**Project: Loan Origination Automation**

**Project PM: Peter West**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date Last Updated** | **Who updated** | **version** | **What are the updates** |
| 2016-02-02 | NA | 0.01 | Initially documented |
| 2016-02-27 | NA | 0.02 | Added all interviews and Wang notes in the document. This |

|  |  |  |
| --- | --- | --- |
| **Stakeholder Name** | **Role** | **Company** |
| Peter West | Project Manager | Fidelity Mutual |
| Me | Business Analyst | Consultant |
| Rachel Westbridge | Senior Loan Officer (SME) | Fedility Mutual |
| Bob More | Underwriter | Fedility Mutual |
| Vivek Reddy | Solution Architect | Fedility Mutual |
| Wang Ping | Developer | Fedility Mutual |
|  |  |  |

|  |
| --- |
| Objective: |
| Fidelity Mutual is upgrading its current Loan Origination process and wants to create an automated processing system.  Your role is to interview the business and technical SMEs, understand the as-is state, create functional specifications, use cases and data model for the to‐be state and obtain signoff on the final requirements. |

| **Question** | **Person** | **Details/ Process** | **Formula/ Condition** | **Terms/ definition** |
| --- | --- | --- | --- | --- |
| Tell me about Fidelity Mutual? | Rachel | Fidelity Mutual is US based company  We offer Home Mortgage Loans to consumers  Company is HUD approved for FHA Loans  For FHA loans we Originate loans directly.  Thru: TPO, Authorized relationships  (mortgage brokers/ originators,  Non-FHA loan – directly  We also have relationship with various other Correspondent from who we purchase loans. |  |  |
| Tell me about Loan Origination Automation System Project?  √ | Rachel | * LOA automation system project * Replace current collection standalone loan processing application system * Multi DB and manual processed * Designed to work on Common relational DB * Designed to process loan Appl. from consumers TPOs, principle authorized agent agreements and correspondents * ~~Will handle loan applications~~ |  |  |
| How are loan applications processed today for consumer mortgages? | Rachel | Current loan origination process in 8 key steps  1) Application:  Consumer applies for mortgage loan also called Retail loan in paper application form, these loans must be for homes. Retail loans are those that consumer applies for parcel of land.  No Loan are given for non-physical properties like caravan These Loans are equity loans.  2) Loan officer process: Loan officer process the retail loan, review appl. And determine if can be approved.  3) **Check Completeness with more documents**:  borrower submits application more doc to be collected from Borrower,  Get Census Track number for the property  Completing the application step **Disclosure doc** have to be generated and accepted by borrower and Co borrower.  Completing the application pkg  4) **Duplicates**: **Loan officer** checks for Duplicate Loan application detection.  Tag as duplicate, and Resolves the duplicates If True duplicate, one Duplicates is declined >> forwards to UW for retail credit … >>  5) **forwards To Underwriter**: evaluates retail loan app pkg and decide to accept or decline Standard Stipulation are added to the loan appl. Must be verified before closed  UW May require Additoinal Stipulations to the UW may give range of interest rates or range of principlanamt to be approved  6) **Sell the approved loan offer to the borrower**  Loan officer will sell loan offer to borrower  with condition doc to be accepted  7) **Borrower agrees conditions and accepts the loan**,  **Loan officer generate closing document** Bor and co Cor must sign the loan agreement. if not signed, Loan officer try to contact bor and co bor  otherwise close loan appl.  8) **Funder funds the loan**,   make sure total disbursement otal loan amt. and send actual fund  Funder loads the fund on computer system or Borrow the loan  Close  **3 more steps** 1. Sometimes loan officer decides to withdraw loan appl. if  Does not submit the sign docs or **fraud detected**.  2. Sometimes Manage stipulation  borw or co borw must satisfy the all stipulations  Llan officer may need u/W  3. Finally:  Loan officer or ask underwriter for alternative documentation  How declined loans are handled is defined in company profiles. |  | **Stipulations** are all conditions or requirements to complete the loan application. |
| Can you walk me through the Process for applying for a retail loan?  √ | Rachel | * Consumer select the loan application form * Bor needs List the personal and subject property info on application * Lien on property and co-borrower info * Financial and employment info on the form and of coborrower * Loan information that is required * Borrower mails application and docs * Mail room clerk receives application and create retail loan application package conbine with other docs. clerk assigns Unique Identifier to the pkg * Mail room forwards retail loan appl. Pkg to loan processing dept. * Loan processing dept. randomly assigns pkg to a Loan officer |  | A **lien** is a notice attached to your property telling the world that a creditor claims you owe it some money. A lien is typically a public record. It is generally filed with a county records office.  **Liens** on real estate are a common way for creditors to collect what they are owed. Liens on personal property, such as motor vehicles, are less frequently used but can be an effective way for someone to collect. |
