Quarterly Update
2017-Q4

RIXML Standards Committee
Highlights from our Last Quarterly Meeting

The RIXML organization held its fourth and final quarterly members’ meeting of 2017 at the 60 Wall Street office of Deutsche Bank in New York City. Jim Ulrich, RIXML Executive Director, began the meeting with his welcoming remarks, and Roman Kitov, RIXML Treasurer, summarized our revenues and expenses for the quarter.

Sal Restivo from Morgan Stanley picked up the agenda from there and reviewed preceding activities of the Emerging Technology working group, which included an interesting discussion of the application of artificial intelligence to market surveillance methods and a quick update on our recently launched Unbundling Buyside Survey.

Sal then turned to the release plan for the *RIXML Research v2.5 Standard*. Implementation and documentation had reached readiness for the public comment period. The Standards & Technology Committee presented all materials in the release bundle to the organization. It was subsequently posted up to the RIXML.org website. The public comment period was set for 30-days from that posting, which brought us to mid-December when it became final and official.

Jonathan Palcsesz from Visible Alpha demonstrated his work in translating the Interaction Model from its original Excel format into an XML Schema Definition. Jonathan walked our meeting attendees through the overall structure, illustrating this important milestone in its development. This represents the new *RIXML Interactions v1.0 Standard*, which was officially released in early November. Deirdre and Jim closed out the topic with some comments on next steps.

Dave White from Quark brought us all up to date on our Componentization working group, which had re-engaged and re-considered its initial approach. Dave talked about applying other markup methods, such as RDFa, JSON-LD, and Microdata. The group had an initial demonstration of a sample web portal for semantic components-driven research consumption, and a proposal for furthering how semantics are defined in the research HTML through the use of an HTML5 schema language.
And, finally, Michelle Roxby from Citi and Mike Bassman from Barclays discussed Entitlements and the MiFID II go-live date in early January. Research publishers are developing pricing models and product tiers, and working with aggregator partners to prepare. The RIXML organization, through our Entitlements working group, seeks to foster collaboration and standardization, where it can, so that the transition process is smooth and client service is maintained.

Featured Presentations

Jonathan Palcsesz  
Visible Alpha

RIXML Interactions v1.0

Translating the Interaction Model from its original Excel format into an XML Schema Definition. Presenting the overall structure. Illustrating this important milestone in its development. Getting ready for final release.

Sal Restivo  
Morgan Stanley

RIXML Research v2.5


Activity Summary

See the table below for a summary of RIXML activity that has taken place during the last quarter. More details are offered in subsequent sections of this document.

<table>
<thead>
<tr>
<th>Date</th>
<th>Work Stream</th>
<th>Venue</th>
<th>Host</th>
<th>Main Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sep 21</td>
<td>Quarterly Meeting</td>
<td>Deutsche Bank NYC</td>
<td>Roman Kitov</td>
<td>Interactions, Research Standards</td>
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<tr>
<td>Nov 1</td>
<td>Interactions</td>
<td>Official Release</td>
<td>RIXML</td>
<td>RIXML Interactions v1.0 Standard</td>
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<tr>
<td>Nov 30</td>
<td>Interactions Survey</td>
<td>Results</td>
<td>RIXML</td>
<td>Unbundling Buyside Survey</td>
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<tr>
<td>Dec 1</td>
<td>Emerging Technology</td>
<td>Call</td>
<td>Jim Ulrich</td>
<td>Cloud Storage</td>
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<tr>
<td>Dec 6</td>
<td>Research</td>
<td>Period End</td>
<td>Public Comment</td>
<td>RIXML Research v2.5 Standard</td>
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<tr>
<td>Dec 13</td>
<td>Componentization Call</td>
<td></td>
<td>Dave White</td>
<td>Progress on Framework</td>
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<tr>
<td>Dec 15</td>
<td>Research</td>
<td>Official Release</td>
<td>RIXML</td>
<td>RIXML Research v2.5 Standard</td>
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<tr>
<td>Jan 5</td>
<td>Emerging Technology</td>
<td>Call</td>
<td>Jim Ulrich</td>
<td>Artificial Intelligence</td>
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<td>Jan 9</td>
<td>Entitlements</td>
<td>Call</td>
<td>Michelle Roxby</td>
<td>MiFID II Insights</td>
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<td>Jan 17</td>
<td>Componentization</td>
<td>Jordan &amp; Jordan NYC</td>
<td>Dave White</td>
<td>Examples &amp; Demonstrations</td>
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<tr>
<td>Jan 18</td>
<td>Quarterly Meeting</td>
<td>Moody’s NYC</td>
<td>Maribeth Martorana</td>
<td>Componentization, Entitlements</td>
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Emerging Technology

The group held two calls since the last Quarterly Meeting. They covered progress within our active work streams, including Componentization, Entitlements, Interactions, Research, and the Unbundling Buyside Survey.

The Unbundling Buyside Survey results were shared on November 30. Recall that the survey was made up of 24 questions aimed at discovering the nature of research spending and consumption, MiFID II applicability and planning, research valuation, pricing models, budget allocation strategies, and payment methods. It asked participants about expected utility of interactions data, plans to use rate cards, and any corresponding vendor strategies. We discussed the results on the December call.

By the January call, we had already officially released both the Interactions v1.0 and Research v2.5 Standards. After summarizing these milestones and assessing the release processes, we moved on to discuss our featured topic: the application of Artificial Intelligence techniques toward capturing and identifying research content.

