Loan System

Overview

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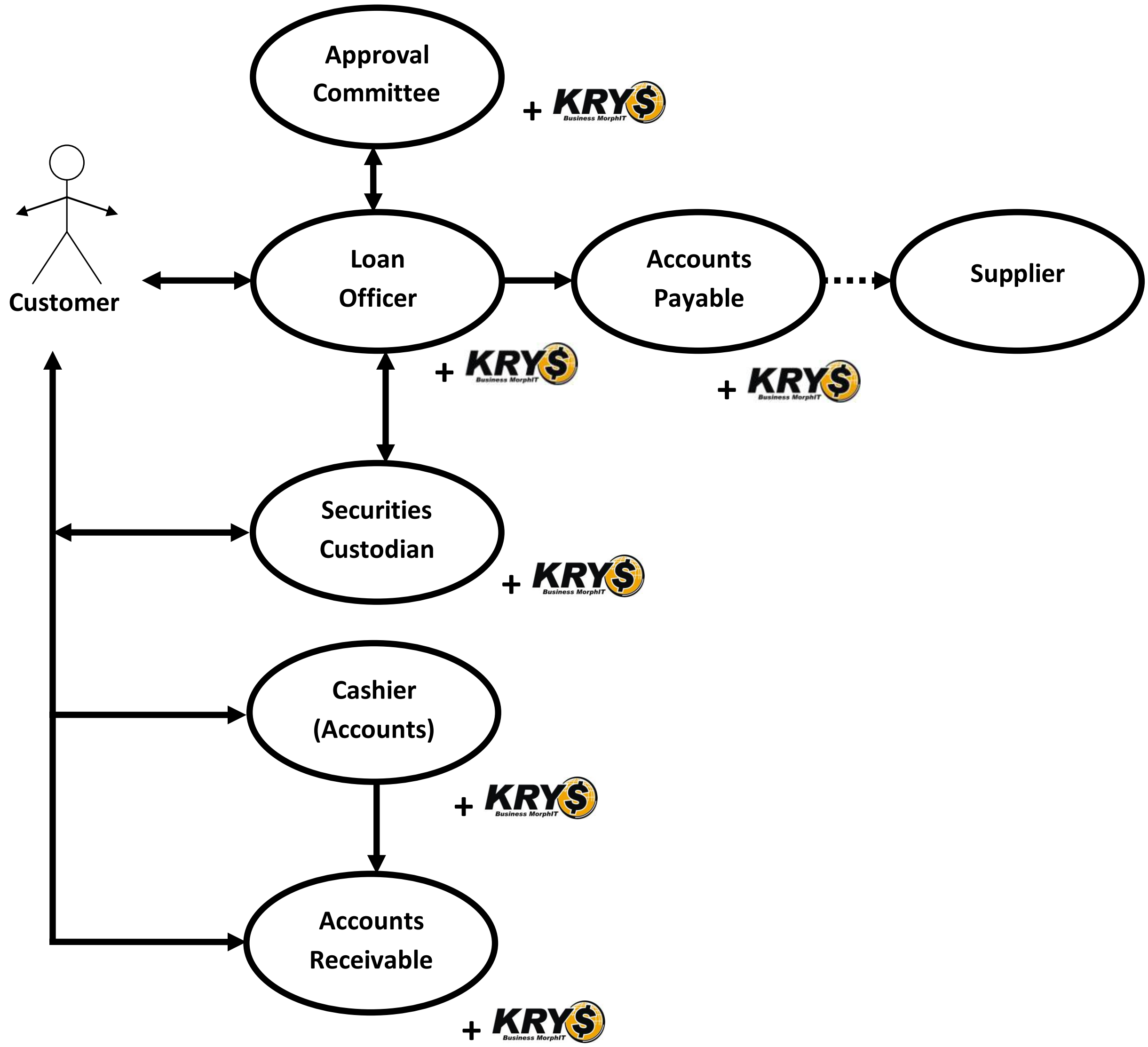
The KRY$ LOANS MODULE provides decision-making support for customers (borrowers) and lending institutions to effectively manage loan portfolios.