| What information is mandatory on the application form, and MUST be provided for application to be processed?  √ | Rachel | * Personal, financial and subject property info * Co, need for them as well * Name, mailing address, telephone no. tax ID number, birth date, and email address * Co - same * Financial Info: Employment details, income, debt and assets * Co -same * 5 years of employment info required * Address of the subject property * Current lien holders * Details of the loan: * Fixed or variable, loan amount, duration of loan, rate and rate cap |  |  |
| Can you walk me through the Process for processing a retail Loan? | Rachel | * Loan Process Starts with: * Loan officer get new **retail loan application pkg** from the database and completes the application Package, if complete send to UW * Loan Officer Send the package to UW * UW review the retail loan pkg and determine if loan can be made * If **UW approves**, application is sent back to **Loan officer** * Loan Officer collects all docs and ensure application satisfy all stipulation if conditions are met pkg send to borrower to accept the stipulations  if accetpted by borrow * Loan officer sends appl pkg to Funder * Funder makes closing pakge and verifies the signed loan * Rtl loan appl Funder verifies that the local municipality has registered the property **Title**. * Funder generates disbursements and updates the company systems (database) based on information in the retail loan package. |  |  |
| Are there any Exceptions to the Usual Process? | Rachel | Yes,   * Retail loan appl may not be complete or missing key info or incorrect detail: Loan officer contacts the applicant to correct..or update to complete pkg. * If appl. Pkg is not Not-approved:  **UW notify LO and LO notifies to Mail room**. **Mail room sends the Rejection letter to applicant**. * If Appl is Approved:  Borrower may have not accepted the Stipulation or do not sign the offer. Loan Officer has to be withdrawn!   : that time offer is withdrawn. |  |  |
| Can you walk me through the process for completing the application for a retail loan? | Rachel  Rachel | * Check if there are any dup loans on file in the database * LO determines that there are No Dup appl on file >> then LO using Census Track Search for the property from Census Report using address and obtains Census track code * LO Obtain Credit Report from credit bureau for retail borrower and co-borrower * LO Calculates Standard fees and payments applied to the loan   + Courier Srv charge   + Credit report fee   + Documentation Prep charge   + Flood Hazard determination fee   + Loan Service Fees   + Mortgate broker fee   + Pest Inspection Fee   + Private Mortgage Insurance   + Property Appraisal Fee   + Property insurance Premium   + Property Survey fee   + Property Tax   + Required closing agent fee   + Required credit Insurance Premium   + Sales tax   + Title Examination Fee   + Title Insurance Premium   + Title Registration   + Other Fees * LO updates application pkg that all info that is collected * LO determines **loan fee and APR** does not exceed **High Cost Mortgage Limit** * LO generate and print the disclosure document and send these to the retail borrower * **MUST: Disclosure documents must be sent within 3 days of the company receipt of the loan application** |  |  |
| How does a loan officer search for duplicate application? | Rachel | LO Search for duplicate applications in OPEN Loans we have on file. Open Loan application is one whose status is NEW, COMPLETE, APPROVED, CONDITIONS MET, ACCEPTED DOCUMENTS SET and SIGNED  LO search for duplicate loans using BO and Co\_BO Tax ID number and the address of the subject property |  |  |
| What happens if the duplicate application is found? | Rachel | It depends on the type of the duplicate application,  >>If there are multiple open loan appl. From retail BO or CoBO, and they are all for different subject properties, LOP Continues processing new retail loan appl. Pkg.  >>If there are mutliple open appl.pkgs for same subject property,  LO reviews the types of loans if first loan is the first mortgage and other loan is the second mortgage, home line of credit or home improvement loan will still continue processing the new retail loan appl pkg.  >>If there are mutliple open appl. pkgs for same subject property,  And retail BO and CoBO are different, LO will contact retail loan BO to verify the subject property address. If the subject property address is wrong, LO will put the correct subject property address in each of the retail loan application pkgs and continue processing the new retail loan appl.  >> If the subject property address is same on multiple loan appl pkgs  LO will determine that the BO and CoBO for the same loan, if they are same Borrowers, LO will merge the retail loan pkgs into one retail loan pkg, and decline the other retail loan pkgs, and continue processing the new retail loan appl pkg.  >> In all other cases, LO will determine which retail loan appl pkg is the valid one. LO will continue processing the valid retail loan appl. Pkg. and decline the other loan appl pkgs. |  |  |
