VIEWPOINT

SMARTDX

The Time is Right for Collaborative Negotiation to Accelerate Capital Markets Documentation

SmartDX, A Division of Smart Communications September 2016

The Time is Right

Advances in digital technology are re-casting everything around the needs of the information consumer. People expect to be connected and able to access digitized data from anywhere, at any time.

The Capital Markets are not immune to effects of digital hyper-connectivity. The SmartDX division of Smart Communications is the industry standard for automating trade and relationship document generation, collaboration and processing in the Capital Markets. We know there's a continuous and increasing demand from many financial institutions

Ready for Re-Papering?

Capital Markets participants face the daunting task of re-papering agreements as a result of new BCBS/IOSCO standards for margin requirements on non-centrally-cleared derivatives. Dealers and buy-side firms are looking at solutions that streamline the repapering and negotiation of legacy CSAs. SmartDX provides a cost- and time-efficient solution for document re-papering and negotiation to help market participants meet new regulatory challenges.

Using SmartDX, every term in a CSA can be extracted into structured and normalized data points and then placed into a template with defined data taxonomy and rules for the standardized terms. Executing the data against template rules generates a standardized CSA draft in SmartDX's collaborative negotiating environment. Parties then negotiate collateral terms to comply with margin requirements under the new rules. Exceptions can be built into the CSA template to facilitate the monitoring of rules that were triggered during the re-papering process.

to access data that exists within "paper" documents. The crisis in 2008 made it clear that critical commercial data is trapped in paper and opaque systems and processes, confounding and frustrating all of those involved.

We believe there is a way to improve the Capital Market's documentation process and we're working with major market participants to create a new collaborative negotiation ecosystem around critical information. In this paper, we'll give you our perspective on why we think the time is right to change the documentation process and how we're working with key partners to bring it to market.

Business as Usual for Trade Documentation?

Capital Markets' documentation is ready for change. Whatever the documents—pre-trade relationship documents, trade documents or post-trade documents—they're all being negotiated in the same way they were 30 years ago, via email and in Microsoft Word.

The process is inefficient outdated and costly. Base60 Consulting, experts in the industry, estimate that the investment required for supporting document and data management across the Capital Markets industry is approximately £2bn across buy and sell-side institutions. Unilateral investments are no longer sustainable given the cost pressures all industry participants face.

There are, however, positive steps being taken to improve the process and two issues stand out. Firstly, there's a vigorous debate within the industry and active development around the concept of distributed ledgers—essentially an asset database that can be shared across a network of multiple sites, geographies or institutions—using blockchain technologies.

Blockchain-based distributed ledgers are being proposed, funded and developed by the industry for a wide range of financial and public sector applications, including OTC trade documentation. While it's not clear how or if distributed ledgers will be adopted for OTC trade documentation, it is significant that the industry recognizes the benefits—a highly secure, accessible single version of the truth based on the data contained in its documentation—that could be realized by applying distributed and collaborative technology to documentation.

Secondly, over the past two years, the Capital Markets sector has been in a process of data mining. Data, previously only stored in paper legal agreements and contracts, has been extracted, transformed into machine readable text and subsequently processed for storage and consumption. This digitization process has been invaluable in helping financial institutions access and mitigate their risk, but digitization has still not been fundamentally extended into how documentation is produced or managed.

The reason? Digitization only solves one element of the document management process. *It fails to address the fact that paper-based negotiations never stop.* Organizations continue to create paper

Is a cloud-based service right for Investment Banking documentation?

In a cloud environment, documents are digital from the outset, in structured form using XML, which removes the need to have to subsequently digitize the data to close the loop in the process. Cloud-based negotiation makes the process more efficient, transparent and controlled than MS-Word.

and so the document management loop remains open. Even as the industry digitizes and looks to the prospect of distributed ledgers, it's still trapping critical commercial data in paper and systems that can't make information accessible. The prospect of distributed ledgers and digitization combine as a sign of readiness, a signal that it's time to push the negotiation phase of the document process into an all-digital environment.

A Collaborative Negotiation Environment

We believe that the way to accelerate the process, unlock trapped data, and lower the cost of documentation is to enable efficiencies within and between participants in the Capital Markets. The buy and sell-side participants need to have the tools and environment that will enable them to generate, collaboratively negotiate and manage access to documentation in an online, secure and accessible environment.

