

CAPCO

AUTOMATING LOAN AGREEMENTS

A CASE STUDY WITH XCEPTOR



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1. INTRODUCTION

The aim of this paper is to provide an overview of Xceptor, its industry applications, and a Loan Agreement Automation use case. The use case, implemented by the writer at a Tier 1 investment bank, pertains to documentation automation (loan agreements), a very manual process within a middle office, with downstream (timely delivery to clients, access to credit for clients) and upstream (Business as usual (BAU) simplification,

FTE saving and more) impacts. This specific use case provides an example of how an automation platform can be utilized to solve BAU problems. The automation of loan agreements can pave the way for other use cases based on data ingestion, process digitization and delivery, and spark ideas of other suitable processes within the financial services industry.

1.1. WHAT IS XCEPTOR?

Xceptor is a platform that brings together a powerful data engine and process digitalization into a single no-code solution, which can therefore be configured by non-technical users. Able to handle complex processes from end-to-end in a flexible, replicable, and scalable way, it can be tailored to suit different automation needs.

Xceptor is a leader in no-code data automation and offers various solutions to simplify BAU in banking, financial services, insurance, and many other sectors. The platform processes

complex data ingestion using different input formats, both structured and unstructured, from a wide range of sources (to name a few: Excel, PDF, Word, API), analyzes, combines and validates the data based on smart rules using a simple and intuitive user interface. At the end of the automation process, it can also generate output files, in a wide range of formats, which can then go to directly to clients or be used internally within an enterprise. There are various interesting capabilities for which Xceptor can be leveraged and make everyday life easier, whilst improving data quality, reducing risk and FTE dependency.

NO-CODE DATA AUTOMATION



Data extraction, data transformation, process digitisation in a single platform	No-code enables quick deployment and easy config updates by business users	Common platform handles unmatched scope of simple to complex processes
Proven by its customers	Banking, Financial services and insurance specialists	Validated by its Partners
Scalable architecture	Recognised by the industry	AI-inside

2. ISSUE: OLD FLOW

BAU – loan agreements drafting

Within the Credit Middle Office at a Tier 1 investment bank, a member of the team, fictionally called 'Contract Specialist' or the 'CS', is responsible for the drafting of all credit documentation for asset wealth management EMEA clients. CS works in partnership with the Front Office to deliver various types of legal agreements to the firm's clients, including but not limited to new loan agreements (CFAs), amendment, cancellation letters, pledges, guarantees and others.

Drafting time for documents varies, but for vanilla facility agreements (CFAs), it conventionally takes one hour. Bespoke loan agreements including financial and personal covenants or non-standard deal structures require more time, say two to three hours. For complex deal structures, the CS has to reach out to Legal and validate the non-standard language, like a new covenant clause. Over a year, as a conservative estimate, CS can commission around 100 new CFAs and 200 amendment

letters, for just one of the Bank's EMEA markets. It is clear that reducing total drafting and delivery time was of paramount importance for the firm.

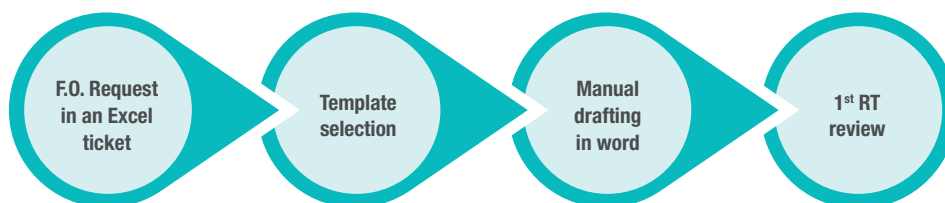
The templates upon which CS drafts the loan agreements, created by Legal, are stored on SharePoint. Based on the type of loan requested (Uncommitted vs Committed lines, Committed Revolving vs Committed terms and others) CS has to select and download the right type of template from SharePoint, save it onto their local machine, and then complete it with changes tracked. This allows the Review Team (RT) to check and track all changes made to the template.

Documentation drafting spans across **two stages**:

Stage 1 in Microsoft Word, is a very manual process during which CS has to make sure that the information received in a deal ticket matches the approval from Credit Risk, perform the required due diligence on all client data (address, ID, etc.) and then key in all the relevant information. Often, CS must cut parts of a template or copy-paste the same attribute (example: amount of the facility, name, and address of the Borrower etc) over and over again.

This manual drafting process bears several risks: typing errors, selection of template, incorrect dates, mis-spelling names, and many others. Once the documentation is ready, it is sent to Review team (RT) for their first review.

