

A decorative graphic on the left side of the page consists of a network of orange and red nodes connected by thin lines, resembling a molecular or data network structure.

Striking the Balance Between Risk and Reward

in payments modernization

Staying competitive in financial services requires meeting ever-increasing customer expectations for digital convenience. Payment systems, at the heart of this equation, must be nimble enough to support new market demands. While outdated legacy payment systems can be problematic, wholesale replacements can be prohibitively costly and time consuming. Modernization-in-place allows banks to balance both risk and reward by maximizing existing technology investments while moving forward incrementally toward their transformation visions.

By Santino Failla, CGI

Introduction

Modernization-in-place leverages existing systems while progressing toward a bank's transformation vision.

At the most basic level, payment systems allow parties to conduct transactions. But that's where the simplicity ends. These systems lie at the heart of a complex ecosystem that continues to expand and evolve.

In this age of anytime, anywhere transactions, payments have become a sophisticated, brand-defining specialty, with non-traditional players pushing the envelope and grabbing market share. Conventional business models are being challenged like never before. Consumers in emerging markets may not even have bank accounts, yet are making payments on their mobile devices.

To remain not just viable but vital, banks must offer exceptional consumer convenience and reach. While payment systems should extend the reach, not set the limits, of banking practice, legacy systems with obsolete technology and disparate interfaces are keeping banks from keeping pace. Maintaining these systems is onerous, but the business case for a single integrated payment system is not always possible to secure. Additionally, banks do not want to toss out systems that are working and represent a huge IT investment.

Since any system replacement effort comes with risk, the risks and rewards of maintaining versus replacing legacy systems must be weighed carefully. For those unable to move forward with system replacements, there is a solid middle ground. Modernization-in-place (MIP) leverages existing systems while progressing toward a bank's transformation vision.



Common paths to modernization

CGI has continued to help leading banks reduce their payments operational costs by 20-40% using a managed services approach.

The ability to meet financial market demands requires flexible payment services that can handle all payment types, scale to meet growing volumes, offer a truly unified global service tailored to local variations, and differentiate service levels for customers.

Today's modernization paths enable banks to keep their payments engines in tact while simultaneously enhancing them to drive future business growth. Depending on their current environments and business visions, banks typically take three common paths to payment modernization: legacy platform replacement, intelligent front-ends, and managed payment services, or a combination of these.

Full platform replacement

For organizations with multiple, unreliable legacy systems that pose significant compliance risks, consolidating and replacing these systems are a priority. In these cases, banks will replace their legacy systems with modern, integrated and flexible payment services hubs. Expert system integration partners can assist banks that choose to go this route and also can provide parallel testing and implementation capabilities.

Adding value with intelligent front ends

For banks with legacy payment platforms that are reliable—but comprised of multiple, disparate systems—the focus often is on deploying front-end services that work with multiple settlement systems (e.g., onboarding, limit checking, integrated wire and ACH payment with file de-bulking and integrated reporting) to deliver additional services and consolidated reporting to the corporate client. Another solution is to deploy a payments engine in front of the legacy systems to increase agility by adding workflow to send value-added information to the payments engine.

Recognizing that the variety of payment systems is likely to increase, many banks are looking at ways to move toward their target state while continuing to deliver value to clients and/or reducing back-office costs.

Reducing costs with managed services

Capital investments often are difficult to justify, and hiring top IT talent is a daunting challenge. In these cases, banks have turned to expert third parties to manage their payment services. Such arrangements require little to no upfront costs, provide access to expert talent, and reduce overall total cost of ownership. They also enable quick start up so banks can realize faster business benefits in straight through processing, automation and revenue generation. With a managed services partner responsible for implementation and operations, banks also can minimize overall risk while preserving the option to migrate to a single payments platform in the future. Service-level-backed performance, common processes and tools, and planned upgrades drive continuous improvement. CGI has continued to help leading banks reduce their payments operational costs by 20-40% using a managed services approach.

Balancing risks and rewards

The first step in modernizing should be an assessment of where the bank wants to go and where it is now. The second step is to determine which paths are available to get to the destination, and which paths should be chosen. Often a bank will choose a combination of approaches (e.g., application re-hosting and encapsulation, conversion, rewriting and/or replacing) to get to their end-state. The pros and cons of these approaches are further discussed in CGI's white paper, "Banking Application Modernization and Portfolio Management."

The modernization roadmap helps banks determine the most effective strategies for their particular environment, including people, processes and technologies. Key elements include: a vision, current state, desired future state, and a roadmap.

Vision	As Is	To Be	Roadmap	Roadmap Options
Main Activities <ul style="list-style-type: none"> • Interviews with Client Executives • Interviews with owners • Documents review 	Main Activities <ul style="list-style-type: none"> • Process workshops • IT modeling • Business to IT mapping • Documents review 	Main Activities <ul style="list-style-type: none"> • Journey workshops • Process workshops • IT modeling • Business to IT mapping • Expert input 	Main Activities <ul style="list-style-type: none"> • Gap analysis • Planning workshops • Dependency analysis • Expert input 	Main Activities <ul style="list-style-type: none"> • Cost analysis • Risk analysis • Options evaluation • Expert input

The critical value of the roadmap is in balancing the risks and rewards of change. It should be based on an open, standards-based environment that allows new functionality to be added, where legacy applications become enterprise services.

Modernization-In-Place (MIP)

An alternative to "big bang" replacements is modernization-in-place. This approach focuses on achieving immediate performance gains while preserving the value of legacy technologies and pursuing the bank's transformation roadmap. By proceeding incrementally and using extensive testing along the way, successes accumulate in a series of small project steps, leading to better operational continuity and quality outcomes.

