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As a payment solutions provider, CGI often must explain how we handle the migration from MT messages to ISO 200022 MX messages in high-value and cross-border payment markets. The simplest answer is that we migrate the heritage payment system to a hypernew solution that is ISO-native, cloud-proven, and designed to meet next-generation challenges. However, CGI has been providing wire payment solutions around the world for the last 40 years. Some of the earliest legacy solutions are still in production, deeply embedded into complex ecosystems, and critical to moving billions of dollars on a daily basis.

These heritage solutions, such as CGI BESS, have run diligently since electronic messages first emerged and are technically capable of continuing to do so for many years. With the global migration to ISO 20022, we now face a significant challenge. Changes hindered for many years are suddenly happening with tight deadlines and strong business mandates. In short, the high-value and cross-border markets demarked by SWIFT and central banks are going through seismic shifts that will affect your mainframe at its core.

This is not the first major market migration to ISO 20022 messages. Only 10 short years ago, the European Union mandated connectivity to its ISO-based SEPA schemes for thousands of banks and a flurry of bridges, pipes, wrappers and renewals emerged. This was the primary driver for the creation of ISO 20022-native solutions, such as CGI All Payments. However, while SEPA was typically a new endeavor for most of participants and led to the implementation of new processing solutions, the upcoming high-value and cross-border market changes are hitting at the very core of most banks' infrastructure along with some of their oldest technology solutions.

Often, the wire solution is the beating heart of the bank—tied to its core systems and essential to everyday life. Due to decades of technology evolution, it is not atypical for a heritage wire solution within a bank to interface

with more than 100 systems. These may be simple connections to reporting systems, liquidity management, sanctions screening, or complex interweaving process flows. The connections often involve a myriad of bank-specific processing solutions, all designed to support MT-based payments.

Now we have a challenge. How do we put the patient (bank) on bypass and prepare for open heart surgery (heritage replacement)? How do we keep transactions flowing in a fast-approaching ISO world? Is it better to replace the old, enlarged organ (old system) with a modern replacement, giving the bank's infrastructure a new lease on life?

CGI has been preparing to address this question for years. The conclusion, of course, is a highly variable answer. It depends entirely on the state of your system, your timelines, and your solution preference.

This last point is probably the most important. Much as personal investment strategies vary, the risk appetite of organizations also vary. Whether those risks are real or perceived, some banks will always choose the path of least resistance—just fix what is there and get on with things. This is a perfectly valid approach, but it comes with some long-term drawbacks for banks that are providing correspondent services for others, which the bank needs to build into its risk assessment.



Building your payment modernization strategy

The ability to address payment market changes, such as the introduction of ISO 20022-based messages and the move from batch to real time, requires a flexible payment infrastructure 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.

Depending on each financial institution's current environment and business vision, there are three common paths to payment modernization: 1) heritage platform replacement, 2) intelligent wraps, and 3) managed payment services, or a combination of these.



Pursuing full platform replacement

For organizations with multiple, unreliable heritage systems that pose significant compliance risks, consolidating and replacing these systems should be a high priority. In these cases, banks will replace their heritage systems with modern, integrated, and cloud-proven payment solutions. Expert system integration partners can assist banks that choose to go this route, providing parallel testing and implementation capabilities. CGI has improved deployment technologies and mastered the use of cloud-based infrastructure. Both advancements reduce implementation times and enable proactive banks to beat market deadlines and innovate at speed.

Adding value with intelligent wraps

For banks with heritage payment platforms that are reliable—but comprised of multiple, disparate systems—the focus often is on wrapping existing solutions to unify the front-end interfaces. This is an increasingly common use case for introducing hypernew platforms. An intelligent wrap can connect with multiple settlement systems (e.g., SWIFT, ACH, domestic real time). At the same, it can deliver additional services (e.g., onboarding, limit checking, integrated wire and ACH payments with file debulking and integrated reporting), along with consolidated reporting.

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 customers, improving customer satisfaction, and/or reducing back-office costs.