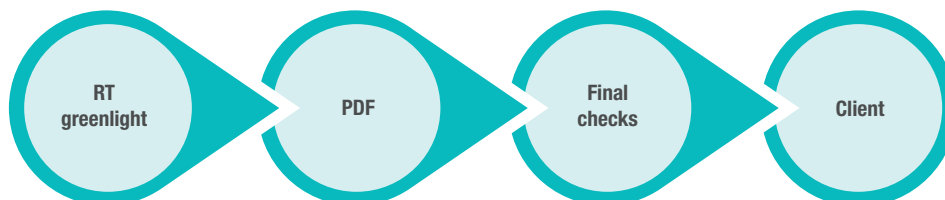
STAGE 1



Stage 2, in PDF, is another manual process where CS has to convert the contract or documents into PDF format and perform final checks, such as page numbers, spacing, etc. Final PDF docs are then sent to RT for their final review.

Clearly, manual drafting (stage 1 and 2 plus RT review) takes a long time and is prone to several human errors.

STAGE 2



3. SOLUTION: NEW FLOW

BAU of Contract Specialist (CS)

In the previous section, we discussed how manual documentation drafting required several steps before contracts could reach a client. This would increase workloads for CS, RT and the other teams involved in the process and, on the other hand, impact delivery-to-market, which was slowed down by the complexity of the flow.

Recapping, the seven stage pre-Xceptor flow would look like this:

MANUAL FLOW



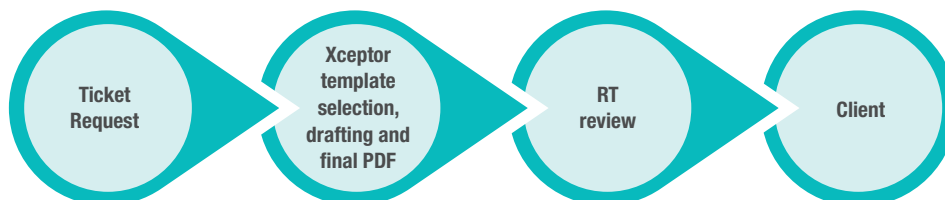
Solution: simplify the flow by implementing Xceptor for Loan Agreement Automation, thereby drastically reducing time-to-market thanks to the elimination of three unnecessary steps of the deal delivery process, with great time/risk and FTE savings. This solution allowed for FTE savings between one and one-and-a-half FTE for the UK market only, considering the reduction of drafting time by 45 minutes per deal (please note, this is an estimation only as drafting time even for vanilla loans

varied based on the client, speed of work of CS and other factors).

Other benefits are listed on page 8 (Impact).

New flow/process: documents are generated using Xceptor, avoiding the inefficient manual drafting process:

XCEPTOR FLOW



4. APPROACH

Loan agreements, amendment and cancellation letters are now generated with Xceptor, cutting down several stages of the original drafting process, whilst increasing delivery speed to market and quality of output.

Automating loan agreements was an interesting journey, on the one hand because it was the first team to successfully implement it and, on the other, because Xceptor had not been used in that space just yet. There had been initiatives in the past that used different tools or created brand new systems for this exercise, however none of them had been successful. Some

failures were linked to the poor quality of generated outputs, others to the complexity or high costs associated with building and maintenance of a tool. Xceptor is budget friendly and can be licensed for unlimited use cases. This combination makes it an ideal platform to build solutions that are tailored to a client's needs.

Three key steps were taken to achieve loan agreement automation:



1. Mapping existing templates:

The team mapped 24 different combinations of facility agreements and all possible combinations for amendment and cancellation letters, leveraging the existing operating model, and end-to-end flow, but making it smarter, quicker, and more efficient!



2. Building rules: build all the rules as Xceptor could generate the correct loan agreement based on the information received. To minimize the impact on Front Office users and leverage as much as possible the existing operating model, hidden rules were built in the Excel ticket file already in use. This tweak to the existing ticket allowed Xceptor to populate a ready to market PDF contract tailored to a client's needs.



3. Configuring: Making the platform work with bespoke agreements and more tailored client requests, such as covenants and other amendment to the T&Cs. This prompted (especially for amendment letters) a new cutting-edge design, whereby the entire template was re-built and stored in Xceptor and then populated with all relevant deal specific attributes. This new design is important because it proved that also documents in a letter format could be automated.

5. IMPACT

Impact and interesting facts

The positive impacts of the Xceptor Loan Agreements Automation include:



No manual template selection and download.



No back-and-forth emails with different teams before delivery to market.



No more manual typing of attributes several times in the same contract, with reduction of risk.



