



MAKING SMARTER DECISIONS

Learning from the past
to deliver for the future



CHALLENGE THE CHANGE

Everyone working in financial services is aware that the industry is changing as a result of financial technology. Commentary about Fintech is inescapable. Whilst the industry is undoubtedly benefiting from unprecedented investment, it pays to be sceptical about the benefits and ask whether the investment is being directed at the right problems.

In this paper, we explore the risks and data challenges which many Capital Market firms have been exposed to, yet have been effectively unable to solve for years. Guided by an independent market study, we identify ways of solving these challenges to yield major benefits through reducing risk and smarter decision making for the future.

\$210^{BN}

RECORDED GLOBAL FINTECH
INVESTMENTS IN 2021

KPMG Pulse of Fintech, Jan 2022





REFOCUS

DATA CHALLENGES

“Financial markets are still living in an age when documents are creating data rather than data creating documents”

Source: Independent Market Study by Aite-Novarica

Over the last three decades we have seen several regulatory and market events creating major change for firms in financial services.

Regulation has resulted in firms often managing the change in silos with an over-reliance on manual solutions, such as teams of lawyers. This has meant that many firms have not been building a golden source of accessible agreement data as contracts and terms have changed.

In relation to market events, Lehman's in 2008, the collapse of Archegos and Greensill, and more recently the terrible war in Ukraine have been the drivers of chaos within financial institutions.

Many in the industry react by investing in better ways to predict the source of the next event. However, this simply isn't practical as the very nature of these incidents is that they catch everyone by surprise. When unforeseen events occur, too many firms are left unprepared as they've spent all their time scanning the horizon rather than working out how to respond effectively to things closer to hand.

While financial institutions may not be able to prevent external shocks such as wars or resource price inflation, it is possible to take further steps to mitigate harms caused by individual business or market failures. To be successful in this, companies need to overcome the challenge of how to access reliable and completed data sets to fully assess counterparty risk.

This is particularly important in the context of legal agreements, where many financial institutions have left themselves exposed by the omission of sufficient control measures from their contracts with counterparties and clients. There is often a contrast between the unstructured content of legal documents and the structured data in an institution's operating systems. Many firms acknowledge a risk, but have neither the time nor resources to tackle it.

The industry is now changing rapidly, and some past failures are being addressed. Those who have analysed the issues and adapted are seeing major improvements in the mitigation of operational and credit risk. The growing risk is diminishing as the industry uses more effective tools to digitise legal agreements to produce completed and quality agreement data sets which can be used for more effective decision making. The result is that firms are better placed to react to market events and correct their positions.



LOOKING TO THE FUTURE

Benefits of digitising legal agreements

Likezero commissioned an independent study to explore the benefits of digitising legal agreements. The research interviewed participants who represented both large buy and sell side organisations with 75% of banks being GSIBS. The research was led and produced by the Aite-Novarica Group and focused on the evolution, adoption, benefits, and challenges. There were several important findings, which are summarised below, in addition to examples from Likezero's experience with financial institutions around the world.

Achieving true digitisation

The financial services industry is still at a stage where the benefits of digitising legal agreements are misunderstood and mean different things to different firms.

The research showed that legal agreements are typically stored in a PDF format, and some of the data is parsed using optical character recognition (OCR). Whilst most participants in the study indicated that their documents were at least partially digitised, this is often done through costly manual processes and the recorded data is far from complete. Whilst manual solutions cause problems with efficiency and accuracy, the incomplete data sets can seriously impact the likes of the Front Office, Treasury, Risk and Prime who require a more completed view of the data along with the context required to properly assess counterparty risk and maximise opportunities. An OCR'd PDF is not true digitisation, given the difficulty in accessing the information to make decisions, especially at the point of crisis.

How true digitisation changes the game

True digitisation means that there's a central golden source of all agreement data, with the ability to search for agreements and the contents within all agreements and amendments. When decision makers can assess data in this way, they can quickly identify the right information and take effective decisions. Data sets can then be created for a particular purpose, such as a regulatory project or collateral management.

Accessing trusted data

The largest issue firms face is accessing trusted data to manage market events and the subsequent impact these events cause on existing business. The research showed that most participants must sift through agreements to just find the right ones due to the lack of complete digitisation—a process one European bank stated took “months and months.” When a defined procedure is in place, supported by the right technology, managing major events becomes a normal part of a bank's standard operation rather than a unique and stressful problem.

