ISO 20022 Architects' Forum

Launch Workshop – Thursday May 21ˢᵗ, 2015
Level 39, One Canada Square, Canary Wharf, London.

1 Introduction/Background/Executive Summary

SWIFT organised this workshop because in our role as the ISO 20022 Registration Authority, we are aware of more than 200 ISO 20022 projects globally. It is clear to us that ISO 20022 has reached a tipping point and industry rollout is growing rapidly. Many of these projects are being driven by market infrastructures, and many SWIFT shareholders are being confronted by multiple simultaneous ISO 20022 projects, often global in scope. Regulators are also taking an interest in ISO 20022, and principles such as BCBS 239 are forcing a more strategic approach to architecture and standardisation.

SWIFT is increasingly being approached by architects and other strategic thinkers, wishing to leverage ISO 20022 to support strategic enterprise, and indeed, industry, transformation.

The time feels right for an open conversation between "Financial IT Architects" about the role of ISO 20022 as a platform for strategic industry transformation – SWIFT planned this launch workshop as an intimate and informal, invites-only "meeting of minds" to test the appetite for such a conversation.

It quickly became clear that there is appetite, and that architects perceive real benefits in open collaboration around the ISO 20022 methodology and content. SWIFT has scheduled a *follow-up meeting for August 10, 2015* to draft a vision, framework, and engagement model for an ISO 20022 Architects' Forum.

2 Who was there?

Attendance was limited to a small number of hand-picked or personally recommended experts who work in architecture roles for banks directly. The goal was to bring together a small but representative sample of different architect "flavours" with solid industry and ISO 20022 experience, who were willing to share their thoughts and insights openly. In the room, we had:
- Chris Day - HSBC
- Martin Comiskey - NT
- Martin East - Credit Suisse Investment Bank
- Prajith Sreedhar - BAML
- Paul Waugh - Credit Suisse
- Rob James - JPMorgan
- Stephane Canon - Lloyds
- Jamie Osborne - Standards Research - SWIFT
- Andrew Muir - Head of Standards Operations - SWIFT
- Judith Gieben - Standards Operations Project Management - SWIFT
- Last minute apologies were regretfully accepted from: Citi & LGIM.

During introductions, attendees were given an opportunity to describe their current roles, interests, and specialities according to several criteria. As planned, we had a nicely representative, but manageable sample of architects - Specifically:
- While most attendees were primarily internally-facing in their day-to-day activities, several also had an external/customer focus.
- Most attendees had a good mix of business and technical focus in their current role, but several were more exclusively focused on the technology.
- Most had a preference for information architecture over data architecture, but pure data architect perspectives were represented.

- In terms of domain of influence, there was an even balance between systems and enterprise architects.

Attendees were also given an opportunity to describe the current level of engagement of their employers with ISO 20022. We heard that:
- All represented institutions are actively using ISO 20022 for some external messaging.
- Most were also using (or attempting to use) ISO 20022 to inform their internal data models.
- Some were starting to build ISO 20022 into their enterprise information model.
- All participants felt that their institutions could do more with ISO 20022, and most felt that they personally could understand it better. Many felt that they would benefit from engaging more directly in the ISO 20022 standardisation process itself.

3 What are the next steps and actions?

- All: Suggest agenda items for the next meeting

- All: Draft a vision, framework, and engagement model for this ISO 20022 Architects' Forum. See rough first sketch of a vision below.

- We will meet again, with a slightly expanded core group to deliver on these actions:
  - **Proposed Date:** Monday 10 August 2015.
  - **Proposed Location:** Level 39, Canary Wharf, London.
  - **Proposed Attendees:** We'll again target a representative sample of different architect "flavours" with solid industry and ISO 20022 experience, who work in architecture roles for banks directly. We seek an expanded, but still small group (<20) of hand-picked or personally recommended experts who are willing to share their thoughts and insights openly.

- All: Register for the next meeting and introduce qualified colleagues or peers who will contribute appropriately to Judith.gieben@swift.com by Monday August 3rd.

