The ISO 20022 Challenges

AquaGlobal

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While ISO 20022 brings several benefits, such as improved interoperability and richer data exchange, it also presents some challenges and problems.
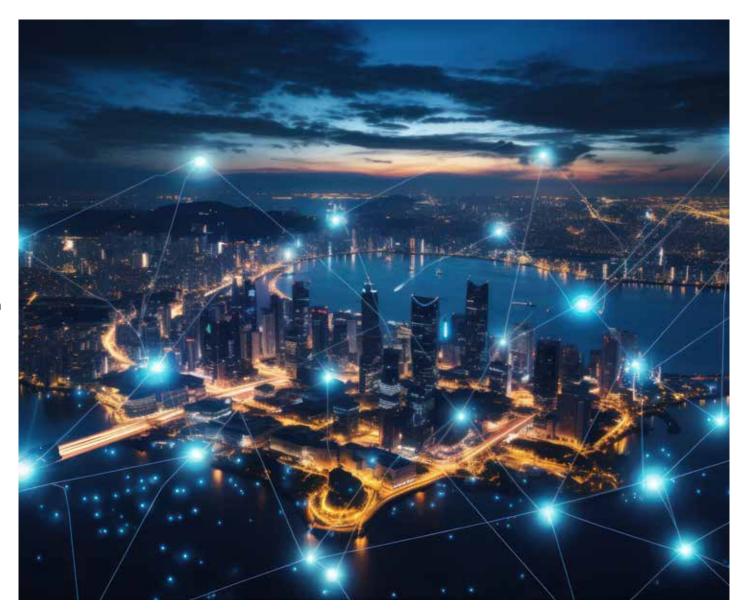
1. Implementation Complexity:
Adopting ISO 20022 can be complex and costly, especially for organizations with legacy systems which requires costly upgrades, workarounds and significant changes to existing infrastructure, including software, databases, and business processes.

2. Data Mapping and Translation:
ISO 20022 messages (MX) can be more complex than older formats like SWIFT FIN (MT) messages. This complexity can lead to challenges in mapping and translating data between different message formats, potentially resulting in errors and data loss during the conversion process. Aquila can show how the data was mapped between the MT/MX messages and highlight any data truncation issues that can initiate the creation of incidents.

3. Customization and Variations:
Although ISO 20022 defines a common standard, different organizations and industries may implement it with variations and customizations. These variations can hinder interoperability and require additional effort to ensure compatibility between systems.

4. Data Quality:

ISO 20022 encourages the inclusion of more detailed and structured data in messages. Ensuring the accuracy and completeness of this data can be a challenge, and data quality issues can lead to processing errors and reconciliation problems. Aquila's counterparties database for institutions and individuals can be used to improve the quality of the MX messages for any of the following data elements.

Institutions	Individuals

• Name
• Unstructured addresses
• Structured addresses
  ○ Department
  ○ Sub-Department
  ○ Street Name
  ○ Building Number
  ○ Building Name
  ○ Floor
  ○ Post Box
  ○ Room
  ○ Post Code
  ○ Town Name
  ○ Town location Name
  ○ District
  ○ Country Sub Division
• BIC codes
• Local Entity Identifiers (LEI) codes
• Distinguished Names (DN)
• Clearing codes
• Clearing system
• Account numbers/IBANs
	• Name
	  ○ Title (e.g. Mr, Mrs, Dr etc.)
	  ○ First name
	  ○ Middle name
	  ○ Last name
	• Date of birth
	• Province of birth
	• City of birth
	• Country of birth
	• Nationality
	• City of residence
	• Country of residence
	• Identification (e.g. Passport number, National ID number etc.)
	• Identification issuer
	• Account numbers/IBANs
	• Unstructured addresses
	• Structured addresses
	  ○ Department
	  ○ Sub-Department
	  ○ Street Name
	  ○ Building Number
	  ○ Building Name
	  ○ Floor
	  ○ Post Box
	  ○ Room
	  ○ Post Code
	  ○ Town Name
	  ○ Town location Name
	  ○ District
	  ○ Country Sub Division
	• Contact Information
	  ○ Work Phone
	  ○ Home Phone
	  ○ Mobile Phone
	  ○ Fax
	  ○ eMail

