VIEW POINT

COLLATERAL MANAGEMENT - UNLOCK VALUE IN LENDING LIFE CYCLE

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Introduction

"Collateral" is a common term used frequently in the context of borrowing money. The process of leveraging a collateral against a loan provided to individuals and business customers has been in existence both in formal & informal lending. Collateral in a lending transaction is a security to mitigate default risk by staking claim on the asset in case of non-payment of dues by the borrower.

Since the financial crisis of 2008, regulators have introduced new guidelines to monitor credit exposures, oversee practices related to credit risk & tracking granular credit information. The guidelines from EBA (European Banking Authority) on credit risk assessment methodology requires a historical observation period of at least five years. To maintain a historical snapshot, investments are required in preparing dedicated data platforms for risk modelling, track data lineage & accurately report information to regulators. Recently, Bank of England had fined a leading US bank for incomplete regulatory information. Leading financial institutions being fined over non-compliance has been reported across US and Europe. Hence, the need to report accurate information remains a foremost priority. The global regulatory spend is expected to grow to over $300 billion in the next five years.

With the COVID-19 threatening to impact economies across the world, lenders will have to focus on stress testing their portfolios to evaluate capital positions and make it available for regulatory review. To reduce the burden on banks, Bank of England has proposed to cancel the stress tests as part of the relief measures. While this provides a temporary relief, it is imperative for banks to understand the resilience of their balance sheets against the looming crisis.

There are dedicated solutions for collateralization of capital market products while a dedicated solution for retail and wholesale lending has not received due attention. The post crisis era required stricter governance to acquire, record, manage, store & report collateral data.

Functions & challenges in the collateral management process

Collateral management processes have multiple touch points across the credit origination, fulfilment & monitoring processes. The tightly coupled functions in the credit and collateral process is illustrated below,

Collateral process	Credit process
Collateral acquisition	Credit intake
Collateral valuation	Credit analysis
Collateral allocation	Credit offer
Collateral perfection	Credit fulfilment
Collateral review	Credit monitoring
Collateral release/liquidation	Credit re-structure/recovery

Collateral acquisition capability covers the onboarding of asset & collection of collateral data. For example, a commercial real estate property requires data related to the floors in building, occupancy status, tenants, rental contracts, rental income. In case of ships, the type of ship, purpose and usage related details are to be collected. The legacy platforms hosting the collateral management module are not flexible enough to accommodate new types and growing data requirements.

Collateral valuation capability covers the asset valuation process. The market value, assessment methodology, appraiser details & valuation dates should be recorded. The calculation of the risk parameters like expected loss (EL), loss given default (LGD), development of risk models & risk-based pricing relies on the availability of accurate collateral information. For Targeted Review of Internal Models (TRIM) program, it is essential to use valuations throughout the lifecycle for credit risk modelling. The existing solutions do not enforce the capture of information resulting in poor data quality or even missing information.

Collateral allocation capability covers the linkage of an asset to an exposure or multiple exposures. This capability provides risk managers a view on the risk weighted assets (RWA) capital required to be maintained against the exposures. The lack of real time view on cross collateralization leads to reactive & judgmental process rather than proactive & predictive process in determining early warning triggers.

Collateral perfection capability covers the registration of the asset and establishing the lender's claim on the asset. Typically, banks would like to have the first claim on the asset so that the probability of recovering funds is greater in case of delinquency. The process to register the claim with the notary is quite extensive, documentation heavy and manual process. Lack of automation in legacy processes can result in a delay to release funds.