Reducing costs with managed services

Especially during the early days of the COVID crisis, many banks recognized that on-premise solutions and data center ownership are no longer the right approach. Capital investments often are difficult to justify, and hiring top IT talent can be a daunting challenge. In these cases, banks have turned to expert third parties to provide cloud environments and application management for their payment services.

Such arrangements require little to no upfront costs, provide access to expert talent, and reduce overall total cost of ownership while ensuring continuity in times when physical access is restricted. By adding a managed services partner that is responsible for implementation and operations, banks can further minimize overall risk while preserving the option to migrate to a single payments platform in the future.

Service-level driven performance, common processes and tools, and planned upgrades drive continuous improvement and ensure regulatory compliance. CGI has continued to help leading banks reduce their payments operational costs by 20-40% using a managed services approach.

The correspondent conundrum

If you are a correspondent bank, the choices are more difficult and the risks of inaction are higher. In a world where all banks used similar SWIFT MT messages, being a correspondent bank was a relatively simple undertaking. You receive messages from participants in your network and then use your unique correspondent relationships to pass them on further. However, now this same network will be massively updated between the years 2022 to 2025 and enter a period of message duality that needs to be supported.

During this transition phase, banks will need to support both heritage MT messages and new MX messages built using the ISO 20022 standardized components. This will create a period of duality that becomes difficult for those in the correspondent banking business to manage.

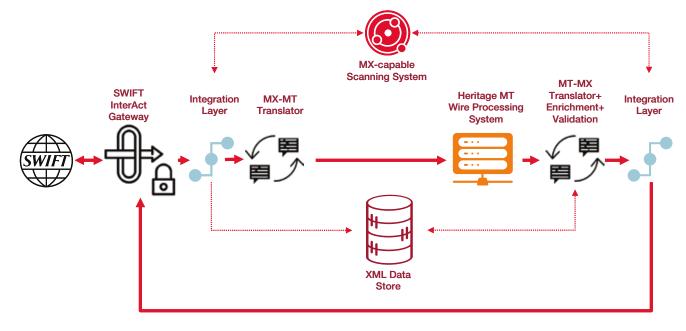
The greatest difficulty comes for those updating their own heritage systems during this period. Many in their network will continue working with MT until late in the duality phase. However, correspondents in markets that upgraded systems to support ISO 20022 in the past 10 years for other payment types may be MX-ready from November 2022.

As an endpoint or initiator of transactions, it is possible to use one of the myriad basic MT to MX translation services or solutions. However, correspondent banking, i.e., passing on the message, presents new problems that will necessitate a sophisticated message reconstruction solution.

Essentially, if your core processing solution is heritage MT and you receive an enriched MX message that you need to pass on, there are a few key challenges:

- 1. You need to be able to complete regulatory and risk scanning of the full MX message. Your scanning solutions need to be able to do this, as does whatever activates them.
- 2. You need to be able to store full MX messages for both regulatory and reconstruction purposes.
- 3. You need to be able to reconstruct an outgoing MX message by combining the original incoming MX message with the downgraded MT message that you have processed. This is perhaps the most difficult task as data was likely truncated when downgraded to MT.
- 4. You need to be able to validate that your reconstructed message is still compliant with the MX rules.

Knowing that correspondent banking is a highly profitable business, the case for making these changes is obvious for most banks. However, with November 2022 racing towards us, the timeline for change is short at best.





A case for rapid renewal

While your heritage MT solution may have taken 30 plus years to become what it is today, there is good news on the horizon. It should not take 30 years to replace it, not even 30 months. Modern deployment methods, agile processes and cloud technologies now make it possible to replace core heritage infrastructure in record time with a hypernew platform. With the right resources and considerable enterprise focus, it is now possible to renew a core wire or xCT processing platform in 12 months or less.

Solutions in this space have been maturing since the early days of ISO 20022 payments. There now is a greater selection of solutions that can meet the majority of a bank's needs in this space. Some, such as CGI All Payments, offer fast deployment.