4 First rough sketch of a framework/vision for the forum

This section captures some key ideas and activities that can provide a framework/vision for this forum - These ideas will be refined during the next workshop to publish a formal vision for the group:

- This forum is a place for Financial IT Architects to collaboratively explore shared industry needs that can be fulfilled (wholly or partially) by ISO 20022, as it is today, and as it could be in future (Where "ISO 20022" should be read to include ISO 20022 artefacts, such as those in the e-Repository, and the ISO 20022 methodology itself.)

- This is a forum for Financial IT Architects to collaboratively define/deliver/commission the community actions, activities, tools, and products needed to enrich and extend ISO 20022 to allow it to fulfil the current needs and future challenges facing our industry.

- This forum could spawn "working groups" or "workstreams", around which experts can self-organise according to skills and interests, to co-create content that is important to architects. Some ideas include:

  1) Development of an Information Model for Finance: This is about enriching and extending the ISO 20022 business model to make it more complete, extensible, and comprehensible - This is an area where we can collaborate very closely with our friends from EDM/FIBO - Some obvious, concrete deliverables from this stream would be a static dictionary/glossary, and a more complete/rich/interactive semantic model/ontology of global finance.

  2) Development of a Business Capability Model for Finance: This is about what we do in our industry, and how - We believe that we can quickly collaborate to develop and publish an uncontroversial level one and level two capability model then elaborate further.

3) Development of a Services (API) Model for Finance: This is an area where we can collaborate very closely with our friends from BIAN to further leverage the synergies between ISO 20022 and BIAN.

5 What did we talk about during the launch workshop?

5.1 Industry Models:

- All agreed that reference models are important to the Financial Architect Community because they provide an effective common language between business, regulators, IT, vendors and service providers.
- General agreement that our industry needs *only one* reference model though. Today, ISO 20022 is one of several potential models, none of which are sufficiently complete to claim a title of "The One True Model of the Global Financial Industry"
- We started (but got nowhere near finishing) an interesting exploration about what "The One True Model" might look like, and what we would like to do with it if it existed. What are the components and use cases for each – Capability model, conceptual model, ontology, glossary, process model, service model, …
- The Telco industry's TMForum was widely admired and suggested as a potential role model for Finance/ISO 20022 to follow to deliver a resource such as TMForum Frameworx for Finance.
- Broad acknowledgement that developing an industry capability model is not a competitive exercise and that this is fertile ground for a collaborative effort between architects. Everyone in the room had helped to develop at least one such CM – all felt that this was mostly unnecessary and redundant work. All would prefer to see a single model worked out for the industry.
- Is ISO 20022 the right vehicle for developing a "One True Model of the Global Financial Industry"?
  - o If such a central model was developed under ISO 20022, how could we minimise concerns about central control becoming a bottleneck?
  - o Is ISO 20022's Zachman-based methodology fit for this purpose? Does it support alignment other commonly used EA frameworks (e.g. TOGAF?)
  - o What does "ISO 20022 compliance" mean without certification? How does it help when anyone can claim that their application, messaging, dog, etc is "ISO 20022 compliant"?

5.2 Challenges with ISO 20022 e-Repository Content Today:

5.2.1 Usability:

- It was widely acknowledged that although it is free and open, the ISO 20022 e-Repository is simply too difficult for an architect audience to consume today.
- The ISO 20022 content cannot be natively consumed by the kinds of tools on architect desktops.
- Semantic Web formats (e.g. RDF/SKOS/OWL) seem popular and may provide part of an answer…

5.2.2 Content Coverage:

- All agreed that ISO 20022's current Business Process and Business Transaction Models are not formal enough today to be really useful to architects.
- Many felt that the ISO 20022 Business Model could be more semantically rich, and many pointed to FIBO as a good example of how more semantic richness can be useful to architects. Agreement that there seems to be value in a closer alignment between ISO 20022 and FIBO.
- Some observed that certain areas of ISO 20022's content were incomplete, insufficiently precise, or too messaging-biased for some important architect use cases today.

5.3 We talked about the Architect Forum Itself:

There was quite a lot of discussion about what this forum could be - We began (but got nowhere near finishing) some interesting reflections on the What, the Why, and the How of a successful ISO 20022 Architects' Forum…

- WHAT is the universe of discourse for such a forum?
- WHY is ISO 20022 relevant to Financial IT Architects?
- HOW could such a forum help to define and deliver on the potential of ISO 20022?