Simplified teamwork that cuts out all unnecessary steps: Review Team process cut by one step and at least 3 hours of waiting time. Quality of output also improved as human typing and selection of template risk of errors is reduced to zero.



Significantly reducing drafting times: In this case study, drafting went from 1 hour to 45 seconds plus 5 minutes for a sanity check of the ticket/output.



Delivery to market assuming an average of 4 hours for a vanilla CFA between drafting, RT, checks, etc., can be **reduced by 85%** (provided all teams were ready to work on the deal).



Xceptor-generated templates are **compatible with DocuSign**, allowing clients to sign and access credit without having to physically meet their banker/lender. This is a solution which helped businesses thrive during Covid.

Here are some interesting facts about it:



The platform is smart enough to work on rule-based input: this translates into avoiding manual repetitive tasks from a BAU team. Once those tasks are mapped, they can be replicated infinitely. Xceptor can ingest, read, and use a variety of different file formats, ranging from Excel to PDF (including machine readable) but also scanned images: this makes the platform **scalable, resilient, and tailorable** to a client's specific need.



Xceptor is **designed for re-use**: a very similar process to what was done for CFAs was later utilized to map and work on amendment and cancellation letters, albeit those two templates being in a different format and content. An Xceptor automation flow can be hence replicated to cater for other documentation-based processes, such as client outreach letters, Libor re-papering, Brexit communications and many more.

6. DESIGNED FOR RE-USE



Xceptor is a platform designed for re-use, as similar mapping exercises can cater for a plethora of business needs. By way of example, the platform is currently being used for KYC functions, to merge, analyze and cleanse data from different sources and generate an output that combines those, to be then stored in the internal client's repository. This initiative has the potential of saving FTEs for all teams involved in KYC or onboarding activities.

For onboarding, we could think of an automated account opening document for clients or a tool that monitors updates and keeps a client file always up to date: a use case that is being discussed at another tier 1 investment bank.

Another interesting use case could be analyzing a corporate client's file such as their statute or Companies House extract to validate who has the power of signature or monitor updates in the directors' composition. Both of which were activities performed at various levels for the delivery of loan agreement to corporate clients, described above.

Xceptor can also be configured to work with APIs from public registries allowing for even faster and more automated processes – this functionality is currently being investigated for one of the use cases here at Capco.

With Xceptor, the platform can be configured to cater for a variety of use cases and business areas:

BANKING, FINANCIAL SERVICES AND INSURANCE SPECIALISTS

CAPITAL MARKETS	SECURITIES SERVICES	ASSET MANAGEMENT	FUND SERVICES	INSURANCE
<ul style="list-style-type: none"> Trade Confirmations Standard Settlement Instruction Client Allocations Legal Outreach (CSA, IBOR...) Regulatory & Client Reporting: SFTR, Mifid II Collateral Management Trade Validation 	<ul style="list-style-type: none"> Account Opening Trade Capture Broker Pricing Broker Statements Trade Blotter Reconciliation Client Billing Fund Migrations Subscriptions & Redemptions Tax reclaims/QI Reporting 	<ul style="list-style-type: none"> Capturing Client and Broker Statements Cash & Position Reconciliations External Money Management Failed Trades Management Factsheet Checking, Capture Cash Flow Updates 	<ul style="list-style-type: none"> Invoice management, Confirms Capture Cash Monitoring Term Loan Processing Fund Migrations PE Statement Capture & Processing Cash Monitoring 	<ul style="list-style-type: none"> Catastrophe Modelling Marine Insurance Underwriting Mifid II PE Statement Capture & Processing Solvency II Bordereaux Processing Priips

Source: Xceptor

SHORTLIST OF POTENTIAL OPPORTUNITY AREAS

FUNCTION		DESCRIPTION	
A	Contact and Onboarding	KYC (Know Your Customer)	Identifying and verifying individuals or institutions
C	Post-Trade Operations and Asset Servicing	Trade Reconciliation	Reconciling and matching trade data
		Cash Reconciliation	Reconciling and matching cash balances and accounts
		Exchange Reconciliation	Reconciling and matching exchange-related data
		REPO Agreements	Short-term borrowing of government securities
		Settlement Instructions	Standard terms to facilitate transaction settlement
		Reference Data	Counterparty and security identifier data
D	Compliance and Regulatory	Regulatory Reporting	Mandated reports to fulfil regulatory requirements
E	Legal and Finance	Operational Tax	Client related tax and reporting
		Tax Reclaim	Claim of withholding tax

Source: AFME, *Industry Utilities: A Perspective for Capital Markets*, 2018, p.17

7. CAPCO'S PARTNERSHIP WITH XCEPTOR

How Capco and Xceptor complement each other

Leveraging Capco's financial services insight and digital transformation experience, together with Xceptor's no-code data automation software, can help deliver high quality and tailor-

made automation solutions to clients. There are plenty of use cases just waiting to be developed and Capco is here to help businesses achieving their goals.