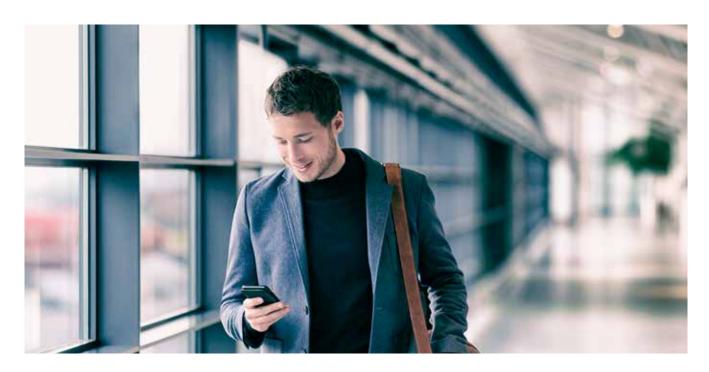
The business case is clear, particularly if you are still running mainframe infrastructure. Deploying a modern, highly available, service-based solution will vastly reduce your operational costs. Putting that solution into cloud

infrastructure also will chip another chunk out of your core cost while setting your bank up to seize upon the opportunity created by laggards and their inability to serve corporate customers efficiently.

While the investment in translation and reconstruction technology is tempting, this is inevitably throwaway work with no shelf life beyond 2025. If you can commit to a rapid deployment renewal and be ready ahead of the November 2022 duality phase, then your bank will be in a strong position.

Ideally, to achieve this, you need a solution that meets the following criteria:

- o Is truly ISO-native, with an XML data store
- o Is ready to be deployed on cloud infrastructure
- Is supported by implementation and managed service resources



A case for modernization-in-place

An alternative to rapid renewal is modernization-in-place (MIP). This approach focuses on achieving immediate performance gains while preserving the value of heritage 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 with reduced risk.



How it works

Since "big bang" involves rewriting or replacing a heritage 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 achieves two things: 1) it modernizes the existing heritage application in place, protecting past knowledge investments, 2) it 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.

With MIP, banks can reduce risk significantly because this kind of modernization involves use of the same hardware and external interfaces, as well as the same people, whereas a "big bang" approach would require new infrastructure, software, skills, and people, etc. MIP also allows a bank to migrate capable components to cloud environments while leaving heritage components in place, using available technologies to bridge communications between the two. This means that MIP can be a steppingstone to full cloud adoption at a measured pace for those more risk averse.

It also enables a clear vision of how to migrate a massively large heritage environment to a state where new technologies deliver 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.



How CGI can help

CGI is an IP-enabled, end-to-end provider of high-end IT and business consulting. We offer services that enable you to develop your payments modernization strategy and build the right solutions to allow you to deliver it.

CGI All Payments, our ISO-native, cloud-proven payment solution, is being deployed by forward-looking banks around the world to solve their modernization challenges. It offers everything you need to transform your payments environment into an efficient, full-service, customer-centric, money-moving operation.

Through its structured deployment of available APIs, you can take advantage of hundreds of business services that add value to your operations, react quickly to

regulatory changes, and easily monetize new products and services to meet your business growth objectives.

With more than 50 years of expertise and industry knowledge, CGI All Payments helps clients achieve their goals and enables the introduction of innovative services, faster processing, lower costs and greater transparency. Coupled with our dedicated integration teams and local expert resources, CGI is ready to help your bank prepare for tomorrow with the right strategy for your unique environment.



About CGI Founded in 1976, CGI is among the largest IT and business consulting services firms in the world. Operating in hundreds of locations across the globe, CGI delivers an end-to-end portfolio of capabilities, from strategic IT and business consulting to systems integration, managed IT and business process services and intellectual property solutions. CGI works with clients through a local relationship model complemented by a global delivery network to help clients achieve their goals, including becoming customer-centric digital enterprises. Visit www.cgi.com/collections to learn more.