

SOA 20022 To Agility and Beyond

Future proofing your organization from the challenges of ISO 20022

As yet more ISO 20022-based initiatives continue to be announced around the world, the pressure on organizations to implement and maintain efficient ISO 20022-based processing continues to grow. ISO 20022 is no longer the basis for one-off tactical projects. It now impacts multiple parallel running processes, projects and strategies across large swathes of the financial market landscape. Whether it is for international or local payment clearing, securities settlement, supply chain finance automation, funds administration or cash balance reporting, ISO 20022 has come to a town near you and is here to stay.

So what are the challenges that ISO 20022 proliferation creates? What should an organization do to address these challenges? Are you managing the take-on and implementation of ISO 20022-based services within the context of an enterprise strategy? How are you protecting your business from unnecessary costs, poor customer service and delivery risks?

It's time for financial institutions to manage the implementation and maintenance of ISO 20022 services within an agile, enterprise IT strategy, in order to cope with the new, pervasive and extendable nature of modern financial messaging.



Financial messaging & standards

The worlds of finance and IT are governed, impacted and supported by many different standards. Be it for quality systems and quality processing (ISO 9000 series), data processing and IT infrastructure (ISO 2382), transaction data such as currency codes (ISO 4217), country codes (ISO 3166), banking processes such as nostro reconciliation (ISO 7341), open system integration protocols (ISO 8327), or system and data security standards (ISO 27001, 27002), there are a multitude of standards to ensure consistency and high service levels throughout the industry.

High on that list of standardized definitions and processing is financial messaging. In fact, one might say that financial messaging, understandably, embraces the use of standards more than any other area in the financial markets. How else could the complicated transactions that are the lifeblood of the global financial industry work without the definition and adherence to community agreed financial data information exchange standards.

Hence, the creation and maintenance of various financial messaging standards over the past 50 years to cover numerous local, regional and global financial markets for payments, securities, trade finance, lending, trading, treasury and reporting processes.

At the top end of the tree are the global messaging standards created under the ISO banner. Foremost among these global financial messaging standards, are the existing SWIFT FIN or MT standards, which were first introduced in the 1970s and are based on the ISO 7775 standard.

During the late 1900s, ISO 15022 standards were introduced to provide enhanced processing for securities messages. These created a new set of MT-based SWIFT messages that are still the basis for the majority of securities processing around the world.

However, in the mid-2000s, borne out of a need to support the rapid evolution of the digital information age, a new standard for financial messaging was created, ISO 20022, and unlike previous incarnations, this new standard came to market with a much wider remit and vision for standardizing all flows of financial transaction information, be it for local, regional or global markets.

What is ISO 20022?

ISO 20022 is THE global standard for financial messaging. It provides a single standardized approach (methodology, process, repository) to be used by all financial standards initiatives.

First introduced in 2005, it has since then released numerous standards that cover business processing in payments, securities, cash management, account management, FX and trade services, and is continuing to expand its breadth and depth of coverage.

As of Q3 2014, there are 19 different message categories with 326 messages defined.

| Message Category | Business Function | Number of messages |
|------------------|--|--------------------|
| acmt | Account Management | 23 |
| admi | Administration | 2 |
| auth | Authorities | 7 |
| caaa | Acceptor or Acquirer Card Transactions | 17 |
| camt | Cash Management | 31 |
| catm | Terminal Management | 4 |
| pacs | Payments Clearing & Settlement | 6 |
| pain | Payment Initiation | 10 |
| reda | Reference Data | 4 |
| remt | Remittances | 2 |
| seev | Securities Events | 43 |
| semt | Securities Management | 19 |
| sese | Securities Settlement | 37 |
| setr | Securities Trade | 34 |
| trea | Treasury | 13 |
| trin | Trade Services Initiation | 5 |
| tsmt | Trade Services Management | 50 |
| tsrv | Trade Services | 19 |
| Total | | 326 |

All messages are defined in XML and ASN.1, however, the vast majority of implementations are in XML.

Each message definition provides a global framework for the exchange of data within the specific area of processing including syntactic and semantic rules. These global standards are then used by the various implementations around the world as the basis for their defined service. Each of those services aims to enhance, amend and/or expand the base standard to capture the specifics of their requirement.