How it works

Since "big bang" involves rewriting or replacing a legacy system from the ground up, it is viewed as a risky proposition for many reasons. MIP involves small, incremental steps leading to the desired long-term objective.

The MIP approach does two things: it modernizes the existing legacy application in place and creates a more open and nimble architecture going forward. This makes it easier to introduce new functionality and accommodate unplanned changes required by the ever-changing regulatory and financial climate.

MIP maps a path for evolution while creating the “building blocks” of technology that are immediately available. The journey starts by moving data to an open and standardized environment, and then exposing decades of rich application functions as services to the enterprise.

Business benefits

Using MIP allows banks to realize new functionality and value-added services by using the same trusted platform on which they rely, and for which they cannot afford anything less than exceptional uptime.

One area where modernization is particularly welcome is straight-through processing (STP). As messages come in, banks want to minimize the amount of human interface. Inbound messages with missing or incomplete information increase costs due to manual intervention to repair and lower transaction times. Working closely with our clients, CGI has consistently been able to increase STP rates. For a tier one bank, this could represent savings of up to 50 FTEs.

With MIP, risk is significantly reduced because this kind of modernization is done on the same hardware, with the same people and the same external interfaces, whereas a “big bang” approach would require new hardware, new software, new skills, new people, etc.

So in-place migration allows financial institutions to continue to leverage their hardware investment while relying on their proven solution. They can realize all the benefits of the modernized platform with a more open application and well-defined, standard interfaces. This opens the application to easier reporting, workflow, business process management, analytics, and rules-based business logic.

It also enables a clear vision of how to migrate a massively large legacy environment to a state where new technologies can be leveraged for better business outcomes. Additionally, it allows banks to think about the enhancements they want to pursue for the business, rather than being stuck in the problem of how to get the technology into a different state. A successful in-place migration systematically moves independent functions, and then exposes those functions as enterprise services.

The MIP approach requires banks to evaluate and prioritize such capabilities as:

- STP to eliminate costly, time-consuming and potentially error-prone manual steps
- Flexible creation of business rules so bankers, not IT staff members, determine payment system operability
- Standards compliance to support easy introduction of the payments system into the current processing environment, allowing investments in legacy hardware and software to be leveraged and replacement risks avoided
- Modularity and scalability to allow banks to centralize payment system activities, eliminating difficult and expensive to maintain silos and point solutions
- Visibility through easily configured dashboards, reports and data analytics to help executives cut through complexity, set priorities, flag bottlenecks and manage liquidity in real time
- Versatility to handle multiple forms transactions in multiple currencies.

Working closely with our clients, CGI has consistently been able to increase STP rates. For a tier one bank, this could represent savings of up to 50 FTEs.

About the author

Santino Failla is Director of Payments and Financial Messaging for CGI. His expertise spans all major channels: high-value transaction systems, high-volume transaction messaging, low-value payment processing, ATM and POS card systems, securities trading and clearing, and data warehousing. He brings more than 30 years of experience driving the implementation of continuously available applications across many verticals and leading legacy modernization efforts. In his career, he has successfully orchestrated large, multi-national financial system implementations, including as key architect for redesigning and reengineering NASDAQ's several mission critical applications. Santino has leveraged his financial industry experience to meld the best of proven methodology with the best of today's technology and services leading to multiple patents in the financial technology space.

Conclusion

Flexible payment capabilities can help banks enter new lines of business, add and retain customers, develop strategic partnerships and sharpen their competitive edge. Banks are rethinking how to revamp their legacy applications to support future business growth. A modernization roadmap enables them to foster forward thinking and change, while preserving existing investments.

Depending on their current environments and business visions, financial institutions typically take three common paths to modernization: legacy platform replacement, intelligent front-ends, and managed payment services, or a combination of these.

"Big bang" migrations, especially of core legacy systems at the heart of the business, can be risky propositions. For banks seeking lower-risk, more gradual alternatives, modernization-in-place allows them to leverage existing investments while achieving their future visions. The result is a more open and nimble architecture for introducing new functionality and adapting to regulatory requirements.

Why CGI

CGI has spent a lot of time mapping out the modernization-in-place process to ensure that the change is smooth and cost-effective. We work as a partner, not just a provider. Through a disciplined and accountable delivery approach, we have achieved an industry-leading track record of on-time, within-budget delivery. As a result, our average client satisfaction score for the past 10 years has measured consistently higher than 9 out of 10.

More than 10,000 CGI financial services professionals based in 40 countries are helping top banks and insurers to reduce cost, increase efficiency and improve customer service. We have helped shape the payments market since our role in the design of the SWIFT banking network in the early 1970s. Based on implementing more than 80 payment solutions globally, we developed our CGI Payments360 solution to help clients develop strategies to move money smarter, while preserving existing investments and gaining the agility to adapt rapidly.

We help banks quickly and efficiently modernize payment systems with complete solutions for consolidated multi-entity payment processing, financial messaging, liquidity management, and Watchlist filtering. We also offer robust consulting and systems integration expertise to transform operations across the payments lifecycle.

Learn more at www.cgi.com/payments



cgi.com

Founded in 1976, CGI is a global IT and business process services provider delivering high-quality business consulting, systems integration and managed services. With 68,000 professionals in 40 countries, CGI has an industry-leading track record of delivering 95% of projects on-time and within budget, aligning our teams with clients' business strategies to achieve top-to-bottom line results.

© 2015 CGI GROUP INC.

All rights reserved. This document is protected by international copyright law and may not be reprinted, reproduced, copied or utilized in whole or in part by any means including electronic, mechanical, or other means without the prior written consent of CGI.