=== 2024-07-19

This is a strategic priority according to John.

Action items:

* Review all previous filters and rebuild workflow
* Prepare Xactus Extract
* IST need to set up an SFTP to send extract to Xactus
* All guarantors need to have a BSCB PFS and we need to flag/pop out the ones where we don’t explicit permission to run credit scores (soft pull)
  + Colin reviewed the list and this is in the “Intern Deliverables” folder in CLO share
  + There are several within SBLC.
  + Action needs to be taken

There are several filters on Alteryx workflow & PBI that need to be understood and documented.

Work on WH\_ALLROLES join on accounts. Improve data model that powers this PBI dash.

=== 2024-07-22

Criteria for Alerts system:

* ACT, NPFM lines of Credit
* Credit limit amount < $500,000 & Total relationship exposure < $1,000,000

A white rectangular object with text

Description automatically generated

Can refactor a lot of the workflow to make simpler.

New system for the total relationship exposure.

Filtered on minors below:

"CM06","CM11","CM30","CM52","CM57","CM62","CM71","CM76"

Unique Product List:

['FNB - CML Line of Credit',  
 'FNB - SBA Line of Credit',  
 'Line of Credit',  
 'FNB - Borrowing Base LOC',  
 'Borrowing Base Line of Credit',  
 'Express Business LOC',  
 'SBA Secured Line of Credit',  
 'Equipment Line of Credit']

On deposit side, need to take a closer look at the NSF count and how to properly build the test for this

Need average line utilization & 30-day clean up provision tests

I am using this ACCTLOANLIMITHIST field for the inactivedate on the line product.

== 2024-08-06

Alerts

* Filter down to the specific products within criteria
* Grab a list of guarantors and specific address information.
  + PERSORGADDR & ORGADDRUSE fields give addrnbr which can linked to wh\_addr

A screenshot of a computer

Description automatically generated

Where text1 and addrlinetypdesc1 = Street. Sometimes, this could be text2 if text1 is company name. I’ll have a better idea once this is filtered down.

Prior to sending along:

* Review Colin's PFS check & Hasan's comments on this.

Targeting Aug 12 week for sending out the file to Xactus.

Do I want ACCTSTATISTICHIST and ACCTLOANLIMITHIST?

* Yes
* A screenshot of a computer

  Description automatically generated
* ACCTSTATISTICHIST is used for delinquency criteria that the customers are tested on.

ACCTLOAN has some fields that are needed:



Formula for potential outstanding:

Net Balance + Net Available + Net Collateral Reserve Amt

* All net of participations and Net Balance = BOOKBALANCE – Charged Off Amount

Priorities for Today:

* Code potential outstanding on product level
* Group on household number.
  + Append to core list of products of interest (lines within set criteria)
* Once products are narrowed down, attach guarantors and get addresses
* Ensure that COCC field is ready to go with Kelly A on the Guarantor level.
  + Personal guarantors

Unique Product types included in this system:

A screenshot of a computer screen

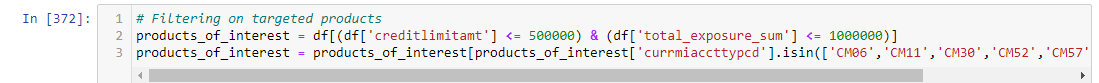
Description automatically generated

As of today, there are 266 products of interest:

A screen shot of a computer

Description automatically generated

Under criteria:



Will be useful to check against status page to validate household outstanding.

== 2024-08-07

Shared drive appears not to have saved any of the work from yesterday. As a result, I will implement a version control system (inspired by Git) where I will have a lower probability of losing my code.

A diagram of a product

Description automatically generated

* I’ll add in a deposits component to this. This is the general starting architecture.
  + Bring in all relevant fields and make sure that the workflow is caching data at the right time.

== 2024-08-08

Next area of focus:

* ALL ROLES and getting Guarantors & information. Ensure that fields that Kelly A created are accessible
  + Compliance PFS check. Place a Y on these guarantors.
    - Review Colin’s PFS list
    - Have to exclude the ones where we don’t have a PFS signed from them.