| What is high Cost Mortgage Limit? | Bob More | >>First mortgage is High Cost Mortgage if APR exceeds the avg. prime offer rate by more than 6.5%, which will be published by the Fed and published and accepted weekly.  >>However, if the transaction is for the personal property, and worth less than $50,000 APR must exceed the Prime Offer Rate by 8.5% or more.  >> SubOrdinate or Junior mortgage with APR that exceed avg prime rate by 8more than 8.5% will also be considered a High Cost Mortgage (,HCM).  HCM also include mortgage in which points and fees are > 5% for transactions of more than $20,000.  >> for Transactions < $20,000, the Trust hold is < 8% or the total transactions or $1,000.    >>Mortage that allow creditor to charge or collect pre-payment fees for more than 36 months after the transactions closing, or such fee or penalties exceeds 2% of the amount prepaid are also considered high cost. |  |  |
| What happens if the loan officer finds that the loan fees and APR exceeds high cost mortgage limit? | Bob | LO reviews the loan to determine if the APR or fees needs to be adjusted to bring the loan within the High Cost mortgage Limit. |  |  |
| Can you walk me through how an underwriter makes a retail credit decision? | Bob More | Bob More (UW):  UW is about follow business rules for lending decisions that has been set  >> When I make lend decisions for retail mortgage Appl., I make sure that the following criteria and business rules are met:  >> 1>> Based on the borrowers collatoral, employment capacity, U/W determines maximum monthly mortgage and maximum monthly Debt that the borrower will be eligible for. Gthe mAx monthly Debt means no more than 30% of the gross monthly income of borrower and Co-borrower and total monthly payment on the debt including the subject loan, may be no more than 50% of gross monthly income of borrower and co-BO.  >> There are some standard Stipulation that UW need to verify for each and every retail loan application, this includes infomration about the subject property and borrower.  >>>Info for Subject property includes Apprise value, Flood Report, and Title Report.  >>>Info about borrower is info about income, ability to enter into a contract.  >>>> Deoending on the loan, UW may add stipulation to the loan appl. Pkg.  >> UW determines the parameters by which the loan can be approved, includes interest rate, duration, and amount of loan. UW adds these parameters to retail loan appl., mark is as APPROVED and send it to the Loan Officer (LO). |  |  |
| What happens if you are unable to approve the loan? | Bob | In that case we send out adverse action paper to the borrower advice them, why we are unable to approve their application. |  |  |
| Can you provide some more details on the standard stipulations? | Bob | Sure;   1. First stipulation is **Apprise value**. The appraise value of the subject property must be the amount of loan or more;  in addition, a loan for a first mortgage can be no more than 80/90% of appraise value of the house with private mortgage insurance required for the loan. 2. Another Stipulation is **Cash for Closing**; BO must have cash assets sufficient to pay for the closing cost unless the closing cost will be funded. 3. Flood Insurance: then there is flood insurance for the property if the property is situated in the flood zone. If the property is in the flood zone, the loan can only be approved if the Borrower has contracted with **flood insurance for FULL VALUE OF THE HOME**. 4. Title: We also ensure that the title of the property must be held by the seller and must be clear for transfer. 5. Another Stipulation, that the Borrrower and Co-Borrower MUST NOT have declared bankkrupcy within the last seven (7) years and must not be convicted felon\*.   And finally two more standard stipulations are;   1. BO and CoBO must be Resident of US, that is residing in US 2. BO and CoBO must be capabile of contracting that means they must be old enough and of sound mind. |  | 1. **\*Appraise Value** is the assessed value of the property done by the professional Appraiser hired by the bank. 2. **\*Convicted felon** is a person who has committed a serious crime. |