5. Regulatory Compliance:
Adhering to ISO 20022 standards may require organisations to meet specific regulatory requirements, which can vary by jurisdiction and schemes such as CBPR+, SEPA Instant etc. Staying compliant with these regulations can be a complex and ongoing task.
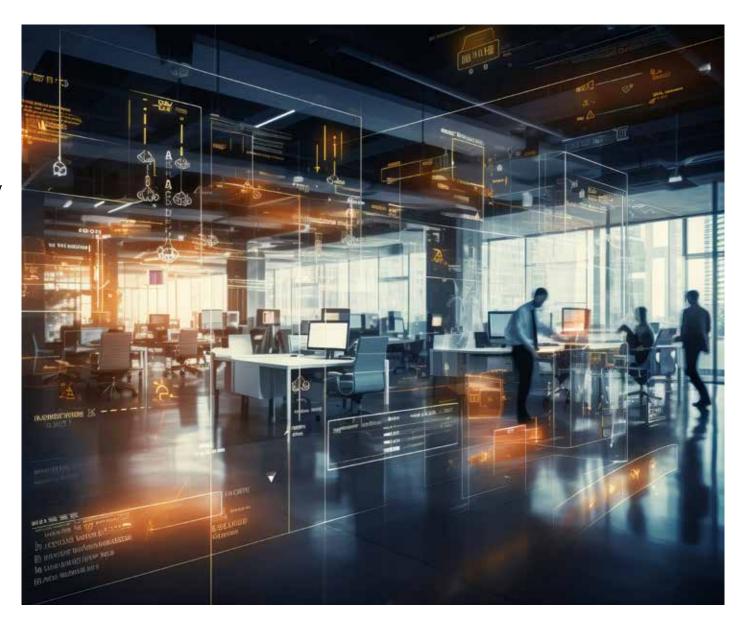
6. Costs:
Implementing ISO 20022 can incur significant upfront costs for organisations, including technology upgrades, staff training, and compliance efforts. The return on investment may not be immediately apparent, making it a challenging decision for some.

7. Transition Period:
During the transition from older messaging standards to ISO 20022, organizations may need to support multiple formats simultaneously. This can increase complexity and require careful management.

Despite these challenges, the long-term benefits of ISO 20022, include improved data quality, enhanced automation, and better support for emerging payment and reporting requirements.

Successful adoption of the standard will require careful planning, investment, and ongoing commitment to address the associated problems.

The ISO 20022 Solution

The Aquila solution provides a highly scalable and configurable infrastructure to manage any data types including SWIFT FIN and ISO 20022 messages.

Aquila can assist organisations by:

• Enabling ISO 20022 adoption using a framework controlling message formatting that can be initiated automatically or manually.

• Allowing the ISO 20022 granular information required for institutions and individuals to be stored within its own counterparties database improving data quality of MX messages.

• Integrating native ISO 20022 messages with internal or 3rd party products (e.g. sanctions checking and AML).

• Support for Swift Essentials API's will improve data quality and help to reduce risk by allowing information about counterparties and message content to be validated prior to transmission to Swift. This allows any unknown BIC's, clearing codes, Distinguished Names (DN's) or Legal Entity Identifiers (LEI's) to be resolved and used to improve message quality.

• Automating processing to validate accounts, check availability of funds, book accounting entries and create outward settlement messages in either MT or MX format. For payments, automation can include checking that cover has been received, generating requests for charges from correspondents andensuring SWIFT gpi compliance

• Controlling management of exceptions.

• Providing integrated solutions that are ISO 20022 compliant for:

  - Account Reconciliations
  - Treasury Message Matching
  - Securities Reconciliations
  - Securities Matching

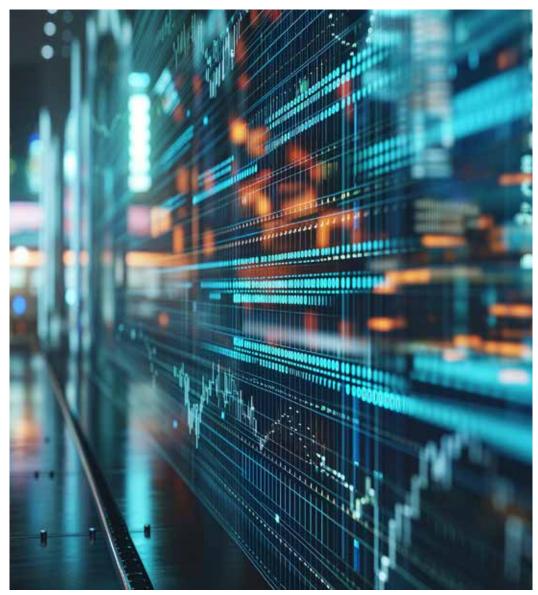• Maintaining integrity of existing internal or 3rd party products by transforming MT to MX messages and vice versa.

Message Transformation

Aquila enables bidirectional conversion between SWIFT MT and MX message formats adhering to CBPR+ recommendations.

Bank

AquaGlobal's MT/MX Converter

Swift

Benefits

• Dashboards to show the data mapping between source and target messages highlighting any truncation which can optionally raise alerts and halt any message flow for user intervention.

• Messages can be linked and viewed showing expansion of BIC, clearing, LEI, DN codes and Swift codewords.

• Aquila's Business Intelligence (BI) that performs the data mapping for translation is customisable to your own requirements.

• SWIFT MT and MX messages support different character sets. If any mapped characters are restricted, they will be replaced with an alternative automatically and warnings raised.

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About AquaGlobal

Aqua Global is a leading provider of financial message management solutions and has been for over 40 years. We provides solutions to the world's top financial institutions producing high levels of Straight Through Processing (STP) and operational efficiency, whilst minimising risks and costs. Headquartered in London, Aqua Global also has a support and development hub in Poland, as well as several global business partners.

For more information, visit
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