Updated CHANGELOG.txt. Currently on version [0.2]

Unique Loan officers that have products that are going to be tested by alerts:

['SBLC LOAN OFFICER',

'JOAN M. MEDEIROS',

'MARK A. BORKMAN',

'AN T. LE',

'EBL PROGRAM ADMIN',

'WILLITTS S. MENDONCA',

'THOMAS D. KELLY',

'KEVIN M. MCCARTHY',

'ROGER A. CABRAL',

'ALISSA E. HALL',

'PETER ST JEAN',

'JOSHUA A. CAMARA',

'ANDREW J. OMER',

'DAMON T. ARPIN',

'JEFFREY M. VIALL',

'ANDREW K. SPRINGER',

'BRANDON CANNATA',

'JEFFREY P. PAGLIUCA',

'ANDREW RODRIGUES']

266 current customers that will be analyzed

['GRAPHIC INNOVATIONS INC',

'FORE COURT RACQUET & FITNESS CLUB INC',

'H.B. PRECISION PRODUCTS, INC.',

'ANDERSON-WINFIELD FUNERAL HOME INC',

'NORTHERN RHODE ISLAND CHAMBER OF COMMERCE',

'PARENTEAU TRUCK AND EQUIP LLC',

'SPECTRUM THERMAL PROCESSING LLC',

'JORGES AUTO REPAIR',

'NEW URBAN ARTS',

'VRS OF FALL RIVER INC',

'VISITING REHAB AND NURSING SERVICES INC',

'TONY LUIS AUTO SALES AND SERVICE INC',

'CARLOS F. DASILVA',

'FISHER, P. C.',

'CROSSFIT AC CORP',

'DALEY AND ORTON LLC',

'PUREWILL INC',

'ETEMAN LLC',

'SOPHAYA INC',

'NA FITNESS LLC',

"WOMEN'S FUND OF RHODE ISLAND",

'FLOORS BEAUTIFUL BY DEE',

'PIERCE PACKAGING PRODUCTS INC',

'QUALITY VAN SALES INC',

'M.O.L.I.F.E., INC.',

'BRANDYWINE MATERIALS INC.',

'FERNANDES & CHAREST, P.C.',

'UNLIMITED POWERWASHING LLC',

'W.C. SMITH & SON, INC.',

'TAYLOR & COMPANY PC',

'MUTO, VOLLUCCI & CO.,LTD',

'DENNIS J SWART ARCHITECTURE, PC',

'LEWIS & SULLIVAN P C',

'DDC CONSTRUCTION INC.',

'HINES DERMATOLOGY ASSOCIATES INC',

'ART MUSEUM NEW BEDFORD INC',

'THE BATTERY CONNECTION, INC.',

'CENTER FOR PSYCHOLOGY AND LEARNING, LLC',

'FEENEY PINKERTON LLC',

'B & D CONSTRUCTION CO INC',

'LIG CONSULTANTS PC',

'PATEAKOS & POULIN , PC',

'EAST COAST SHED INC',

'COMMONWEALTH CHEMICAL SPECIALTIES LLC',

'BOSTON AIR CORP.',

'CRAYON CAMPUS INC',

'2120 PLEASANT STREET REALTY TRUST',

'TITUS ENGRAVING AND STONESETTING INC',

'BEDROCK GRANITE COMPANY INC',

'MARKEY & WALSH LLC',

'LISCO INC',

'ARRUDA TRENCHLESS CONSTRUCTION LLC',

'ED GALLAGHER & SON PLASTERING, INC.',

'RHODE ISLAND DERMATOLOGY INSTITUTE INC',

'RDS OPERATIONS INC',

'CORSO LAW, LLC',

'URBAN BLINDS LLC',

'FREEDOM RESTORATION LLC',

'KM DOVER LLC',

'KERRY L PLANTE CPA PC',

'LOPES YARD SERVICE LLC',

"WAYNE'S SHEET METAL INC",

'RIGHT FOOT SHOES LLC',

'SCHAEFER MARINE, INC.',

'LUZO AUTO BODY INC',

'HOLMAN INSURANCE AGENCY INC',

'LISCOMBE & PARRELLA PC',

'BLACKSTONE STUDIOS LLC',

'FORTE ELECTRIC INC',

'MB CONTRACTING CORP',

'CORE AUTOMOTIVE INC',

'LAX AND COMPANY INC',

'K. N. B. AUTO SERVICE CENTER INC.',

