

# Reinventing Syndicated Loan Processing with Distributed Ledger Technology

## Abstract

Syndicated loans are assets traded over the counter, and cleared bilaterally. Unlike other asset classes, a syndicated loan is processed manually, requiring a significant amount of information exchange between multiple stakeholders, making it a time-consuming activity. Non-standard communication methods contribute to longer loan settlement times, which introduce risks in the market, lock up capital, and affect the wider financial landscape.

Distributed Ledger Technology (DLT) can simplify loan trading and settlement with its smart contract and real-time settlement capabilities. It has the potential to streamline post-trade loan processing through automated sharing of standardized information through the distributed ledger, thereby shortening the settlement cycle.

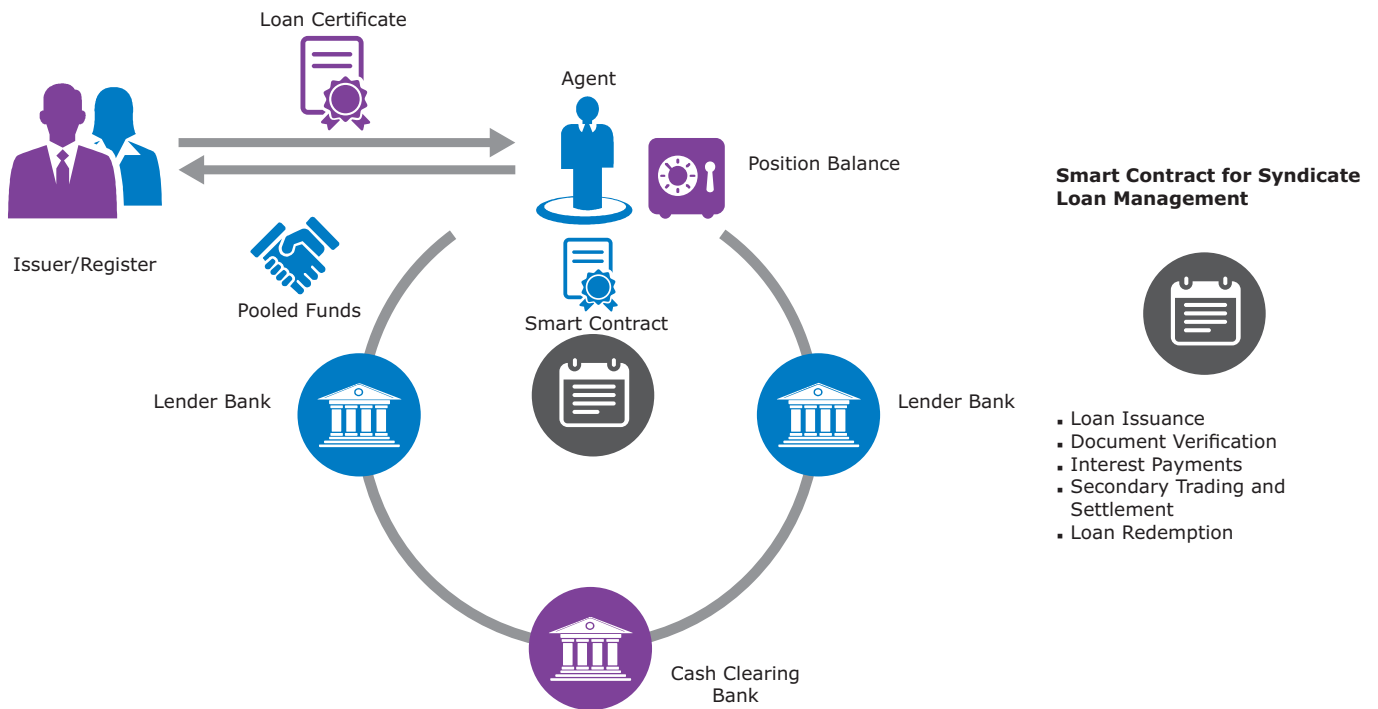
## The Challenges of Syndicated Loan Processing

Syndicated loans are highly-customized financial products that require significant information sharing between various stakeholders, as a result of which the settlement time is longer compared to other asset classes. The post-trade loan processing is cumbersome and time-consuming as it is performed manually, thus resulting in higher operating expenses. The key challenges faced by financial institutions in the current syndicated loan processing system are:

- **Lack of Standardization** - The syndicated loan agreements are non-standard in nature, as each loan is highly customized, based on terms and conditions such as loan type, loan structure, and call options.
- **Long Settlement Cycle** - Post-trade processing is largely paper-based, antiquated, and manual, resulting in longer settlement cycles, elevated counterparty risk, lower liquidity, and high settlement costs.
- **Dependency on Data Providers** - Obtaining the loan position reconciliation is crucial to timely interest payments, however the involvement of multiple lenders and intermediaries complicates this process. Currently, lenders and agents have to depend on independent data providers to obtain loan position information for reconciliation.