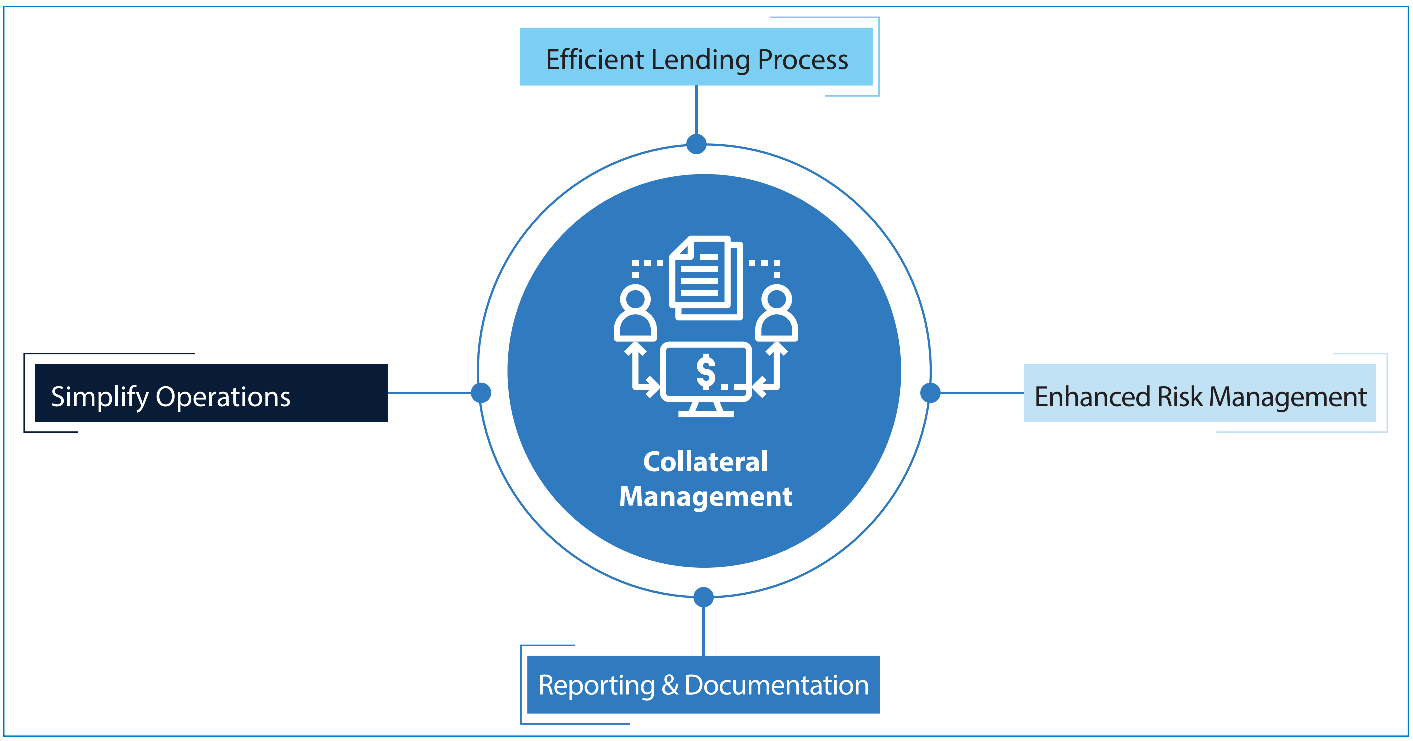
Collateral review is driven by the need to determine the current asset value & review the agreement. For volatile assets like stocks, valuation will need to happen on real time basis. IFRS9 require banks to calculate 12 month expected loss for assets in Stage 1 and lifetime expected loss for assets in Stage 2 and 3. For ECL(expected credit loss) calculations, it is important to capture the updated collateral value.

Collateral release/recovery is required to ensure the claim on collateral is released once the obligations are met by the borrower. The release process requires the notary to be informed of lien cancellation on the mortgage. In case the obligations are not met, then invocation of claim is required to liquidate the asset and recover the loss. The liquidation process will require the collateral management system to record the recovery values.

To summarize, the key challenges for collateral management are:

- Lack of support in capturing wide variety of assets & related information
- Detailed data sets on various asset types are not available in single place
- Valuation information is plagued by data quality issues & constrained by limitations in the legacy application
- Perfection is a manual & time consuming process
- Alert mechanisms to perform collateral review & tracking under collateralization are not automated
- Collateral recovery or release process is not streamlined resulting in manaual actions
- Unable to register multiple assets under single collateral agreement and vice-versa

Expectations from an ideal Collateral Management Solution



Simplify operations

- End to end workflow management to avoid manual errors & data redundancy
- Automate the calculation process of deriving the net collateral values, expected recovery values
- Clear segregation between the asset & registration of asset to cover exposures
- Ability to maintain the linkages between collateral & exposures to be covered. (ex: cover entire exposure of counterparty or a specific facility)
- Support the recovery process by capturing re-possession details & recovery costs

Efficient lending process

- Support a variety of collateral types
- Capture allocation of collateral to various exposures to reduce risk weighted assets
- Optimal allocation of RWA (Risk weighted assets) thereby identifying the potential to lend more
- Flag exception on credit applications not confirming to the collateral policy including calculation of Loan-to-Values (LTV)
- Provide seamless experience to customers with a streamlined registration & release process
- Real time event-based feeds to track important events in the lifecycle & valuations