'SUMMIT INTERNATIONAL MEDICAL TECH INC',

'COOGAN SMITH LLP',

'ASPELL SAGGERS LLC',

'NEW ENGLAND REFRIGERATION & HEATING INC',

'BERGERON CHIROPRACTIC NEUROLOGY, P.C.',

"THE CHILDREN'S MUSEUM OF GREATER FALL RIVER INC",

"RUFFIN' WRANGLERS LLC",

"CHRIS' ELECTRONICS CORP",

'ARAUJO LANDSCAPING INC.',

'GRO-BRO INC',

'COMMERCIAL SALES & MARKETING INC',

'COHEN CLEARY, P. C.',

'COMPULSION, LLC',

'SARAH NUTTALL CPA INC',

'HART ELECTRIC CORPORATION',

'INTERNATIONAL C FOOD INC',

'EXTREME DRYWALL CONTRACTORS, INC',

'NEW BEDFORD OCEAN CLUSTER INC',

"GASPAR'S SAUSAGE CO. INC.",

'ADVANTECH CONSULTANTS MSP INC',

'LAPLANTE & ASSOCIATES INC',

"SLIP'S CAPEWAY MARINE,INC",

'FUZION DESIGN INC',

"TINO'S TRUCK SERVICE, INC.",

'J & R PRE CAST INC',

'BRIDGEWATER FARM SUPPLY CO., INC.',

'SIGN DESIGN, INC.',

'DONELLON ORCUTT PATCH & STALLARD PC',

'H & H CEILINGS INC',

'SOUTHEASTERN REGIONAL PLANNING & ECONOMIC DEVELOPMENT DISTRI',

'G. BROUILLETTE & SON INC.',

'TAUNTON STOVE COMPANY INC',

'VACUMETRICS CORP',

'PRO HOME INC',

"CAPTAIN BUB'S MARINE, INC.",

'POMROY ASSOCIATES LLC',

'WILLIAM L. PROVOST',

'TRIUMPH INC',

'COLONIAL TRUST LTD',

'JPS CONSTRUCTION AND DESIGN INC',

'OTERI FUNERAL HOME INC',

'ATLANTIC PAPER AND TWINE COMPANY. INC.',

'EYE CONSULTANTS OF RHODE ISLAND LTD',

'TOWN & COUNTRY PLAZA LLC',

'BACKATCHA APPAREL LLC',

'TRACEY GEAR INC',

'NEW ENGLAND METALFORM INC',

'INTERBUILD INC',

'ROSELAND NURSERY INC',

'JORGE DRYWALL CO INC',

'ATLANTIC ELEVATOR SOUTH CO INC',

'BEETLE INC',

'WILLIAM MCCASKIE INC',

"STAN & PAUL'S INC",

'DYL & PERILLO INC',

'ASPECTS INC',

'BLACKSTONE VALLEY COMMUNITY ACTION PROGRAM INC',

'RUTH E. URQUHART INC.',

'PAWTUCKET FOUNDATION',

'ANAWAN ASSOCIATES REALTY LLC',

'PETER D BARTEL D D S FAMILY & DDS',

'YANKEE LEASING CORPORATION',

'YANKEE FIBER CONTROL INC',

'FIBERTEC INC',

'AOL PROPERTIES LLC',

"JOHN'S ARCO INC",

'COLIBRI LLC',

'K & L TIRE AND AUTOMOTIVE CO., INC.',

'LEVEL DESIGN GROUP LLC',

'DILON COMPANY INC',

'AGUDAS ACHIM SYNAGOGUE',

'ROBERT M DIGIANTOMMASO PC',

'ISE ENGINEERING INC',

'M J EISENHAUER PLUMBING INC',

'SKYLINE MARBLE AND GRANITE INC',

'COLONIAL AIR INC',

'ABREAU OIL SERVICE, INC.',

'WOODFORD HOLDINGS LLC',

'CURRY WATERPROOFING & MASONRY RESTORATION INC',

'PREMIER CONSTRUCTION INC',

'SAFETY RESEARCH & STRATEGIES INC',

'A.P.C. AUTO BODY INC.',

'LAND TEK MAINTENANCE INC',

'BIGELOW AUTO BODY INC',

'IPSCO INC',

'NEW HOPE INC',

'CLIMATE CONCEPTS HVAC SERVICE CONTRACTORS INC',

'T A CHRISTIANSEN LLC',

"COLLINS SMITH & O'CONNOR LLP",

'WILLOW TREE POULTRY FARM, INC.',

'DENNISON MEMORIAL COMMUNITY CENTER INC',