| How to verify that these stipulations have been met? | Bob | There are prescribed rule to verify stipulations:   1. Typical method to verify income is by asking BO and CoBO provide copy of their:    1. last two pay stubs, or    2. get two months of bank statements, or    3. previous two years of tax returns, or    4. previous two investment statements    5. other source of income such as court order support which may show in legal documents and bank statement of regular deposits. 2. If the BO name does not match the name in the credit report, a name change must be verified through documents such as;    1. Marriage Certificate, or    2. Name change Certificate 3. In order to verify the value of the subject property, we get Appraisal of the value of the home. And if the home is sold with three (3) years, we need previous purchase price may be used. 4. We ask the city office, if the home is located in the flood zone, we ask the letter from insurance agent saying that the insurance is contracted upon loan closing. And first insurance premium is added to the closing. 5. In order to verify that the BO and CoBO are old enough to make a contract;    1. We call them and discuss their understanding of loan contract.    2. We also do background check to verify the person is not a convicted felon. 6. We also do credit check for BO and CoBO that they have not applied for bankruptcy for the last seven (7) years. 7. We also verify that BO and CoBO reside in US by asking a copy of Utility Bill or bank statement for the previous month. 8. Finally, we verify the ownership of the property by doing a title search on the property. |  | 1. **Convicted felon** is a person who has committed a serious crime. |
| What happens if these stipulations are not met? | Bob | We will not approve the loan and decline the loan. |  |  |
| What happens when you sell the loan to the borrower? | Rachel | Involves a Phone call by Loan Officer after BO have received the disclosure documents:  Loan Officer (LO) goes through the documents with the BO and CoBO, explains the stipulations and the parameters. And Ask BO and CoBO to accept the same. |  |  |
| What happens if the borrower (BO) or co-borrower (CoBO) declines the stipulations or the parameters? | Rachel  Rachel | In that case, we rescind (cancel) the loan offer. |  |  |
| Can you walk me through the process of generating the closing document? | Rachel | Sure,   1. Once the borrower has signed the papers/ documents; 2. LO forwards the documents to the Funder 3. Funder enters the closing date, normally this is the day after the funder receives the package. 4. The funder verifies where the documents should be sent. 5. and all the disbursement information is included in the retail loan application pkg. 6. Funder sets the valid period of the loan offer in the retail loan appl. Pkg., and 7. Generates the closing documents, based on the kind of loan and legal requirements 8. Funder prints the document in the mailing label and send the document to the indicated location using an overnight courier |  |  |
| What happens if there are any errors when generating the closing documents? | Rachel | 1. Some times disbursement information is missing;    1. In this case, Funder contacts the LO and get the information,    2. LO provides the missing information,    3. and the, Funder updates the retail loan appl. Pkg. 2. If there are other errors in generating the documents, Funder will correct the information in the retail loan appl. Pkg. and 3. Regenerate the closing documents |  |  |
| Can you walk me through the process of funding and boarding the loan? | Rachel | Sure,   1. Funder has to wait till recession period of three (3) days for loan has ended prior to funding and boarding a loan, this refers to the borrowers right of recession period to cancel the loan within three days, no questions asked, and walk away. The recession period for the loan may be set by the State, where the subject property is located, if the State does not indicate that the recession period is three business days. 2. Once the recession period is over, Funder balance the loan by calculating with sum of the disbursement and make sure they equal the loan amount and any cash received in closing. Funder also calculates premium, discounts and gain on Sell, Funder then determines the disbursement methods, that can be check, wire transfer or electronic deposit. 3. Funder verifies that all servicing information for loan is complete and generate forms for all the required disbursements 4. Funder gets the payment forms signed by accounting and based on the disbursement method mails a cheque or initiates the wire transfer or make electronic deposit. 5. Funder sends disbursement information about the loan, premiums, discounts, and gain on sell to accounting the **General Ledger** 6. Since Servicing info about the loan is servicing and sends info about the BO, loan type and any insurance to the **secondary marketing**. 7. Finally, Funder asks the **mail room** to generate a Welcome Letter and initial payment coupons and send the confirmation letter and initial payment Coupons to the Borrower. |  | \* **recession period** is a period of silence that allows applicant to think about the Loan Offer, payment and stipulation before making decision to accept or withdraw from Loan Offer. |
| QUIZ |  | |  | |
| QUIZ |  | |  | |
| QUIZ |  | |  | |
| QUIZ |  | |  | |
| Can you provide me with a system overview of how mortgage applications are processed? | Vivek Reddy  Vivek | Let me share my screen and show you architecture diagram:       1. Current loan application system is called LoanAce. It is a simple web site with a database in the backend. We primarily use to store information about mortgage applications. 2. The New automated system will be called LoanAce2. 3. We also use two other systems;    1. Census tract system provided by Census Tract Bureau.    2. Credit Report System provided by Equifax |  |  |
