

SmartDX – Voice of the Customer peer review

SmartDX has provided solutions to the Financial Services industry since 2003 around Document Generation and more recently Document Collaboration. SmartDX usage is relatively mature and there is a strong understanding of its capabilities and potential

1. The Industry Regulatory Challenge

The industry is facing increasing and more stringent regulatory requirements regarding the timeliness of trade confirmations

Regulation	Requirement
CFTC Rule 23.501	T+1 execution timeframe for SD & MSP
EMIR Article 11	T+1 for FC & NFC / T+2 for NFC-FCs must report to their competent authority on unconfirmed transactions outstanding for more than 5 business days

Given these timeframes for all uncleared OTC derivatives the need for timely generation, negotiation & execution is critical

Despite the industry's efforts to comply with regulation a number of challenges remain:

- Confirmation drafting, despatch, negotiation and signature functions remain a **highly manual process**
- Multiple parties are involved in the process and therefore **transparency** around status is **opaque**
- The creation of PDF paper documents despite being stored in electronic filing cabinets are **difficult to query automatically** to find terms that have been agreed
- Lack of lineage between terms contained in documents and trade booking, risk & settlement infrastructures increases **risk of breaks**
- No golden copy of data for all internal users results in data being persisted in multiple stores requiring labour intensive and costly **manual reconciliations**

2. SmartDX Adoption & Usage

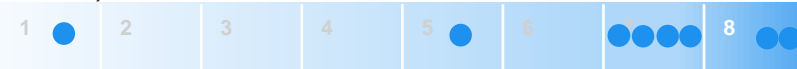
In July of last year (2016) SmartDX performed a voice-of-customer exercise to elicit feedback from a segment of its clients on the awareness, adoption and usage of SmartDX's core components being (i) **Document Generation** and (ii) **Online Cloud Collaboration**

The survey was performed with **8 sell side firms** with participants from Ops, Tech and Change roles

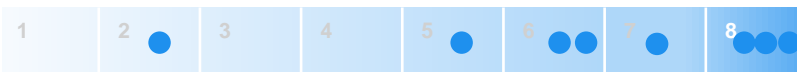
A. Document Generation

- Widely used for Document Generation **across all asset classes** with full roll out only limited by low volume and resultant business case
- Client customisation** and lack of standardisation remain the biggest inefficiency for paper confirmation generation
- Many dealers are happy with their current versions and require a much **stronger business case** to justify migrating to SmartDX (more to come on this topic later in the day)

Thunderhead Document Generation Usage?(1=No Asset Class. 8=all Asset Classes)



Are your templates affected by Client Customisation? (1=No. 8=Yes.)



Do you have transparency around Client Customisation? (1=No. 8=Yes.)