'CASTRO THRESHER & OLIVEIRA PC',

'3 D WELDING INC',

'ATTLEBORO OPHTHALMOLOGICAL ASSOCIATES INC',

'WORDSMITH PROS INC',

'BRIGGS MECHANICAL INC',

'TIRE STORES INCORPORATED',

'MALCOLM GIVENS & ASSOCIATES PC',

'BI COUNTY COLLABORATIVE',

'J & R SALES AND SERVICE, INC.',

'ROSANNE K. ROMIGLIO-ASHLEY',

'SELF HELP INC',

'BRADFORD STEEL CO INC',

'FALL RIVER ELECTRICAL ASSOCIATES CO INC',

'SCOTT W. LANG',

"COSTA'S TRUCKING, INC.",

'LAW OFFICE OF MARC R. DESHAIES P.C.',

'WHITE TAIL HOLDINGS LLC',

'M.A.G. IRRIGATION INC',

'NICKEL RENTALS LLC',

"ALLAN SMITH & COMPANY CPA'S PC",

'M3IP INC',

'MR CESSPOOL INC',

'NEW BEDFORD PLUMBING & HEATING SUPPLY C',

'BLC REALTY CORP',

'MORTON FEDERAL CREDIT UNION INC',

'TOTAL CARE ACCIDENT REPAIR SERVICE OF RAYNHAM LLC',

'BROUILLETTE HVAC AND SHEET METAL INC',

'TAUNTON BUSINESS IMPROVEMENT DISTRICT IN',

'T-SCAPE, INC.',

'HOUGHTON PHYSICAL THERAPY AND SPORTS CONDITIONING, LLC',

'THREE T ENTERPRISES INC',

'JAM CONSULTING LLC',

'HIGH REZ CONSULTING INC',

'ANDERSON TECHNOLOGIES LLC',

'MASSACHUSETTS DESIGN ART & TECHNOLOGY INSTITUTE INC',

'TOUISSET CONSTRUCTION COMPANY',

'LAW OFFICES OF DANIEL C. PERRY, LLC',

'ERICKSON GROUP INC.',

'CAMELOT ENTERPRISES INC',

'CUSTOM CONCEPTS CONSTRUCTION CORP.',

'TWOMAC, INC.',

'G. PRETO INSURANCE, LLC',

'EAGLE CORNICE CO. INC',

'LISE MOTORS, INC.',

'CENTRAL SPORTS CARDS, LLC',

'D4 PROPERTIES LLC',

'BEAVER TREE WORKS, LLC',

'RLG SUPPLY LLC',

'NAX ELECTRICAL SERVICES, LLC',

'MILESTONE MORTGAGE SOLUTIONS LLC',

'SPECHT ORTHOPEDIC, INC.',

'STEPKA CORP.',

'ARCHITECTURAL CONSULTING GROUP, INC.',

'COSTA CUSTOM METAL FABRICATION, INC',

'R.I. KITCHEN & BATH, INC.',

'SARAH EAGER, D.D.S., P.C.',

'BRAGA TRANSPORTATION INC',

'FALL RIVER HAT COMPANY',

'S MAIN REALTY TRUST',

'REDTAIL LEASING INC',

'A & M FIRE PROTECTION INC.',

'HANDUP US LLC',

'THIRTY NINE NORTH PLEASANT STREET REALTY TRUST',

'A&A MECHANICAL, LLC.',

'FAMILYSTORE.IO LLC',

'ADVANCE AIR & HEAT COMPANY, INC',

'A G INDUSTRIES INC',

"RACHEL'S TABLE LLC",

'BUCKSWORTH ENTERPRISES, INC.',

'RAYMOND ZHOU, M. D., P. C.',

'CATALANO CONSTRUCTION, INC.',

'OT LLC',

'GREEN MOUNTAIN ENTERPRISES INC',

'C2S ENERGY LLC',

'PIESCO SPORTING GOODS, INC.',

'R. CANTWELL WOODWORKING, INC.',

'STRIDES BEHAVIORAL SERVICES, LLC',

'DSC AUTO INC',

"RAY'S HOCKEY & CUSTOM APPAREL, INC.",

'W ENGINEERING, LLC',

'JACK & SON AUTO SALES SERVICE INC',

'HASELTON PLUMBING & HEATING, INC.',

'NEWBURY DESIGN ASSOCIATES, INC.',

'THE GLOW WORKS, INC. DBA THE LIGHTING GALLERY',

'BDL HEATING & COOLING, INC.',

'PRIORITY ONE PLUMBING & HEATING, INC.',