CAPCO

Fields of expertise:

- Capital Markets, Wealth, Asset Management, Insurance, Retail and Payments
- Change management, process optimization, business analysis, project/program management, operating model design and regulatory change expertise
- Industry leaders in technology integration, modern architecture design & digital solution implementation.

Capco will:

- Identify use cases across our network of financial services clients
- Manage the delivery of Xceptor implementation projects
- Configure Xceptor for specific use cases
- Execute other consulting work around Xceptor implementations (process design, operating model design and others).

XCEPTOR

The Xceptor platform offers:

- An enterprise-grade data engine
- Comprehensive process functionality
- End-to-end automation of simple to complex processes
- No-code configuration, which is quick to deploy.

Xceptor will:

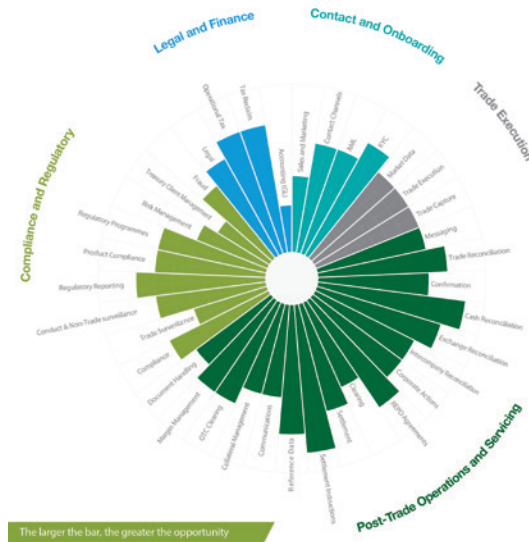
- Work with Capco's consultants to deliver automation to clients
- Provide SME where required for configuration support.

8. OTHER USE CASES FOR XCEPTOR

Capco and Xceptor can partner to deploy many use cases across many fields, ensuring faster and more efficient processes, cutting down costs and allowing for FTEs saving across various functions.

Truly industry-wide coverage:

- Legal
- Compliance
- Regulatory
- Trade reporting tools
- Reconciliation of data
- Remediation of client book
- LIBOR
- Reg reporting
- OTC clearing.



Source: AFME, cit., p.16

9. CONCLUDING REMARKS

This whitepaper has shared what can be achieved by automating BAU processes utilizing a platform like Xceptor. Indeed, the described use case can offer guidance and spark interest on the capabilities of the platform but also on the other opportunities with intelligent automation. Many industries have already embraced operational change, and we believe investment banks and other businesses working in financial services should embrace artificial intelligence powered solutions to simplify their operating models.

The use case on loan automation grafts onto the very traditional and conservative legal world, that has for the longest time resisted change. It proved that there

can be positive synergies between technology and law and that the possibilities are endless. In my previous experience as a barrister, whilst discussing cutting-edge solutions (blockchain, automation, etc.), I often heard remarks such as 'You cannot do it, you will not achieve it' and, looking back to five years' ago, few people could have imagined they would be able to e-sign a contract (DocuSign or similar), let alone have one generated by a platform in 45 seconds.

Modern day platforms unlock the door to achieving more complex automation than we thought possible just a few years ago. The key is to embrace these new technologies and take the leap.

AUTHOR

Gabriele Castagna

Xceptor Business Specialist
Capco Intelligent Automation

CONTACTS

Gabriele Castagna

Consultant
Gabriele.castagna@capco.com

Roland Inglis

Executive Director and
Head of Capco Scotland
Roland.inglis@capco.com

Peter Kennedy

Partner and UK Technology lead
Peter.Kennedy@capco.com

ABOUT CAPCO

Capco is a global technology and management consultancy dedicated to the financial services industry. Our professionals combine innovative thinking with unrivalled industry knowledge to offer our clients consulting expertise, complex technology and package integration, transformation delivery, and managed services, to move their organizations forward.

Through our collaborative and efficient approach, we help our clients successfully innovate, increase revenue, manage risk and regulatory change, reduce costs, and enhance controls. We specialize primarily in banking, capital markets, wealth and asset management and insurance. We also have an energy consulting practice in the US. We serve our clients from offices in leading financial centers across the Americas, Europe, and Asia Pacific.

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