B. Cloud Collaboration (SmartDX)

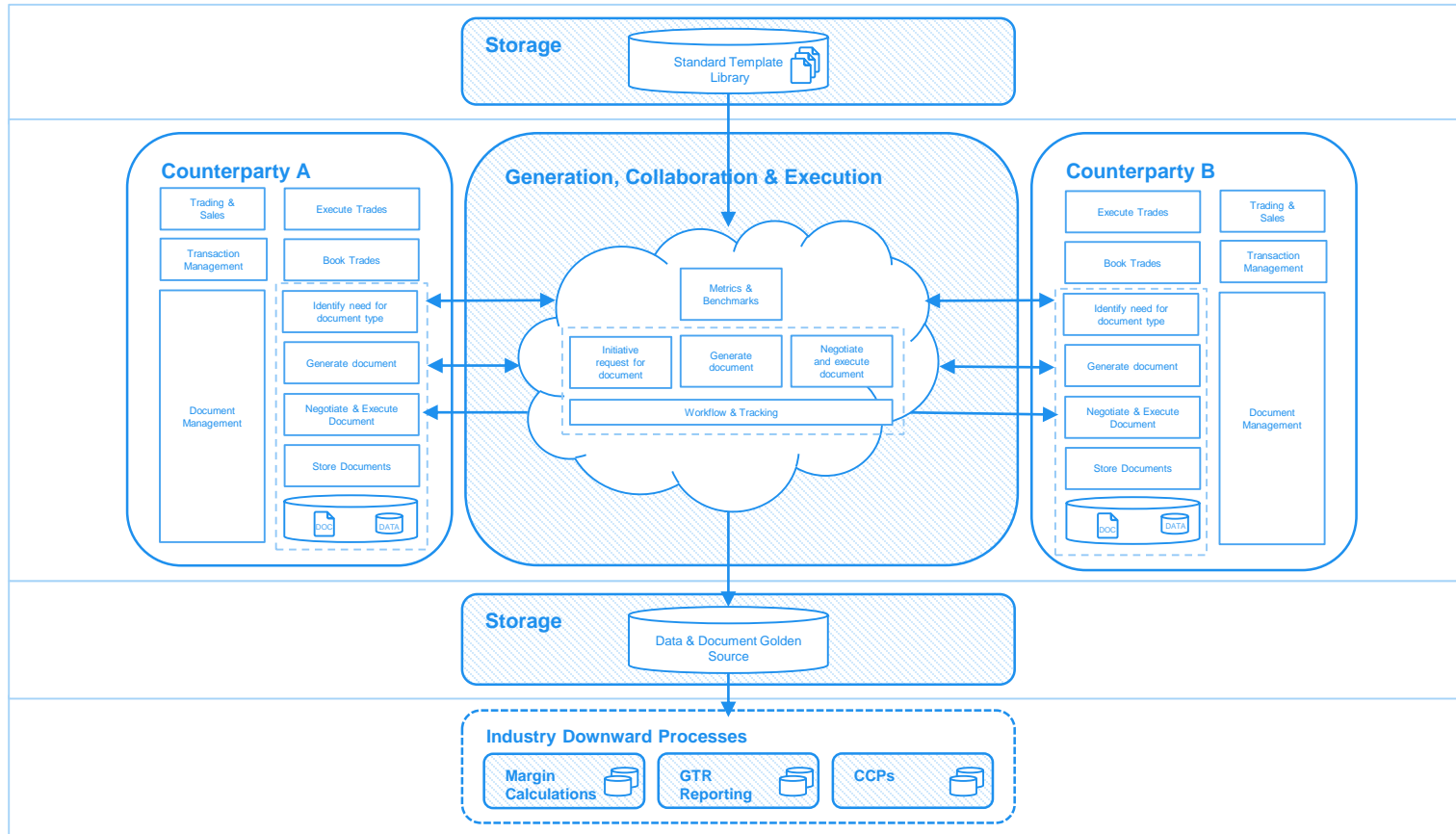
- Most dealers are aware and have a **good understanding** of the collaboration product and its benefits in comparison to on premise versions
- Migration from on-premise to SmartDX has been slow due to **lack of a compelling business case** to invest in the current environment when clearing is increasing and DLT solutions are being considered (more to come on this topic later in the day)
- Collaboration is seen as the right solution but needs the **right driver / catalyst** to get clients on-board

SmartDX – Trade Confirmations Operating Model

3. SmartDX – Online Collaboration

SmartDX provides an online document collaboration tool that gives users access to a virtual environment for document generation, collaboration, execution and storage

A group of SmartDX users discussed the need for a more **consistent operating model** for document management and produced a **blueprint** to describe the longer term strategy for **document management**



A. Benefits

- 1 **Transparency:** the cloud version provides transparency throughout the workflow and an audit trail of interactions and communications
- 2 **Speed & Efficiency:** the workflow remains digital throughout the process and therefore removes manual communications between participants
- 3 **Reference Data:** market participants gain access to documents and the underlying reference data that they can pull back into their internal infrastructures from the cloud
- 4 **Golden Source Data:** market participants able to access and consume golden source data for multiple internal and industry downstream processing
- 5 **User Optionality:** 2 options for users
 - a. **Cloud Only:** generation, collaboration, execution and storage takes place in cloud
 - b. **Cloud / On-Premise:** data and Doc extracted from cloud into internal infrastructure for storage and usage

B. Challenges

1. **Cloud Services:** long lead time for multiple approvals but this is shortening
2. **Business Case:** difficult to justify for one functional dept.; need to tackle “document management” across depts.
3. **Community effect:** need to drive usage across buy & sell side to realise efficiency benefits but in parallel faster move to standards through community learning

SmartDX – Future Industry Infrastructure ecosystem

- The future technology and market infrastructure landscape remains **uncertain** due to a plethora of industry investment in **emerging technologies**
- **Existing foundations** for the exchange of information will **prevent** market participants from being able to full capitalise on these opportunities and will potentially (i) inhibit innovation and (ii) increase operational risks and costs
- Through the work base60 have performed with leading investment banks and industry bodies we believe that the industry is at a critical juncture in its efforts to define and adopt improved **data and process hierarchy standards**
- SmartDX provides the opportunity to help market participants on this journey by generating messages in this new standard, paving the way for **Smart Contracts** which can ultimately be managed on Blockchain **Distributed Ledger Technology** (DLT).

