

Loan Application Process Specification

This document outlines the Loan Application Process BPMN model, covering steps from application submission to process completion. Errors in specific files indicate necessary corrections for a seamless loan application workflow.

Process Steps and Details

Loan Application Submission

Step Summary: Customers submit applications online or in-person. The system records and confirms online applications, while loan officers input in-person applications.

Process Details: System confirms receipt of online applications, while loan officers handle in-person submissions.

Exit Criteria: Application successfully recorded.

Errors Identified:

End Start Error File: Missing start event, which may lead to incomplete initiation of the process.

Initial Document Check

Step Summary: System verifies submission of all required documents.

Process Details: If documents are missing, the system requests resubmission. Completed applications proceed to the next step.

Exit Criteria: All documents verified or resubmission requested.

Credit Evaluation

Step Summary: System conducts a credit check. Failed applications are rejected and the customer notified; successful ones proceed.

Process Details: System assesses creditworthiness and notifies customers accordingly.

Exit Criteria: Credit status confirmed (approved or rejected).

Errors Identified:

Incorrect Link File: An incorrect link connects this step directly to "Loan Disbursement" without passing through "Loan Approval."

Loan Approval

Step Summary: Loan officer reviews the application. Approved loans proceed to agreement issuance, while rejected applicants are notified.

Process Details: Loan officer evaluates credit and application data; if approved, an agreement is sent to the customer for signing.

Exit Criteria: Approval or rejection confirmed.

Errors Identified:

Task Error File: Missing "Loan Approval" task, which could lead to an unverified application status before disbursement.

Loan Disbursement

Step Summary: Upon receiving the signed agreement, the system disburses funds and notifies

the customer.

Process Details: Funds are transferred to the customer's account after agreement confirmation.

Exit Criteria: Disbursement completed and customer notified.

Errors Identified:

Logical Error File: Incorrect logic that could allow disbursement without prior approval.

Process Completion

Step Summary: System marks the process as complete after disbursement. Any pending items are resolved.

Process Details: Loan officer or system finalizes outstanding items and updates status to complete.

Exit Criteria: Loan application process marked complete.

Error Summary

Logical Error File: Disbursement allowed without prior approval due to incorrect logic.

End Start Error File: Missing start event that may prevent proper initiation of the process.

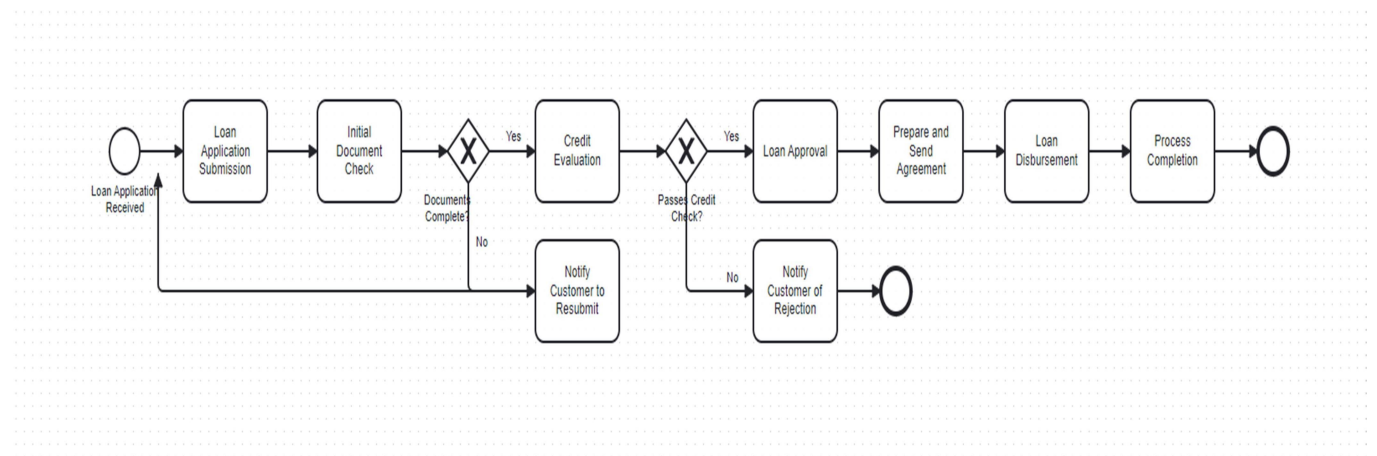
Incorrect Link File: Direct link from "Credit Evaluation" to "Loan Disbursement" without "Loan Approval."

Task Error File: Missing "Loan Approval" task, leading to unverified applications before disbursement.