An online collaborative negotiation must have key elements to deliver benefits to the participants and the industry. These elements are:

- Design and maintain documents efficiently
 Use the most powerful tools that give template
 designers the ability to create documents based
 on standard available libraries or bespoke to an
 organization.
- Generate and negotiate on documents digitally
 Avoid ending the process with paper by placing
 the document generation in a "digital first"
 environment that leads directly to the drafting
 and negotiating of documents, again in a digital
 environment.
- Collaborate and negotiate using familiar tools
 Provide software tools to users that have a similar look and feel to what they are used to,
 MS-Word, so users are comfortable with using these tools in a collaborative environment.

• Facilitate fast and efficient negotiation

Focus on making a collaborative environment available and accessible to the financial institutions so they can collaborate simply and easily as they go about their day-to-day jobs of negotiating agreements between institutions.

Simplify access

Include the industry utilities that play a key role with their applications and give the allimportant capability of storage, management of all information within executed documentation, and data mining.

The highest levels of security

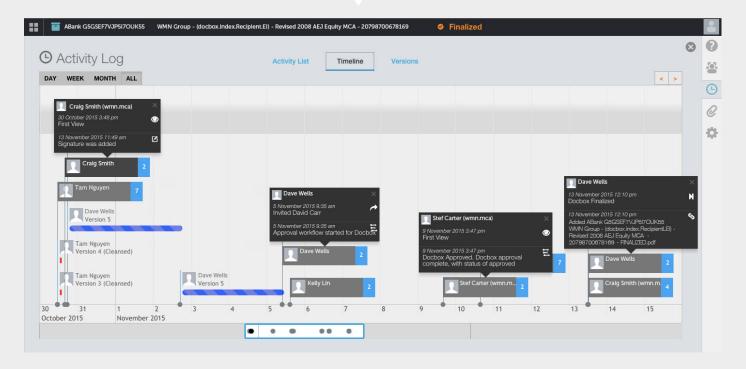
Ensure that the environment offers the latest security and encryption to support the most rigorous security certifications.

Create negotiation information and timelines
 Generate aggregated negotiation metrics and
 timelines so you can identify template
 improvements and maintain compliance with
 the regulatory need to collaboratively execute
 within prescribed timeframes.

Will Capital Markets participants accept cloud-based services for documentation?

In our view, firms need to move to cloudbased services for documentation to improve efficiency, reduce costs and accelerate the process. Providers of cloud-based services must be able to demonstrate that the service has the highest level of security and certifications and that they have 'proven it' with customers that are in the industry.

A number of the world's largest and most demanding organizations trust and use our cloud-based solutions for secure and high-volume document production. In our experience developing and delivering cloud-based solutions, firms now understand that cloud-based solutions can meet and exceed the levels of security, compliance and operational rigor required.



SmartDX timeline of key decisions and events around the negotiation of an MCA

Through our pilot project with leading banks, we have proven that such an environment would bring clear business benefits.

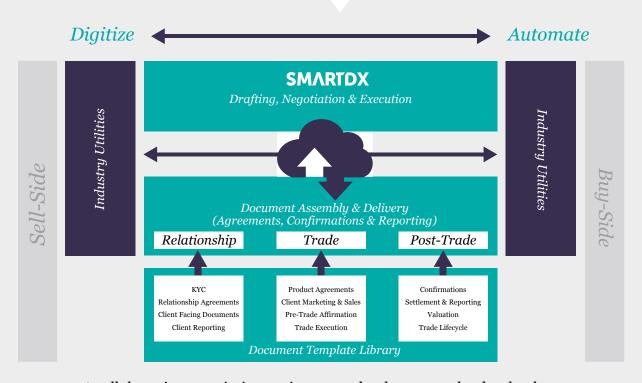
- All market participants will be able to bring speed, efficiency and control to a documentation function that has been in need of improvement for decades.
- Driving an aligned strategy across the industry for any document generation, negotiation and execution function will drive out economies of scale for everyone.
- An integrated architecture for document management, agnostic of both the document type, or even the participants in the process, will lead to more effective and optimal investment in document management infrastructure. In addition to connecting the document management between institutions, such an environment will allow more efficient document production at higher levels of volume and scale.

Industry Leaders Guide Development of Collaborative Negotiation Environment

This collaborative negotiation environment is, in fact, more than just a concept, some of the leading buy and sell-side firms are already using it.

Starting in 2013, the SmartDX division of Smart Communications gathered the organizations in the financial services industry together to create partnerships and establish an industry Working Group. The Working Group has been the forum in which the buy and sell-side firms have discussed the challenges and problems surrounding documentation in order to develop solutions to fully meet industry needs.

The Working Group helped to shape the document generation and collaboration capabilities of SmartDX, which drove innovation for a service with a collaborative environment for the negotiation of documentation. The required capabilities are now contained in the collaboration and new generation functionality found in SmartDX.