| How does LoanAce get data from the Census Track system?  Assuming the Equifax system is also entered into LoanAce manually. | Vivek | 1. Currently, there is **no integration** between LoanAce and any third party systems. 2. LoanAce users have to lookup data in the Third party system and manually enter the information from those system into the LoanAce. 3. Credit report score from Equifax is also entered manually into the LoanAce system 4. Also, Attach a PDF version of the report in to LoanAce for reference |  |  |
| How do you anticipate automating the current loan origination process? | Vivek | 1. Not only automate but make the system more user friendly. Current system is not very intuitive. We want to **redesign** the **user interface** and **workflows** to make the new system easier to use. 2. We want to integrate the third party systems with LoanAce2. So that, reports data and report from Census Tract and Credit report from Equifax can automatically be captured in the LoanAce2 system. 3. We like LoanAce2 system to automatically calculate standard payments, as well as enforce the current business rules. 4. Finally, it will be nice to have features like automatic notification, and ability to add notes to an application. |  |  |
| 1. How will you integrate the new system with Census Tract? 2. Can you send me more information to this API? | Vivek | 1. Census Tract has a REST API to which we can pass a single address in response we get information in response to the API call. 2. Sure |  |  |
| How will you integrate the new system with Equifax? | Vivek | Equifax does not provide direct API for integration , so we will use third party API, called Credit API. And this API will mediate between LoanAce2 and Equifax Credit Engine. |  |  |
| Can you provide more details on how Credit API will mediate between LoanAce and Equifax? | Vivek | Let me share you a sequence diagram that I created:     1. We will exchange our Equifax credentials with CreditAPI, in return for a security token that CreditAPI will provide to us. From there on, every time a user want a updated credit report about an applicant, LoanAce2 will send a request to CreditAPI with the security token and other information such as, name, SSN, DOB and address. Credit API will authenticate that the call is coming from LoanAce using a security token and in return it will use our Equifax Credentials and request a report from Equifax. It will then respond to LoanAce with the Credit Score and PDF copy of the Credit Report. LoanAce will store the score and PDF as part of the applicant record and notify the user that the report is now available. |  |  |
| How long will it take for CreditAPI to provide the report? | Vivek | It will take between 5 to 11 seconds. |  |  |
| What should happen if CreditAPI is not able to get a report from Equifax? | Vivek | CreditAPI will general return an error with a reason code   1. If the error code is 01, then there was a connection error between CreditAPI and Equifax, then LoanAce should notify user and ask the user to try again after a little while. 2. If the error code is 02, then the Equifax did not the matching credit report based on the information provided, in that case, LoanAce should notify the user and ask them to verify the applicant information and then try again. |  |  |
| What kind of notifications would you like LoanAce to send out and when? | Vivek | 1. Notification to applicant that their application has been received by Fidelity. This should be sent out as soon as the application is keyed into LoanAce 2. Notification to Loan Officer as soon as the Loan Manager assigns a loan application to that loan officer. 3. Notification to Underwriter as soon as the Loan Officer submits a loan for Underwriting Review 4. Notification to both Loan Officer and Underwriter as soon as the new Loan is added to the application file 5. Notification to the Loan Officer and the Funder as soon as the Underwriter approves the loan application. 6. Notification to the underwriter and the Funder, as soon as Loan Officer receives a signed Loan Offer from the Borrower and entered the same in the LoanAce. 7. Notification to the Loan Officer, Underwriter and Funder, if the Loan is Rescinded for any reason. |  |  |
| Can you describe the feature of adding notes in more detail? | Vivek | We want to LoanAce user to be able to add Notes with the Loan appl. File:   1. Each note must be saved with the State, time and name of the user who added it 2. All notes on file should be visible to all the users accessing the file. |  |  |
| QUIZ |  | |  | |
| QUIZ |  | |  | |
| QUIZ |  | |  | |
| QUIZ |  | |  | |
| LoanAce WSDL Link: |  | http://185.35.78.156:80/sysworkflow/en/classic/services/wsdl2 |  |  |
| WSDL Browser |  | http://wsdlbrowser.com/ |  |  |
| Data Structure details | Wang | Wang sent Notes in PDF format. See Attached. |  |  |
| LoanAce Diagrams | Wang |  |  |  |
| API Servicing Diagram | Wang |  |  |  |
| Vendor Proposal and Notes | Vendor |  |  |  |
|  |  |  |  |  |