Loan Management Workflow for a Bank

1. Business Requirements Document (BRD)

Objective:

To create a streamlined, digital loan management workflow for processing loan applications, reducing manual intervention and turnaround time.

Stakeholders:

- Applicants (Customers)

- Loan Officers

- Underwriters

- Risk and Compliance Team

- IT Team

Scope:

- Online loan application submission

- Document verification

- Credit evaluation

- Approval/Rejection

- Disbursal and repayment tracking

Out of Scope:

- Collections and recovery process

Assumptions:

- All applicants have access to internet services.

- Regulatory compliance requirements are up to date.

Constraints:

- Integration with legacy systems may require additional time and budget.

2. Gap Analysis (As-Is vs To-Be)

As-Is Process:

- Paper-based forms submitted at branch

- Manual verification of documents

- Offline credit checks and approvals

To-Be Process:

- Online application portal

- Automated document verification using OCR

- Integration with credit bureau APIs for instant credit checks

- Automated approval for standard loan profiles

Gaps Identified:

- Lack of automation in document and credit evaluation

- No centralized tracking of loan status

- Limited reporting capabilities

3. Functional Requirements (SRS)

- The system shall allow users to create a loan application online.

- The system shall accept document uploads in PDF/JPEG formats.

- The system shall perform document validation using OCR.

- The system shall fetch credit score from an integrated credit bureau API.

- The system shall calculate eligibility based on income, score, and existing liabilities.

- The system shall assign the application to a loan officer for review if not auto-approved.

- The system shall notify the applicant via email/SMS at each milestone.

4. User Stories

User Story 1: Submit Loan Application

As an applicant, I want to submit a loan application online so that I can apply without visiting the branch.

User Story 2: Upload Documents

As an applicant, I want to upload ID proof and income documents so that the bank can verify my eligibility.

User Story 3: Perform Credit Check

As a system, I want to automatically fetch the applicants credit score so that it can be used in the approval process.

User Story 4: Notify Applicant

As a system, I want to send status updates via email/SMS so that the applicant remains informed.

User Story 5: Manual Review by Loan Officer

As a loan officer, I want to review applications that fail automated checks so I can make a manual decision.

User Story 6: Track Loan Status

As an applicant, I want to view the status of my application so that I know its progress.

5. Test Cases

Test Case 1: Verify Online Application Submission

- Input: Valid personal, financial details

- Expected: Application saved, confirmation sent

Test Case 2: Upload Document Validation

- Input: Valid and invalid file formats

- Expected: Accept PDF/JPEG, reject others

Test Case 3: Credit Check API Integration

- Input: Valid SSN and personal info

- Expected: Return score or API error

Test Case 4: Automated Approval Logic

- Input: High credit score, stable income

- Expected: Application auto-approved

Test Case 5: Notification System

- Action: Application status updated

- Expected: Email/SMS sent to applicant

6. Business Rules Catalog

Rule 1: Minimum Credit Score for Auto-Approval = 700

Rule 2: DTI (Debt-to-Income) Ratio must be < 40%

Rule 3: Maximum loan amount based on income tier

Rule 4: Loan applications from high-risk zones must undergo manual review

Rule 5: Incomplete applications are auto-rejected after 7 days

7. Diagrams (Description only)

1. Process Flow Diagram:

   - Start Submit Application Upload Documents Credit Check Auto-Approve/Manual Review Notify Applicant Disburse Loan

2. Use Case Diagram:

   - Actors: Applicant, System, Loan Officer

   - Use Cases: Submit Application, Upload Documents, View Status, Review Application

3. State Diagram:

   - States: Draft Submitted Under Review Approved/Rejected Disbursed