'BAY BUSINESS MACHINES, INC.',

'A & L PLUMBING INC',

'SAPERIA ORTHOPAEDICS AND SPORTS MEDICINE INC',

'NEAL REILLY TREE & LANDSCAPE COMPANY INC',

'CAPITAL STRATEGIC SOLUTIONS LLC',

'IMPACT COLLISION PARTS INC',

'BERKLEY BEVERAGE CORP',

'ANVIL STEEL ENGINEERING INC.',

"TJ'S MUSIC INC",

'CRYAN LANDSCAPE CONTRACTORS INC',

'ERICA HOPE GUATIERI, CPA, LLC',

'HARPSICHORD CLEARING HOUSE, INC.',

'KEELAND NOMINEE TRUST']

## Psuedo code

ACCTCOMMON

* Filtered by CURRACCTSTATCD on ACT/NPFM
* Filter to CML

Append ACCTLOAN for COBAL & TOTALPCTSOLD

Append LOANS for AVAILBALAMT

Calculate Total Potential Outstanding

Append household number

Group by household number and sum Total Potential Outstanding

Append Household total potential outstanding

Filter down dataframe on LOC & creditlimitamt/total exposure constraints

Deposit information is needed such as ttm overdrafts & if decrease balance by a % (above a threshold)

* Build calculations in here or use Daily Deposit Update file
  + Can recreate daily deposit update file and embed in the code.

All criteria testing is done once all the data is there

GUAR extract for Xactus & testing criteria for Credit score drop should be done in a separate dataframe and then the consolidated to 1 line so it can be appended back to the main dataframe.

== 2024-08-09

* Wrote a Database Handler wrapper class to abstract a lot of the database connections
* Refactored the code into functions (reduced globalization)
* == 2024-08-12
* Will need ALLROLES, WH\_PERSUSERFIELDS, WH\_ADDR, PERSADDRUSE for personal guarantor section. I need PERS too to get the name.
* A diagram of a flowchart

  Description automatically generated
* At this stage, I’m thinking about the inner joined df being a separate variable name, testing criteria and then consolidating down to 1 acctnbr per record. Here we’ll have duplicate ACCTNBR, as we could have 1 LOC with 2 personal guarantors.
* Data types are important. Joining on all fields that are standard to the database, but if database datatypes change, we could run into issues. Explicitly setting datatypes and placing multiple assertions would work. This is a later stage of the project. Currently working to get an MVP in the hands of end users to see/play with.
* Removed the DB handler and implemented what I had before. While elegant code, it opens and closes the connection every single time it needs to query a database. For back to back queries and complex projects, this is not ideal and pushes many requests to the db. I can tweak db\_handler class at some point, but for now, I will stick with the original data retrieval method.