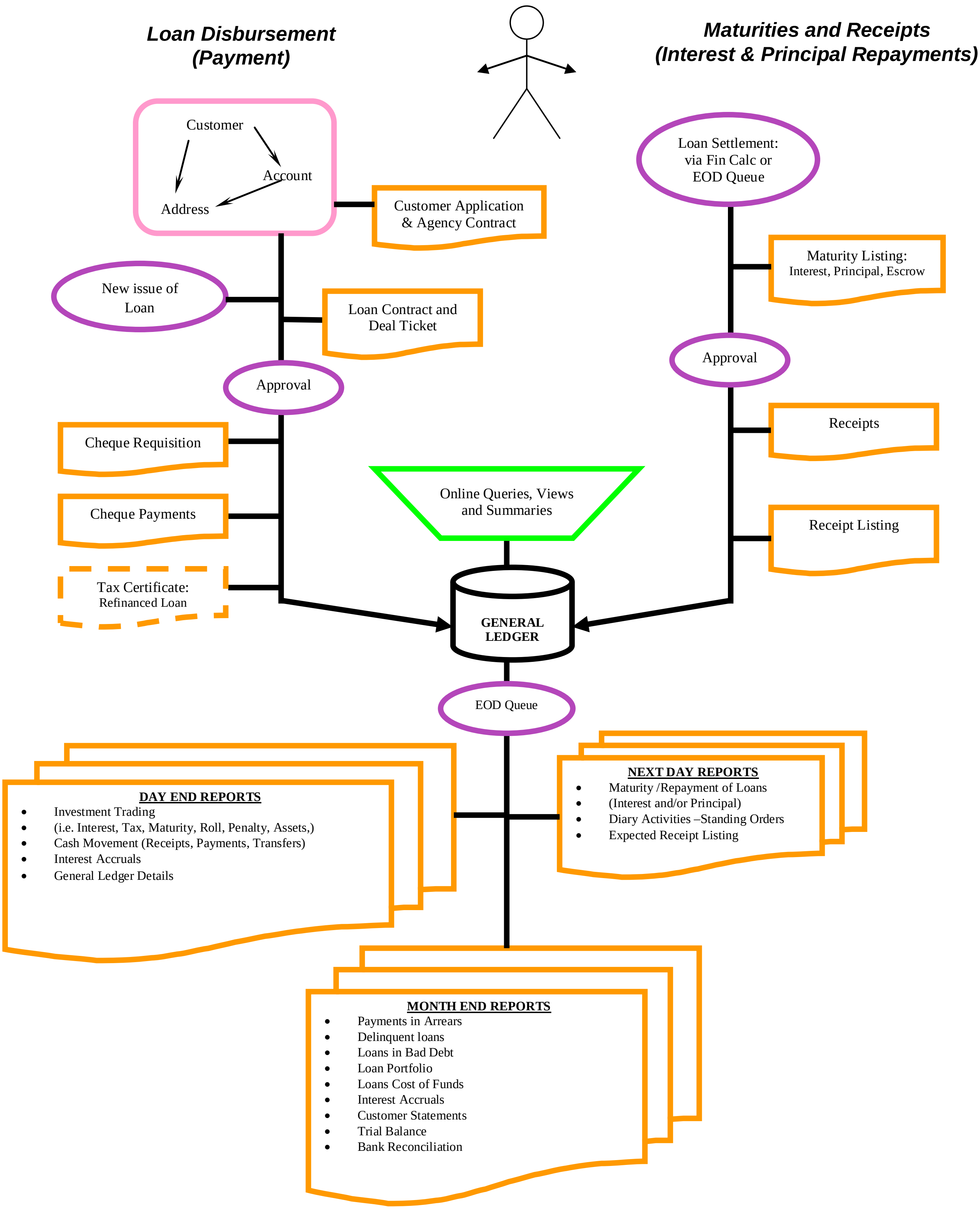
The following is a list of some features and functions of the KRY$ loans module:

- Customer Account and Address Maintenance
- Choice between Add-On, Reducing or Amortised calculation methods
- Fixed rate or Variable rate loan
- Loan re-payment due day/date and frequency
- Interest and/or Principal moratorium
- Moratorium interest: pay at due date or allocate payment over term of loan
- Generate comparative Reducing (effective) and Add-On (straight-line) rate
- Generate rate based on specified re-payment amount or vice-versa
- Produce Amortisation / Re-payment schedule
- Automatically or manually apply loan specific fees and charges
- Report projected Interest and Principal cash-flows
- Re-payment distribution options:
    - A combination of Interest, Principal or Escrow
- Hunt/allocate most suitable re-payment date to match payment received
- Automatically apply/sweep Escrow balance to loan re-payment
- Ability to apply Periodic or Daily interest rate to loan calculation
- Loan Early settlement, Refinancing/re-pricing at market
- Automated Cash-Book updates and Bank Reconciliation
- Automated Multi-Currency General Ledger updates
- Automatic Activity Audit Trail
- User, Menu, File, Record, Field Security
- On-line Routed Transaction Approval
- Integrates with Microsoft Word, Excel and other applications
- Automated / Unattended End of Day Reporting and System Maintenance
- Data Archiving Facility
- Hypothecation/ Lien Management
- Diary and Message Management
- Collateral (Vault) Tracking
- Extensive On-line Query Facilities
- Trading, counter-party and user limit controls
- Date Controls - G/L, Transaction Value & Holiday
- Reports:
    - Payments in Arrears
    - Principal Due -in Arrears
    - Principal at Risk – Delinquency
    - Principal at Risk – Bad-Debt
    - Client Statement of account
    - Cheques, Receipts, Certificates, Contract & Document Printing
    - Mail-merge Letters
    - Accruals, Receivables and Payables
    - Loan Portfolio & Cost of Funds
    - Cash, Tax, General Ledger, Trial Balance
    - Labels, Client Balance Listing
    - Exception Reports – Rate, Maturity

Loan Business Process Diagram



Some Applicable Regulation/Laws (see Loan Procedures Manual for further details)	Loan Officer	Approval Committee	Securities Custodian	Accounts Payable	Cashier	Accounts Receivable
Accounting Standards	√			√	√	√
Bankruptcy Act		√	√			√
Bills of Sale Act			√		√	√
Carriage of goods acts						√


Loan Disbursement
(Payment)
Maturities and Receipts
(Interest & Principal Repayments)
Customer
Account
Address
Customer Application
& Agency Contract
New issue of
Loan
Loan Contract and
Deal Ticket
Approval
Cheque Requisition
Cheque Payments
Tax Certificate:
Refinanced Loan
Loan Settlement:
via Fin Calc or
EOD Queue
Maturity Listing:
Interest, Principal, Escrow
Approval
Receipts
Receipt Listing
Online Queries, Views
and Summaries
GENERAL
LEDGER
EOD Queue
DAY END REPORTS
Investment Trading
(i.e. Interest, Tax, Maturity, Roll, Penalty, Assets,)
Cash Movement (Receipts, Payments, Transfers)
Interest Accruals
General Ledger Details
NEXT DAY REPORTS
Maturity /Repayment of Loans
(Interest and/or Principal)
Diary Activities –Standing Orders
Expected Receipt Listing
MONTH END REPORTS
Payments in Arrears
Delinquent loans
Loans in Bad Debt
Loan Portfolio
Loans Cost of Funds
Interest Accruals
Customer Statements
Trial Balance
Bank Reconciliation

Loan Schedule Reports

These report tables specifications of a loan and details of how the principal is expected to be repaid. Details include:

- Customer name and Account number
- Disbursement amount and date
- Interest rate (Effective and Add-on)
- Tenure and re-payment frequency
- Periodic re-payment amounts: Principal, Interest, Moratorium and Principal Balance

Client Statement Reports

These reports display the account balance and transaction activities relating to a specified period. Details include:

- Customer Name, Address and Account Number
- Issue date and Amount and Interest Rate
- Tenure and Periodic re-payment
- Principal Balance, payments in arrears and months in arrears

Delinquency Ageing Reports

These reports provide an ageing analysis of the loan portfolio delinquency; this is the situation that occurs when loan re-payments are past due. Details include:

- Issue, Expected maturity and Last Activity date
- Issue date and Amount
- Interest rate (Effective and Add-on)
- Periodic re-payment
- Remaining principal
- Interest and principal delinquent
- Amounts aged includes: principal balance at risk, principal due or payment in arrears

Loans calculation methods

Loans are often issued based on the Reducing (Effective) or Add-On (Straight-Line) calculation method.

The **Reducing (Effective) method** uses the remaining (unpaid) principal to calculate interest due for re-payment. Interest is said to be calculated on the Reducing Principal Balance (also called Reducing Balance method). This method is consistent with the time-value of money concept; hence the specified interest rate may be compared with the yield of other investments in the evaluation of a portfolio of assets and liabilities. The Reducing Balance method uses the present value concept to compute the periodic loan repayment amount. The principal due per period is equal to the difference between the periodic amount and the interest due per period. The principal due/paid is usually set off against the loan balance until the loan principal is fully paid.

The **Add-On (Straight-Line) method** calculates (allocates/distributes) interest equally over the life (full-term) of the loan based on the original loan principal. The allocation of interest is not sensitive or dependent on the remaining (unpaid) principal and hence, the specified interest rate cannot be compared with the yield of an investment. Re-pricing an add-on loan using the reducing balance method is necessary to effectively evaluate a portfolio of assets and liabilities. The original loan amount is equally allocated /distributed over the life (full-term) of the loan in order to arrive at the principal due per period. The periodic repayment amount is equal to the sum of the principal due and the interest due per period.

From an **accounting perspective**, the Reducing Balance method results in a higher allocation of interest in the earlier stages and reverses this trend in the latter stages of the loan. This is consistent or comparative with other investment instruments that may be used to fund the loan portfolio. The Add-On method is not consistent with the time value of money and hence, significant distortions may result when compared to other investments funding the loan portfolio.

From a **customer perspective**, the Add-On method displays a lower interest rate; however, at points of refinancing a loan, the customer will not see a reduction in their original principal from an interest calculation point-of-view. This may act as a deterrent to customers' consideration to continue doing business.

Delinquency:

Delinquency is the situation that occurs when loan re-payments are past due.

Types of Delinquency:

- **Delinquent Payments** (payments in arrears) refers to loan re-payments (interest + principal) which are past due.
- **Delinquent Loan or Principal** (or loan in arrears) refers to a loan on which principal re-payments are past due.
- **Bad-Debt** refers to a delinquent loan or principal that has not been paid over a specified (by regulation) period of time; e.g. three months.

How to Compute Delinquency:

Delinquent Payments (in Arrears):

- Determine the amount in arrears by comparing amortization schedule balance with unpaid loan balance.
- The number of delinquent payments (or periods missed) is the arrears (inclusive of interest) divided by the scheduled monthly re-payment. Note: Fractional re-payment periods are treated as whole.

Delinquent Loan or Principal:

- The amount past due is the loan principal (excluding interest) that is meant to be received but has not yet been received. This focuses on the Principal at Risk without consideration for Interest revenues.
- Determine the amount in arrears by comparing amortization schedule principal balance with unpaid loan balance.
- Locate the unpaid loan balance in the amortization schedule and count the number of delinquent payments/periods to current date.