navigating constant change. Providing deep industry and technology expertise, we are continually investing in our credit technology platform to support open and agile systems so that our clients can become more competitive, more innovative and more efficient while also managing risks and costs in line with their strategic priorities.

CGI has been at the forefront of the financial services industry since the 1970s, and we continue to help drive many domestic and global initiatives that have transformed the industry. Today, we support more than 500 financial institutions worldwide, delivering a broad range of digital IT and business strategies, services and solutions needed for successful modernization.

About CGI

Insights you can act on

Founded in 1976, CGI is among the largest IT and business consulting services firms in the world.

We are insights-driven and outcomes-based to help accelerate returns on your investments. Across hundreds of locations worldwide, we provide comprehensive, scalable and sustainable IT and business consulting services that are informed globally and delivered locally.

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