== 2024-08-13

Discussed with Kelly the implications of soft pulls and how credit scores will be stored on the core. No information has been sent out to begin this process yet.

Below is the Fair Credit Reporting Act (2023, pg 7)

A paper with text and images

Description automatically generated

Adverse Action would apply if we chose not to renew the line due to the Credit Score decline being one of the factors.

Isolated guarantors for this particular subset of loans we are looking at.

Architecture:

A screenshot of a diagram

Description automatically generated

== 2024-08-14

Pending external action on the guarantor piece.

Will continue developing the other criteria tests.

Should force int data type on all numeric fields that will be merged to be consistent. It is a mix of float and int currently (with no adjustment from the database).

* Explicit type checking will be beneficial.

Database will be built in a SQLite.db until Microsoft SQL Server is developed. This will store data in a relational database that can be queried and appended to.

Architecture of system will perform as follows:

* COCC is queries for:
  + Loan data
  + Guar info
  + Deposit Data
* Guar info on the particular loans we are targeting for this system will be sent to Xactus to obtain Credit scores.
  + This is stored in a database (with the date of last update). Each Xactus update appends to this db.
  + When a guar is tested, we’ll take at current credit score and credit score – 4 quarters (to get year ago score).
    - To ensure a guar can be tested, we’ll store a PFS check on the core if we have permission (signed PFS in credit file or if originated through SBLC/EBL application)

== 2024-08-16

For criteria testing like line of credit paid to 0 or line utilization, I can do batch query the acctcommon table for each loan. Not sure how long this will take, but if I build SQL query to effectively grab the data we need without extras, it should be a reasonable run time.

Developing the household piece, but I want to keep this flexible. It doesn’t need to be hard coded as household number from the HHACCT table, but this can be a flexible field that can come from any table. I want to use this with the Alerts system.

* R360 is the glue that holds a lot of projects together, once working properly.

Areas for focus:

* Xactus I/O
  + Building the database that will take in the data, populate the table and test the scores
    - If 1 guarantor credit score deteriorates, this is a fail, correct?
* All metrics:
  + Internal
    - Check on COCC if the line has been past due 15 days past due 3x or 30 days past due more than 1x time in the last trailing 12 months.
    - Check on COCC if there has been more than 5 overdrafts on related deposit accounts in the last trailing 12 months.
    - Check if the BCSB depository balances per COCC have declined by more than 20% on a year over year basis. The minimum deposit balances for this criteria is $250,000
      * This way, customers will not be flagged for going from $10,000 in deposits to $5,000 in deposits or similar situations.
    - Line utilization:
      * Check on COCC if the line has been paid to 0 for at least 30 days. This will be treated as an informational data point
      * Assess whether line utilization has been greater than 50% over prior 12 months.
  + External:
    - Check with Xactus if the FICO score has dropped by more than 10% or if the score is less than 680.
    - Check if there have been any bankruptcies, judgments, or liens (D&B Extract file)
    - Excluded for now:
      * Check with UCC vendor Corelogic or suitable vendor if there has been any new UCC filings over the last trailing 12 months. o This will be excluded from the original implementation
      * Confirm if real estate taxes are current. o This will be excluded from the original implementation

Executive Summary:

The Portfolio Alerts system is a portfolio monitoring tool. A quarterly meeting will be held to discuss the portion of the portfolio that is to be reviewed and pushed through the Alerts criteria. This is a way to automate annual reviews for a small subset of the portfolio and provide early warning signs into the deterioration of credit quality. During the quarterly meeting to review the results, the Chief Credit Officer will have authority over the outcomes of each specific loan product that is tested. Team Leaders, Loan Officers, Loan Review, and a designated party to take minutes will be required to attend. It will only be use on a segment of the portfolio, specifically: Lines of Credit under $500M and below $1MM in total relationship exposure.