A collaborative negotiation environment that leverages cloud technology

COLLABORATIVE NEGOTIATION VIEWPOINT

Another crucial element of the solution relates to industry utilities. Markit, one of the leading global providers of financial information services, provides products that are designed to enhance transparency, reduce risk and improve operational efficiency. Markit has integrated SmartDX with its Counterparty Manager, a secure document management platform that adds the crucial aspect of executed document management and storage to the overall solution.

The Markit-SmartDX integration will help organizations to reduce risk and streamline the documentation process for Relationship Agreements and KYC initiatives.

"Markit Counterparty Manager and SmartDX change the game in two ways," according to Guy Harrison of Markit. "First, they cut down the time it takes to put documentation in place, and secondly they allow you to extract the information that's contained within the document and interrogate it."

The collaborative capabilities introduced by SmartDX in February 2016 have now reached some critical milestones. SmartDX has processed a set of Master Confirmation Agreements (MCAs) for a subset of trading partners. The initial results showed that SmartDX significantly accelerated document processing time.

When compared to the traditional manual MCA processing, by using SmartDX the banks discovered:

- Drafting MCAs in MS-Word was reduced from 2 hours to 2 minutes using pre-defined document templates
- Negotiating MCAs using local saved files was reduced from 10 days to just under 7 days using a SmartDX Docbox
- Approving and executing MCAs was reduced from 25 minutes to 2 minutes using a SmartDX Docbox

Overall, SmartDX delivered a 30% reduction in MCA processing time, compared to typical manual processing, a total of 11 outbound sell-side tasks were eliminated and 13 inbound sell-side and buy-side tasks have been removed.

11 of the largest global derivative trading firms from the buy and sell-side are preparing to process Master Confirmation Agreements within SmartDX. The environment will then expand to automate other trade and relationship documents ranging from Credit Support Annexes (CSAs) to Investment Management Agreements (IMAs) and Confirmations.

A Final Thought

Capital Markets' documentation is ready for change and the right circumstances are now present to drive change. With the development of automated document generation tools, document digitization tools, coupled with new online collaboration technology in a digital environment, we believe that document management will change as these tools become the new norm.

Clearly, security and confidentiality will always be paramount, but with the evermore sophisticated and innovative cyber security policies and practices continually evolving, security threats can be mitigated, risks reduced and confidence can be maintained.

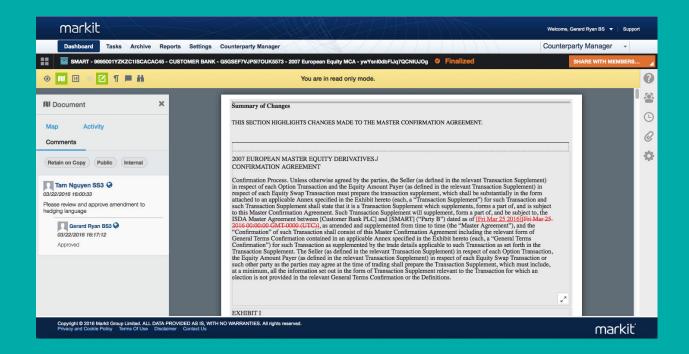
The key moving forward is connecting users across institutions using common functionality, best-of-breed technology solutions and industry communication standards to allow the market to operate more efficiently at higher levels of volume and scale. The industry genuinely will be able to do more with less.

Financial institutions will adopt all these key elements – online document generation, digitization, negotiation and storage – and place them at the center of how they do business in the future. The time is right to move to a collaborative online environment that encompasses these elements for an improved trade and relationship documentation process.

What does blockchain technology mean for a collaborative negotation?

While there's lots of activity and speculation around blockchain technology for distributed ledgers, it's unclear what impact it will have on trade and relationship documentation but we believe that a collaborative negotiation environment will be entirely compatible.

It's our view that when and if distributed ledgers come to pass, SmartDX will still be there to solve a key problem, namely, how to collaboratively negotiate and produce trade and relationship documentation that would then become part of "single version of the truth".



SmartDX integrated with Markit Counterparty Manager for collaborative negotiation

About SmartDX

SmartDX, a division of Smart Communications, is the industry standard for automating trade and relationship document generation, collaboration and processing in the Capital Markets.

Trusted by all of the G15 investment banks and some of the world's largest energy and commodity companies, SmartDX helps simplify the negotiation and execution of documentation for all market participants, across all document types, asset classes and product types.

SmartDX serves its global customer base from offices located in North America, Europe and Asia Pacific.