Enhanced risk management

- Deliver better quality data to credit risk evaluation
- Provide snapshots of data at different points in lifecycle accurately to enable better risk models
- Support review of collaterals as per policy definition
- Trigger alerts for under/over collateralization

Reporting & documentation

- Configurable dashboards to track various parameters Ex: cross currency coverage, expiry of collateral
- Able to deliver critical data elements for regulatory reporting ex: Basel IV, TRIM, AnaCredit etc.
- Accurately report the security interest over the asset (ex: lien on property)
- Capture the party details & roles related to collateral agreement and the asset
- Provision to track the collateral agreement & receipt of documents based on the asset type
- Provide data feeds on collaterals for stress testing on the loan portfolio

The non-functional capabilities like the intuitive user interface, security, audit capabilities, flexibility to host the solution on public, private or on-premise cloud, ease of integration into the IT landscape & availability of API's is also equally important to be considered while selecting a solution.

Implementation possibilities

Specialized off-the-shelf solutions:

The specialized solutions normally cater to most of the collateral types with a capability to scale up with new collateral types & capabilities are available out of the box. It improves time to market in acquiring new collaterals and managing the collateral process. With new regulations being published on a regular basis, it would help to collaborate with a partner capable of implementing these regulations through regular releases/updates. With software vendors rolling out products capable of functioning in an on-premise cloud or with leading cloud platform providers, financial institutions have an array of choices.

Extend the core banking solution through customization

Typically, a core banking /core lending solution is focused on host of capabilities to manage the credit lifecycle. A case by case evaluation will need to be done on the capabilities of the core banking system to determine the gaps in the collateral solution. Assuming there is limited support in the product, the possibility to customize exists. The customization option would require a dedicated team trained on product specific tools, perform a constant review of market practices to build new functionalities. Whenever a product release in planned, site specific customizations will need to be reviewed to assess impact. Software-as-a-Service providers prefer lesser customization to the product so that upgrading customers to newer product versions are relatively easier.

Fully customized solution using workflow tools

Today, low code workflow/platform solutions can be leveraged to build an end to end process quickly. The core capabilities will still need to be either developed separately as a service or re-used from existing solutions within the landscape. To deliver a flexible system requires time and effort across business and IT teams. Normally, the regulatory timelines are so strict that it requires development teams to often choose business deliverables over optimal design. This often results in accumulation of IT debt and maintenance is costlier.

Implementation challenges

- Capture the scope accurately and manage traceability. Due to changing business and regulatory circumstances, priorities tend to change. As a result, it is highly probable to have scope creep.
- Stakeholders mapping to understand the various groups & their motivations within and outside for program to be a success. Lack of clear mapping of stakeholders may result in missed set of requirements late in the program resulting in re-work & missed milestones.
- Legacy applications may not follow API or microservices based architecture and will require additional effort in integration solutions during the build phase. A team with good understanding on the IT landscape, data structures will strengthen the implementation program.
- Lack of clear documentation on the processes in legacy system will require time & effort to understand as-is processes & prepare to-be process workflows.
- Data quality issues can cause a lot of frustration as it requires dedicated resources across operations, IT & business to solve. To migrate quality data, it is important to understand the legacy data structures, profile the data & flag those issues.
- Business & Operation teams familiar with the existing processes are used to a certain way of working. Introducing a new process or changing the way of working is often met with resistance to change and can cause undesired results.

It is recommended to have a solution evaluation phase before the start of the implementation to gather stakeholder expectations. The validation process should provide a good insight on the changes required on the business processes, capability list, possible gaps in solution & data coverage in the reporting chain. A snapshot of the data model for each of the developed use cases would help data management & regulatory reporting teams to determine data coverage. To accelerate the validation process, glossary of terms used in the model would help to share a common language for stakeholders involved in the program.

Conclusion

The shortfalls in existing collateral management solutions will need to be actioned. An evaluation process to determine the collateral types, portfolio size, geographical spread & coverage of business lines would assist in coming up with an exhaustive list of capabilities. A team with strong understanding of the collateral business process, data models, prioritized capability list & high-level epics mapped to the capabilities can accelerate the program timelines. To deliver a seamless digital lending experience in an uncertain & socially distant world, it is imperative to effectively manage credit risk & free up capital by unlocking value of the pledged assets.

Authors

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