== 2024-08-19

This week’s goal:

* Building all criteria and completion of the model (excluding external data sources)
* Ensure code is complete with docstrings and adequate documentation to walk a non-programmer through the code. If it is not clear/readable, at least from a high-level, that is my fault and I should do a better job documenting

Machine learning could be applied to this project at a later date.

Help on class DatabaseHandler in module \_\_main\_\_:

class DatabaseHandler(builtins.object)

| DatabaseHandler(tns\_admin\_path, credentials\_path\_db1, credentials\_path\_db2)

|

| This class abstracts the connection to the database and allows a clean

| interface for the developer to use.

|

| Methods defined here:

|

| \_\_init\_\_(self, tns\_admin\_path, credentials\_path\_db1, credentials\_path\_db2)

| Args:

| tns\_admin\_path (str): Oracle driver path

| credentials\_path\_db1 (str): Database 1 credentials path

| credentials\_path\_db1 (str): Databsae 2 credentials path

|

| query(self, sql\_query, engine=1)

| This allows abstraction of the connection and the class

| so the developer can query a single table as a dataframe

|

| Args:

| sql\_query (str): The query to SQL database is passed as a string

| engine (int): This selects the database. There are two engines:

| 1 -> R1625

| 2 -> COCC DataMart

|

| Returns:

| df: The SQL query is returned as a pandas DataFrame

|

| Usage:

| df = db\_handler.query("SELECT \* FROM DB.TABLE", engine=1)

|

| In this example, db\_handler = DatabaseHandler(args)

|

| ----------------------------------------------------------------------

| Data descriptors defined here:

|

| \_\_dict\_\_

| dictionary for instance variables (if defined)

|

| \_\_weakref\_\_

| list of weak references to the object (if defined)

== 2024-08-22

On track to finishing all internal criteria by Friday of this week

Docstrings are complete for all existing code.

A screenshot of a table

Description automatically generated

A screenshot of a credit card

Description automatically generated

This could be interesting to look at.

== 2024-08-23

Parameter tuning to get to 5% fail is an idea.

PD (15+):

* At >= 3 times past due,
  + 7/267 total: 2.6% fail
* At >= 1 times past due
  + 17/267

Anything NPFM or 4 or 5 rated are already getting scrutinized so we want to exclude these from the system.

== 2024-08-26

Backend model is complete.

Spent some time optimizing SQL queries:

OPTIMIZE

OSIBANK.WH\_ACCTCOMMON a

a.ACCTNBR, a.EFFDATE, a.MJACCTTYPCD, a.PRODUCT, a.CURRMIACCTTYPCD, a.BOOKBALANCE, a.LOANOFFICER, a.OWNERNAME, a.CURRACCTSTATCD, a.CONTRACTDATE

OSIBANK.WH\_ACCTLOAN a

a.ACCTNBR, a.COBAL, a.CREDLIMITAMT, a.RISKRATINGCD, a.TOTALPCTSOLD, a.CREDITLIMITCLATRESAMT

OSIBANK.WH\_LOANS a

a.ACCTNBR, a.AVAILBALAMT

OSIEXTN.HOUSEHLDACCT a

a.HOUSEHOLDNBR, a.ACCTNBR

OSIBANK.ALLROLES a

a.ACCTROLECD, a.PERSNBR

OSIBANK.PERSADDRUSE a

a.ADDRUSECD, a.PERSNBR

== 2024-08-27

A close-up of a test

Description automatically generated

== 2024-09-09

There was a bug in PowerBI where there were duplicate account numbers coming through.

Extensive testing showed that the househldacct table in COCC just has duplicate rows with identical values (why?)

A de-duplication function is applied before joining household data to the rest of the model.