One recent example was the imposition of Russian sanctions. All major financial institutions have had to work out how to respond, defining the scope of affected entities, collecting appropriate data sets, making decisions, and putting in place tracking and governance. This has all had to be completed at incredible speed, but without systems to analyse and control it, the Front Office is left to manage the impact via a manual process on spreadsheets and email.

With true digitisation, everyone can rapidly access a golden source of trusted legal agreement data. The process of identifying the counterparties to be included in any decision, and analysing the course of action to take based on their terms, can happen in days rather than weeks or months.



Smarter decisions

The evolution of data repositories has been driven by projects, which has created problems in the long term. When firms have invested in extracting data from legal documents, they've done it with a single purpose in mind. For example, there may be a change in regulations, which means they need to assess all of their agreements and make amendments to comply.

When the next regulatory or market change comes along, they need to set up a different tactical solution to analyse their agreements. This results in disparate solutions, which are redundant when the market and industry changes as there is insufficient data shared between the two systems. Furthermore, the data is lacking the connection needed to be sure of context—something that can only be achieved by going back and looking at the physical document.

More strategic solutions create a central golden source of agreement data and an unbreakable bond between the underlying legal text and the extracted data. This means that no matter what the event is, be it a piece of new legislation or a market event, all the agreements can be analysed quickly, without the need to locate the PDF, which leads to more effective and smarter decisions.

Major cost saving is achievable

The research shows that digitising legal agreements can save approximately US\$1,700 per agreement in operational costs. This is calculated from an Aite Novarica proprietary model and includes:

- Securing the agreement and/or amending terms after negotiation
- Reconciling the data obtained from the agreement with counterparties to resolve business exceptions on an as-needed basis

Speed to market

The research demonstrated that all participants suffered delays in their speed to market as a result of onboarding and the time spent negotiating agreements. One UK bank said it can take months and even years to repaper an agreement with a large manager for non-standard agreements.

One of the important benefits of having legacy agreements digitised is that you can understand all the clauses that you've previously negotiated and identify what's worked and what hasn't. This readily available digital playbook then allows you to do what's best and drive more standardisation so that you can reduce time spent negotiating agreements.

If you want to read findings in full you can access the independent study here:
likezero.co.uk/insight/whitepaper-an-independent-market-study-by-aite-novarica/

STEPS TOWARDS THE FUTURE

DIGITISING LEGAL AGREEMENTS SAVES

\$1,700

PER AGREEMENT ON AVERAGE



MAKING THE CHOICE

THE RIGHT SOFTWARE

If a firm wants to take steps towards a better future by minimising operational risk, reducing cost and manual processes and access meaningful agreement data to save decision-making time, it can only happen with the right solutions built with a specific industry in mind.

Likezero has pioneered a different way of managing and capturing data from the most complex legal agreements. Our data framework manages all the data artefacts required by senior management for difficult decision making and enables firms to maximise opportunities out of their client relationships. Our software achieves this through data mining and matching techniques to capture data. Our data framework manages complex hierarchies of entities, documents, and terms. The result is a true golden source of agreement data, where clients benefit from:

1. **Usability:** Structured data that can be consumed by line of business systems and reporting tools. Additionally, ad hoc outputs that can be used to interrogate contractual risks at scale for better decision making (regulatory, market events and disputes)
2. **Improved data processes:** Data outputs which enable clients to improve front to back data processes such as amending documents and changing terms data driven events
3. **Improved quality:** Accurate and completed data sets that can be verified against actual agreements at scale
4. **Auditability:** Data outputs with complete context as there is a dynamic link between the legal text and structured data. This accelerates risk decision making by removing the need to go back to the original PDF
5. **Hierarchies:** Managing complexities of document, agreement, and entity hierarchies to provide highly consumable data with the flexibility to read across entire portfolios of agreements
6. **Efficiency and cost reduction:** Immediately start collecting data from any contract type as there is no need to configure, write and test 'rules'

CASE STUDY

High level data reconciliation results:

A sample of the data output from Likezero was reconciled against the data within the investment bank's live collateral management systems to assess the quality, completeness, and accuracy of Likezero.