DLT can simplify syndicated loan processing with its smart contracts and distributed ledger features, thereby reducing settlement cycle time. This will reduce counterparty risks and increase liquidity in the market, thus bringing syndicated loans aligned with other asset classes.

The system is built and maintained by an administrative agent or an industry consortium that functions as a sponsor, while issuers and lenders are the participants. Adopting a distributed ledger solution will help address the challenges created by the slow pace of technology adoption in the syndicated loan processing space.



High-level overview of the new syndicated loan ecosystem leveraging the DLT infrastructure

## Key Features of a Distributed Ledger Solution

The main characteristics of DLT include:

- **Standardized Processes** - The distributed ledger system generates standardized loan credit agreements with smart contracts based on configurable rules such as pricing, interest rate, and maturity period. The standard interface allows easy information exchange between issuers and lenders. Also, the distributed ledger system allows secured exchange of documents through standard protocols.
- **User-Friendly and Automated Process** - The graphical user interface provides access to workflow applications for appropriate manual interventions. The distributed ledger system automates loan servicing functions such as interest payments and loan redemption. The audit trail components enable increased transparency and traceability.
- **Permissioned Solution** - It enables controlled onboarding of member banks at the time of loan issuance and secondary trading. The distributed ledger system offers a ledger that is managed and controlled by agents.

## Benefits of a Distributed Ledger System

### DLT can be used to manage various processes such as:

- Syndicated Loan Issuance
- Secondary Trading of Syndicated Loan
- Syndicated Loan Servicing—Interest Payment
- Syndicated Loan Servicing—Loan Redemption

### The key advantages of DLT include:

- **Shorter Settlement Cycle** - With electronic exchange of documents between stakeholders, generation of smart contracts, and provision of manual intervention in workflows, a distributed ledger system can shorten the settlement cycle drastically to one day, or even offer near real-time settlement from the typical industry norm of twenty days for distressed loans and seven days for other loans. This results in lower counterparty risks, improved liquidity in the secondary market, and reduced clearing and settlement costs.
- **Increased Straight-Through Processing (STP)** - Automation of syndicated loan processing through appropriate workflow applications for manual intervention leads to higher STP and lower operational costs, and results in timely repayments to lenders.
- **Improved transparency** - Enables tracking of loan settlement status at any point during the loan trade lifecycle.
- **Lower Dependency on Intermediaries** - DLT reduces excessive reliance on intermediaries for processing of syndicated loans, which leads to the disintermediation of such intermediaries, thus resulting in lower costs and risks.
- **Improved Access to a Global Loan Repository** - The distributed loan position ledger can function as a global loan repository, and therefore a golden source of loan information that can be shared with authorized market players such as traders and buy-side firms. The global loan information can help traders and buy-side firms make appropriate secondary loan trading decisions.
- **Elimination of Reconciliation Efforts** - DLT eliminates the need for position reconciliation, as the distributed ledger position is immutable, and a single source of truth. It also enables easy computation of balances and interest payments due to real-time loan position updates.

## Conclusion

Currently, syndicated loan processing is largely paper-based, antiquated, slow, and inefficient, resulting in longer settlement time and higher operating expenses. The DLT-enabled platform can truly transform syndicated loan processing, with its standardization and automation capabilities. The technology can deliver significant cost benefits to the stakeholders, and help in growing the syndicated loan market

Banks can adopt a consortium model to industrialize the DLT solution for syndicated loans in three phases over a two-year period. In the first phase, DLT can be developed for syndicated loan issuance and book keeping of loans. In the second phase, DLT can be developed for syndicated loan interest payment and syndicated loan redemption. In the last phase, an alternative ecosystem with underlying DLT can be developed for secondary trading of syndicated loans.

### About The Author

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