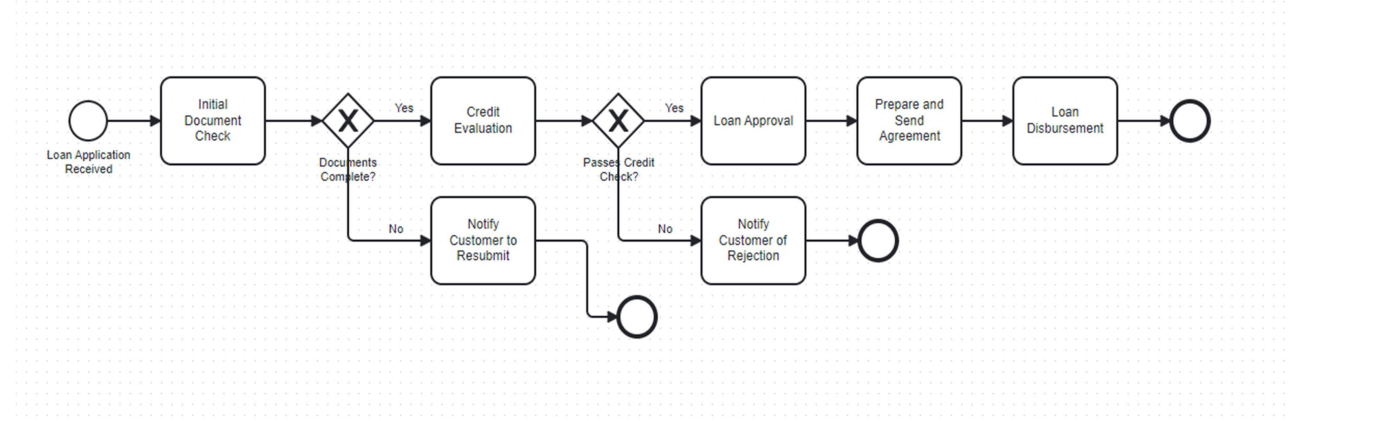
Ground Truth File: No errors detected; this is the correct model.

BPMN Diagram Images

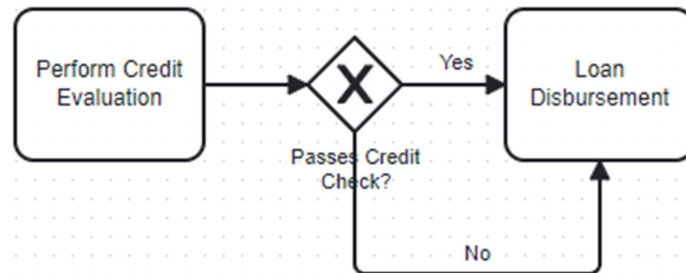
Ground Truth:-



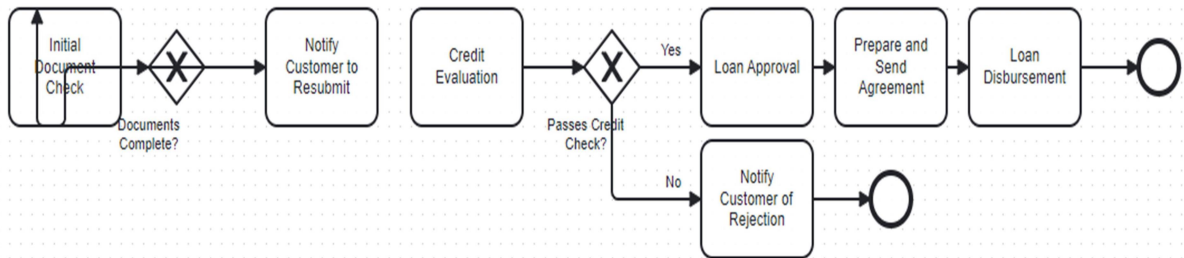
Incorrect Link File:-



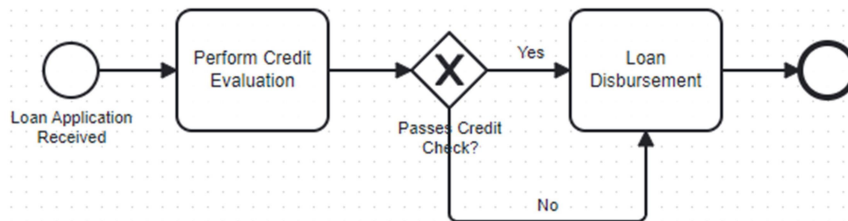
End/Start event error file:-



Task Error file:-



Logical Error file:-



Structured Entity Table for Loan Application Process

Entity Type	Entity	Description
Process	Loan Application Process	Overall loan application workflow covering steps from submission to completion.
Step	Loan Application Submission	Step where customers submit applications either online or in-person.
Step	Initial Document Check	Step where the system verifies submission of required documents.
Step	Credit Evaluation	Step where the system conducts a credit check on the application.
Step	Loan Approval	Step where a loan officer reviews and approves or rejects the loan application.
Step	Loan Disbursement	Step where funds are disbursed to the customer upon approval.
Step	Process Completion	Final step where the loan application process is marked as complete.
Error Type	End Start Error File	Errors in missing start events that may prevent proper initiation.
Error Type	Incorrect Link File	Errors due to incorrect links that bypass essential steps like loan approval.
Error Type	Task Error File	Errors in missing tasks such as a missing loan approval step.
Error Type	Logical Error File	Logical errors allowing disbursement without prior approval.
Error Type	Ground Truth File	File representing the correct model without any errors.
Criteria	Exit Criteria	Criteria that determine when each step in the process is complete.
Criterion	Application successfully recorded	Exit criteria for Loan Application Submission step.
Criterion	All documents verified or resubmission requested	Exit criteria for Initial Document Check step.
Criterion	Credit status confirmed (approved or rejected)	Exit criteria for Credit Evaluation step.
Criterion	Approval or rejection confirmed	Exit criteria for the Loan Approval step.
Criterion	Disbursement completed and customer notified	Exit criteria for the Loan Disbursement step.
Criterion	Loan application process marked complete	Exit criteria for Process Completion step.
System Component	Online System	System component that records online applications.
System Component	Notification	Automated notifications used to inform customers about application status.
System Component	Transfer System	System used to disburse funds to the customer's account.