100%

Importantly, the match percentage between their collateral management system and the legal document should

Global Investment Bank

Likezero successfully digitised a wide range of complex Credit Support Annexes (CSAs), including French and German language, for a global investment bank. Each CSA had varied legal and operational data points, chosen specifically for their non-standard terms and importance to their business. A high level data reconciliation was performed using the Likezero data output against their live operational data pulled from their collateral management systems.

Process

All documents were loaded into Likezero, hierarchies were established (entities, funds, amendments etc) and up to 150 data points were captured per agreement. We used this data output to identify hidden operational risk and performed in-depth analysis on all the key operational parameters to highlight areas of the collateral management system that did not align to the legal agreements.

Initial Insight

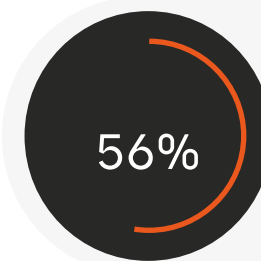
Digitise agreements to obtain insightful discoveries regarding the relationship between data and documents.

Deep Dive Analysis

Understanding counterparty risk profile is key. We used the software in areas of the most concern where we suspected unknown operational risk could be hiding.

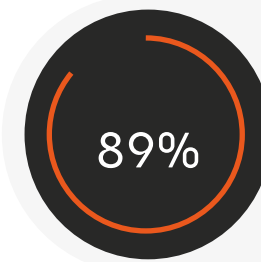
Immediate Data Enhancement

Exploration of hidden operational risk to ensure the data matches the documents. Achieve immediate enhancements to live operational data.



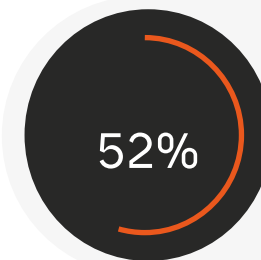
Base Currency & Eligible Currency

- Likezero identified over 40 funds incorrectly set up as USD vs EUR in the investment bank's collateral management system for a specific agreement
- Attributed to a 56% coverage of what was in the CSA vs the live collateral management system



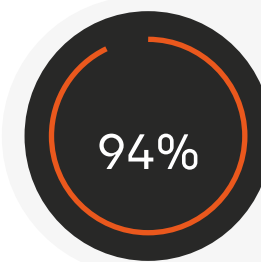
Credit Support Obligations

- Multiple thresholds and Minimum Transfer Amounts (MTAs) were reconciled with issues identified around missing event triggers i.e. zero credit support, event of default, leading to an overall coverage of 89% of the CSA
- Complex margin cap calculation tables not captured within the collateral management systems
- Date range dependant thresholds not captured within the collateral management systems



Distributions & Interest

- Likezero discovered over 40 funds could be accruing interest in the incorrect currency, affecting 52% of the agreement
- Legal drafting errors identified where principals had been added to the agreement in specific currencies. The relevant interest rates had not been added to support potential cash balances



Contractual Parties

- Likezero identified two funds from an agreement that were left incorrectly active within the investment bank's collateral management systems due to issues with the legal drafting process which resulted in a 94% match



Likezero was able to pinpoint specific amendments that triggered a change in key operational parameters such as; Base Currency, Valuation Date Location, Notification Time, MTA. Likezero identified key operational parameters had been missed and, in some cases, added incorrectly to their Collateral Management systems. Our solution has significantly helped the bank reduce operational risk and cost going forward by providing them with a trusted golden source of agreement data to feed their collateral systems.





Likezero has developed the next generation in software designed to support financial services firms. Our data outputs enable firms to improve quality, reduce cost and more importantly save time on difficult decision making to manage legal, credit and operational risk. Our vision is to be the most trusted authority for contract data in the industry.

Established in 2016, we grew rapidly within a large global consultancy culminating in a management buyout in 2020 to form Likezero. We count some of the world's largest global investment banks, asset managers, insurers, and central infrastructure providers as our clients. We have joined forces with S&P Global Market Intelligence and Acadia who also provide solutions to their clients that incorporate software. We continue to deliver precision and unrivalled return on investment through our proprietary data mining and matching techniques.

Learn more at likezero.co.uk

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For more information on our **collateral agreements solution** please visit: likezero.co.uk/insight/case-study-european-investment-bank-collateral-agreement/

