



# Application Modernization for ISO 20022 adoption

# Introduction

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Bank institutions worldwide are adopting the ISO 20022 standard, which the SWIFT community is moving to, starting in November 2022, with an end date for adoption of November 2025.

ISO 20022 adoption is a key enabler for Open Banking. ISO 20022 messaging standard improves the capture and transfer of data, making payments more efficient and faster, and allowing companies to have more complete, better organized, and standardized data. This will not only improve the end client experience but also provide opportunities for developing new products and services. Not limited to payments, ISO 20022 covers the entire spectrum of financial messaging across Banks, Financial Services Companies, and Corporations.

# Challenges Necessitating ISO 20022 Adoption

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**Inconsistent Sanction Screening** - According to SWIFT traffic figures, between 72% and 94% of the fields used to process payments are in free-text format. Up to 10% of payments require manual actions. The unstructured data in free-format fields in existing message types may lead to false positives during sanction screening - a combination of policies, procedures, and technologies that enable a financial institution to ensure that it does not provide any form of services (blocks services) to sanctioned parties.

Most of the market tools for sanction screening currently read whole messages instead of distinguishing the context. Migrating to the ISO 20022 standard prevents these situations. The structured information the ISO 20022 standard provides will lead to secure real-time payments.



**Customer Trust, Privacy, and Security Concerns** - A global survey found security and privacy of data was the primary concern of 71 percent of Hong Kong consumers surveyed, with Australians and Canadians not far behind. Regulated financial institutions have the upper hand with customer trust as they comply with stringent privacy and security policies. However, the same cannot be said about unregulated financial institutions.

Hence, the need to educate customers about the Open Banking initiative and putting transparency at the top is not optional. Participants in Open Banking must transparently share the concept of customer consent, the consent scope, and the privacy and security measures undertaken to ensure their faith in this disruptive banking technology. ISO 20022 standard is a great way to ensure trust via two aspects - Transparency and Innovation with enhanced standardization and compliances



# Need for **Application Modernization**

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The diversity and complexity of the migration to the ISO 20022 standard also pose challenges to banks, payment companies, and corporations that rely on legacy infrastructure.

In the short term, Banks, Financial Services Companies, and Corporations can adopt message translation tools to ease the co-existence of the SWIFT MT messages and ISO20022 MX messages over the next three years. In the long run, Banks, Financial Services companies, and corporations need to consider modernizing their legacy platform.

# APPLICATION MODERNIZATION

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Modernization typically involves moving from legacy platforms to solutions built on the cloud and other modern digital technologies.

As Banks, Financial Services Companies, and Corporations move from a customized set of legacy mainframe applications to a configurable set of Cloud Native applications, the valuable intellectual property in the existing system need to be maintained.

With core and app modernization, the IT model shifts from in-house, on-premises legacy systems to modern cloud-based solutions. Also, the approach to IT development shifts from complex customization to simple configuration.

## A typical business solution platform falls into three categories:

### Legacy Platform

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These “one-stop shop” solutions run on proprietary or closed platforms. They tend to be complex to implement.

### Service-Oriented Platform

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These platforms are designed around a service-oriented architecture (SOA) model and enable real-time processing. The business functionalities are placed horizontally with available cloud services. The system is decomposed vertically to meet modern cloud architecture.

### Cloud Native Platform

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These platforms leverage microservices-based architectures with application programming interfaces (APIs) that provide access to and from other internal and external services. They support real-time processing because they are Cloud Native. This is more suitable for Open Banking and ISO 20022 adoption.

Banks, Financial Services Companies, and Corporations now have a range of ways to transform their core capabilities. They need to establish an app modernization profile based on the sustainability of the existing platform, risk appetite, innovation required in product and service offerings, and the complexity of the data strategy.



# PROPOSED APPROACH FOR MODERNIZATION

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Create a funding model that is very cost-efficient (and ideally self-funding). Maintenance of your existing legacy platform can be optimized to generate savings and reinvest in the modernization effort.



Carefully choose a modernization approach that minimizes disruption to your business.



To succeed, your modernization efforts must generate benefits almost immediately. Many business leaders are understandably reluctant to sign up for a multi-year project since they might be gone before the benefits are delivered. Fortunately, with the right approach and leveraging of modern technologies, it is possible to achieve savings in the total cost of ownership early in the modernization process.



Focus on business impact. The best technology solutions are agile enough to produce new apps quickly in response to shifting business needs, such as market changes, new regulatory requirements, and rising customer expectations.



When modernizing your legacy systems and technologies, take advantage of the opportunity to simultaneously improve your business processes and extract and capture the business rules and institutional knowledge that provide competitive advantages.



Accelerate your mainframe-to-cloud migration and business rules extraction by taking advantage of the latest digital tools and automated APIs (application programming interfaces).

Consider modernization as a strategic business issue, not a technology issue. If you throw the project over the wall to IT, you will probably end up with updated apps after years of project execution.

Although there are several modernization options, any start is smart because anywhere you choose is better than not starting at all. The gap between digital leaders and Banks, Financial Services Companies, and Corporations hampered by their legacy systems are growing wider daily. And the challenges, costs, and risks associated with operating and maintaining outdated core systems and applications will only increase the longer you wait.





# Why Is Techwave the **Most Preferred** App Modernization Partner?

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Techwave has delivered many application modernization projects using best-in-class technologies. Our dedicated business functional and technical team efficiently manages the entire process, including:



**Business Analysis, technology evaluation, and PoCs**



**Solution architecture and technical design**



**Tools and solution accelerators for rapid application development and deployment**



**Frameworks and tools for migrating legacy applications to new technologies**



**Performance analysis and tuning of applications**

All our solutions are highly scalable, robust, secure, and easy to maintain, so you'll always be able to count on a reliable service wherever you are.