6 What opportunities did we identify?

The following opportunities were identified that are potentially interesting to architects, and potentially relevant for such a forum….

6.1 Too Many Standards:

There is an opportunity to use this forum to catalyse solutions to the "too many standards" problem:
- We can collaboratively explore ways to align ISO 20022 more tightly with other architect-relevant industry standardisation initiatives like FIBO, BIAN, UN/CEFACT.
- We can collaboratively explore ways to make sense of the different industry syntaxes (e.g. FIX, FpML, XBRL, ISO 15022/MT).

6.2 Too Many Regulations:

There is an opportunity to use this forum to encourage consistency in the many, often disconnected regulatory initiatives that we face as an industry.

6.3 Improve ISO 20022 Content:

There is an opportunity for architect consumers to benefit from **and contribute to** improved ISO 20022 content, especially in areas such as:
- Linking between the process model and the conceptual model
- Better provenance modelling such as:
    - Improved tracing between the business content and the message content
    - More formal version management
- Expanding the business model into a more general and formal industry taxonomy and vocabulary (working with FIBO)
- Inclusion of a formal industry capability model
- Extension to include a service model (working with BIAN)
- Fleshing out some notable gaps of interest to architects (e.g. KYC)

6.4 Improve ISO 20022 Usability:

There is an opportunity for Architect consumers to benefit from making the ISO 20022 content more approachable, extensible, and consumable by the tools on architects' desktops…

6.4.1 Improved extensibility:

- Make it easier to link to bank's Business Capability Model
- Make it easier to link to bank's Business Process Catalogue
- Make it easier to seed bank's conceptual data model with ISO 20022 definitions
- Provide hooks for renaming/extending concept names/definitions without losing ISO 20022 source – e.g. Publish ISO 20022 content as a SKOS Concept Scheme.

6.4.2 Improved approachability:

- Provide more obvious entry points into the ISO 20022 content, especially for non-technical, and non-ISO 20022-expert users. E.g. Drill-down from the Business Process model.
- Describe the patterns and abstractions used to model ISO 20022 content.

6.4.3 Improved tool support

Engage with vendors to provide native support for COTS EA tooling, such as:
- Sparx EA v11
- RSA
- Enterprise Architect
- MagicDraw
- Informatic
- GPP
- Oracle
- MiSys

And for COTS MDM Tools such as:
- Collibra
- Orchestra Networks
- Ab-Initio

And for COTS Data Transformation Tools such as:
- Volante
- C24

6.5 Increase the Value of ISO 20022 within the Enterprise:

There is an opportunity for Architect consumers to do more and improve time to market if they can generate more stuff from the model. For example, in addition to message definitions, it should also be possible to generate artefacts such as DDLs, APIs, Glossaries, … from the ISO 20022 e-Repository.

6.6 ISO 20022 seems well positioned to catalyse this forum:

ISO 20022 is an open standard. It is not controlled by a single interest and is open to anyone in the industry who wants to participate. It is free for anyone to implement in any business or software environment, or on any network.

Compared with many other financial standards, ISO 20022 is still relatively young, but was conceived with an industry mandate to harmonize the fragmented financial standards landscape. ISO 20022 has recently celebrated its 10th anniversary, and has clearly reached a tipping point in adoption, so now is a good time for Architects to engage more strategically with the standard.

Valid questions may be asked about whether all these opportunities fall directly within ISO 20022's sphere of influence, or whether it is better for the industry if ISO 20022 cooperates with commercial vendors or other standardisation bodies – this forum is the right place to ask those questions, and to engage openly with any necessary stakeholders to get the answers.

What is sure is that ISO 20022 has a strong and trusted brand identity, and alignment with the ISO 20022 brand can help to add weight and validity to related commercial and non-commercial initiatives.

6.7 SWIFT seems well positioned to moderate this forum:

SWIFT is a trusted, independent partner for all key stakeholders in this activity. In launching and moderating this forum, we are playing our expected role of enablers and facilitators for the industry. As the ISO 20022 Registration Authority, SWIFT can provide a direct channel for the collective insights of the group into the ISO 20022 standardisation processes.