Jim also announced that IPREO had joined the RIXML organization as our newest member.

We plan to continue our call schedule as we move into the new year. If you'd like to propose any topic ideas, please contact Jim. Please find references to the articles discussed during these calls in the catalog below:

Mizuho Securities has implemented Nomura Research Institute’s voice recognition and AI technologies to optimize the monitoring and analysis of communication between investors and sales reps for both compliance and customer care purposes.

Intelligent Trading Technology
December 14, 2017

Interactions

The RIXML Interactions v1.0 Standard was officially released on November 1 with an accompanying Press Release. All the great effort in the Interactions work stream ultimately came together in this important result.

We've received limited feedback since the release date, given that the marketplace is occupied with the MiFID II go-live. However, the interest level has been high and supportive of our efforts. A quick poll of some firms, such as Single Track, Feedstock, Commcise, and Ipreo demonstrated mostly strong interest in the Interactions Standard and expectations of implementation.

The Interactions work stream will continue adding to the documentation materials and refining that content. We've also been making updates to the RIXML.org web site to reflect the new Interactions Standard and how it fits into the RIXML Standards Suite.

Entitlements

The Entitlements Working Group had one call on January 9 to review the interest level for continued work. We found a high enough level to proceed. Michelle Roxby saw an opportunity to come together and see what's been done and how people are dealing with MiFID II requirements, and to identify lessons and opportunities for progress and improvement.

We did an informal poll of call participants and got some insights from Barclays, Citi, Morgan Stanley, Deutsche Bank, RBC, UBS, FactSet, and Credit Suisse.
Componentization

The Componentization Working Group had one call on December 13 in which Dave White from Quark led a demonstration of progress on the proposed HTML5 + RDFa approach outlined earlier in the year and a subsequent discussion of results-to-date.

That call was followed by an in-person workshop on January 17 at the Jordan & Jordan offices in New York City.

Principal themes and plans are outlined here:

- Develop a robust sample of an HTML-formatted research report to validate and demonstrate the proposed HTML5 + RDFa approach
  - If the approach is adopted, the specifics of the semantics, including the depth and complexity applied, will be the major discussion for much of this year’s effort
- Develop a portal with a few demonstrable features
  - Prototype is underway
  - Additional work is needed before sharing more broadly
  - Goal is to have this ready by our second quarterly meeting
- January workshop intended to
  - Review the approach and the samples
  - Discuss the trade-offs for simplicity (limited value) versus complexity (unlimited value)
- Maintain a slide deck to keep track of all notes associated with the effort to define the semantic component markup approach
- Initial research phase is reaching its end
  - Will need much more community participation to define a specification (assuming we decide to progress)
- Process desperately could use some Buy-side companies to participate as much of the value will benefit them

<table>
<thead>
<tr>
<th>Purpose</th>
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<tr>
<td>The Componentization work stream is about defining standards for addressing internal document components beyond the basics of title, synopsis, and abstract. By providing component-level addressability we can improve the precision of tagging and searching – and improve the overall experience of interacting with research content.</td>
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<tr>
<th>Leader</th>
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<tr>
<td>Dave White, Quark</td>
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<tr>
<th>Recent Activity</th>
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<tr>
<td>Dec 13: Call – Demonstrations</td>
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<td>Jan 17: Workshop</td>
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<th>Upcoming Activity</th>
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Componentization Encoding Structured Data for HTML
Overview and Recommendation
Marketing & Communications

In addition to the releases and web site updates completed this past quarter, our Marketing & Communications group would like to point out that RIXML has re-framed our offerings. We now refer to our various standards as the RIXML Standards Suite, which includes the RIXML Research Standard, the RIXML Interactions Standard, the RIXML Analyst Roster Standard, and the RIXML Coverage Standard.

The reason for doing this is so that we can present our offerings as a cohesive set of solutions rather than a number of standalone standards. Even though two of these are standalone standards and two are sidecars, many of the underlying philosophies and structures are consistent, and intentionally so. Leveraging this as a strength will be beneficial going forward.

Looking forward to 2018, plans include:

- An updated Interactions Standard document set that uses the RIXML style guide
- Web site overhaul
- Standalone documentation for the sidecar schemas
- New marketing materials

Summary

The RIXML Standards Suite is comprised of four standards:

- **RIXML Research Standard** provides a set of tags and rules that can be used to describe investment research documents, audio files, etc. Using the RIXML Research standard enables firms to improve the process of categorizing, aggregating, comparing, sorting, searching, and distributing global financial research.

  [LEARN MORE]

- **RIXML Interactions Standard** provides a set of tags and rules that can be used to describe interactions involving research providers, research consumers, corporate representatives, and third-party experts. This standard was created to help firms comply with the changes to the EU's Markets in Financial Instruments Directive (MiFID II).

  [LEARN MORE]

- **RIXML Roster Updates Standard** is a sidecar to the RIXML Research Standard, enabling a research publisher to communicate changes to the groups of people playing various roles on its behalf in the investment research marketplace (such as a financial services firm updating its roster of research analysts with aggregator partners).

  Download schema (.xsd)

- **RIXML Coverage Updates Standard** is a sidecar to the RIXML Research Standard, giving a publisher the ability to communicate changes to its coverage universe, including updating the list of companies covered by a particular analyst.

  Download schema (.xsd)