There are now over 60 such different implementations of ISO 20022 around the world live, underway or in planning, some of which are highlighted in the following table:

| Business Category | Global | Regional | Local |
|-----------------------------|--------------------------------|--------------------|--|
| Payments | SWIFT Remit, SWIFT E&I, CGI | SEPA, SADC, T2P | Australia, Brazil, Canada, China, Egypt, Japan, Qatar, South Africa, Switzerland |
| Securities | Funds, proxy voting | Target2 Securities | JASDEC, DTCC Corporate Actions |
| Account/ Cash Management | RTN, eBAM, CGI | SEPA, SADC | Finland |
| Trade services | BPO, TSU, SWIFT MX | | |
| FX | SWIFT MX Treasury, CLS Bank | | |

The basic implication is that, for at least the next 10 years, every financial institution around the world will have to run numerous ISO 20022-based message integration projects, many of which will have to run concurrently.

The key challenges:

Most publications concentrate on the opportunities and business benefits of ISO 20022, which are numerous and compelling, but fail to highlight the challenges that IT departments face when implementing and supporting the new standard. Each implementation of an ISO 20022 standard is different, creating a huge proliferation of message variants that have to be managed. The breadth and depth of message coverage is continually expanding, with new message types and new business areas affected.

Each organization must support:

- » Multiple versions of the same messages across multiple systems and multiple jurisdictions
 - » there are already at least 20 different variants of the PACS.008.001 .xx customer credit transfer in use around the world many of which have to be supported by the same institution for different payment services
- » Multiple updates per year, e.g. over 250 new versions in the past 3 years

| Year | New Version | New Messages | Business Categories |
|------|-------------|--------------|-----------------------------------|
| 2014 | 80 | 4 | Cards, Securities, Trade Services |
| 2013 | 101 | 23 | Cards, Securities, Payments |
| 2012 | 101 | 4 | Securities, Payments |

- » The automated conversion from one recognized standard to another such as SWIFT MT to SWIFT MX, or ISO 8583 to ISO 20022 cards
- » The co-existence of old and new standards during migration periods so the appropriate message format can be sent or received according to the counterparties
- » The delivery of on-time market compliance through applied validations
- » The ability to apply proprietary data transformations to and from the new standards which may also be a variant with different enumerations and cardinality
 - » For internal systems
 - » For customer data

These challenges are not reducing in number. They continue to grow as new ISO 20022-based initiatives are announced and introduced to the market.

How does your IT environment address the challenges of proliferation, conversion, transformation and variation, especially in an efficient and cost effective manner?

What is your strategy?

To Agility & Beyond

Organizations need to implement an agile financial messaging strategy that enables on-time delivery of compliance with a speed to market to meet and go beyond customer and partner demands.

More specifically, financial institutions require components that understand and deliver ISO 20022 extensibility whilst deploying into current and future environments without dictating the need for infrastructure change.

What do you have within your current IT portfolio to deliver the development, configuration, and deployment agility demanded by this challenge?

Which of your technology partners is going to help you?

Most financial institutions will look to their application vendors or middleware/integration providers for the solution. After all, these are the partners they rely on to address the technical challenges created by such market initiatives.

Unfortunately, for the provision of a strategic solution for ISO 20022 service implementation and support, application vendors and middleware providers are not best placed to provide the required solution.

- » Financial Application Vendors are not the solution because:
 - » they are business specific so only look at a particular vertical implementation of ISO 20022 that affects their solution
 - » they tend not to support multiple variants
 - » they tend not to support co-existence
 - » they tend not to support conversions or transformations, and certainly not beyond their particular solution's focus
 - » not all your solutions are vendor supplied
 - » not all vendors are providing ISO 20022 compliance

- » Middleware/SOA infrastructure vendors are not the solution because:
 - » their focus is on transportation, protocols, delivery, security and tracking
 - » they do not focus on the message contents
 - » any libraries they have for ISO 20022 are usually generic and lack support for:
 - » semantic validation
 - » variants
 - » co-existence
 - » they do not supply out-of-the-box conversions such as MT-MX, 8583-20022

Your IT environment needs to be able to generate and process ISO 20022-compliant messages, not only for your in-house developed systems, but also to augment the solutions provided by your application vendors to address the gaps in their offerings, particularly the support of local variants and timely updates for new versions.

The Solution: Volante SOA 20022

Volante SOA 20022 combines a dedicated, specialized ISO 20022 development and deployment solution with an implementation strategy that creates callable services which insulate your environment from the difficult challenges of ISO 20022.

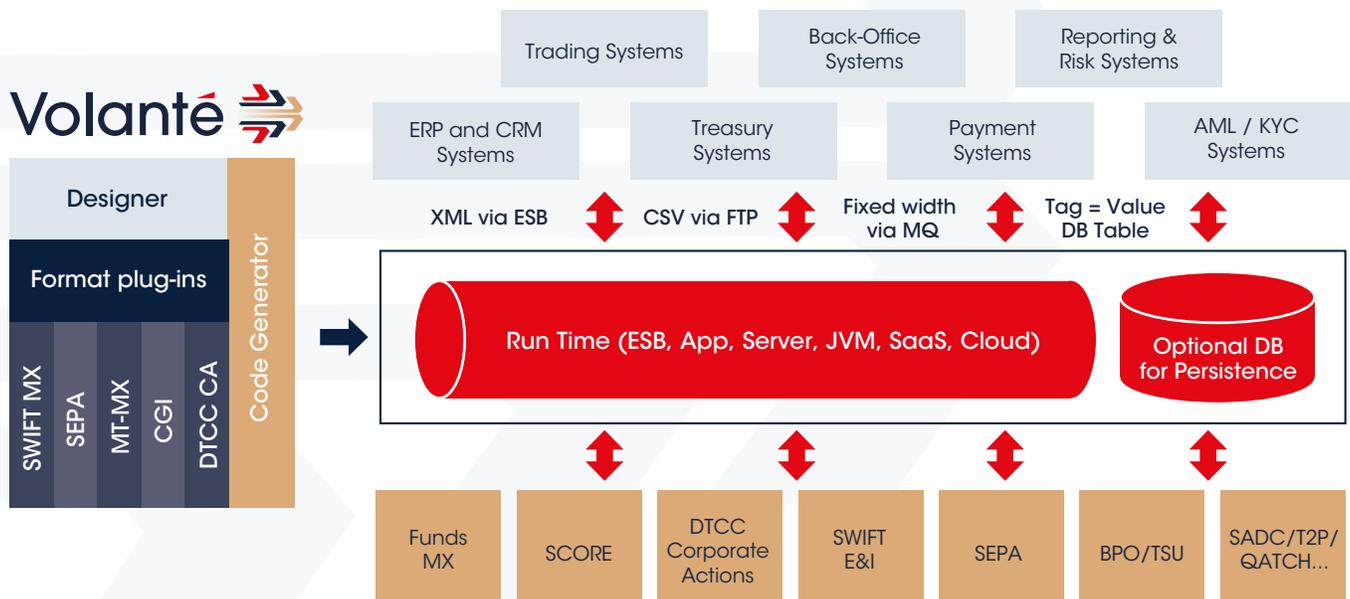
Volante Designer is a collaborative, model-based, financial message integration development and deployment platform which when combined with Volante's delivery of pre-built ISO 20022 message packs and conversion libraries, creates a market-differentiated, future-proofed solution to the speedy delivery of ISO 20022 messaging services.

The key features of this agile ISO 20022 messaging platform are:

- » support for all implementations of ISO 20022 standards through the delivery of pre-built, tested plug-ins
- » support for multiple versions including their specific semantic validations
- » easy upgrades to newer versions of the standards
- » support for automated conversions for MT-MX, ISO 8583-ISO 20022, various ACHs to ISO 20022
- » support for the co-existence of new and old standards
- » support for the flexible definition of bespoke variants and extensions
- » support for the flexible transformation of data to and from specific ISO 20022 implementations
- » model-based approach for integrating ISO 20022 standards into existing applications
- » automated deployment into multiple environments, including a callable service within a SOA implementation

Volante SOA 20022 delivers a message development and deployment environment that enables you to efficiently address the key challenges of implementing support for ISO 20022 across your entire organization in a cost efficient manner.

Deploying Volante ISO 20022-based services:



About Volante

Founded in 2001, Volante Technologies is a global leader in the provision of innovative financial data integration.

Volante is dedicated to enabling clients navigate and manage the diverse, complex and constantly growing range of message formats, standards and protocol challenges encountered throughout the lifecycle of any financial transaction. Volante delivers and maintains comprehensive pre-built plug-ins for over seventy international and domestic standards such as SWIFT MT and MX, FIX, FpML, EDIFACT, ISO 20022, and SEPA, as well as proprietary formats based on XML, CSV and Fixed Width.

Volante's innovative development environment simplifies the management of message complexity, so firms can improve their straight-through-processing (STP) rates and take full advantage of their commercial opportunities. Development times are reduced by 60-80%, delivering rapid returns on investment (ROI) as well as increased operational efficiency for a lower total cost of ownership (TCO).

Supported by offices in New York, London, Dubai, Mexico City and Chennai, Volante solutions are employed by an extremely diverse set of organisations, including buy-side and sell-side capital market institutions, banks (Universal, Commercial and Retail), corporate treasuries, financial industry utilities, clearing houses, exchanges, systems integrators and application vendors. For more information, visit www.volantetech.com