Understanding Document- Offer CDP (Customer Data Platform)

Consumer Loans

Contents

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Document Revision History

Version No.	Creation date	Prepared by	Reviewed By	Reference
0.1	12-04-2023	Anil Tyagi	Prashant Rastogi	BRD version 1.0 (shared on 08-Mar-2023)
1.0	17-04-2023	Anil Tyagi	Prashant Rastogi	BRD version 1.0 (shared on 08-Mar-2023)
1.1	25-05-2023	Anil Tyagi	Prashant Rastogi	BRD updated against the Data Structure finalization for the Offer-mart, E-aggregator and MAS.
1.2	06-Jul-2023	Anil Tyagi	Prashant Rastogi	Updated BRD Received on 28-Jun-2023
1.3	04-Aug-23	Anil tyagi	Ambrish	Updated BRD for Basic validation and New and Enrich Flag

BRD, refer attachment

BRD - Introduction
of LTFS Offer CDP (C

BRD Reference: Data Flow Architecture, refer attachment

Moengage
architecture - V3 - se

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Problem Statement:

In Today's Business scenario a lot of manual work is required to create various Consumer Loans Offer and Proposed these Offers to various LTFS Partners (Proposed/existing). Post this there is another manual Process which passes these Offers to Moengage System (Campaign management) causes manual mistakes, basis on that Moengage do the SMS campaigning. There were instances when SMS were published to un-intended partners instead of intended partners/Proposed Customers.

Business Case:

A new System is required to remove the manual work, faster Processing and better management of Customer, Campaign, and various Offer data for Consumer Loan and to avoid manual mistakes.

Objective:

Create a new System (LTFS Offer CDP) to resolve the Problem statement given above, the Proposed System (Offer CDP) should have the features of Customer Dedupe, Attribution Logic, Customer Segmentation, managing Customer events, Data Lineage capabilities and maintain Campaign Data at Offer level and Customer Level.

Scope:

The scope is limited to the Proposed LTFS Customer, the System will not be used for existing Customer (Customer 360).

LTFS - Moengage Architecture LTFS Offer CDP will perform customer dedupe for single profile view of customer, offer attribution for partners and CL programs, customer segments and attributes maintenance, capturing of customer events like SMS events and loan journey stages, data lineage for EDW system and maintain campaign data on customer level and campaign level and on the basis of all these processes, it will generate a file in Moengage format which can be downloaded from CDP which will be used to upload on Moengage for campaigns.

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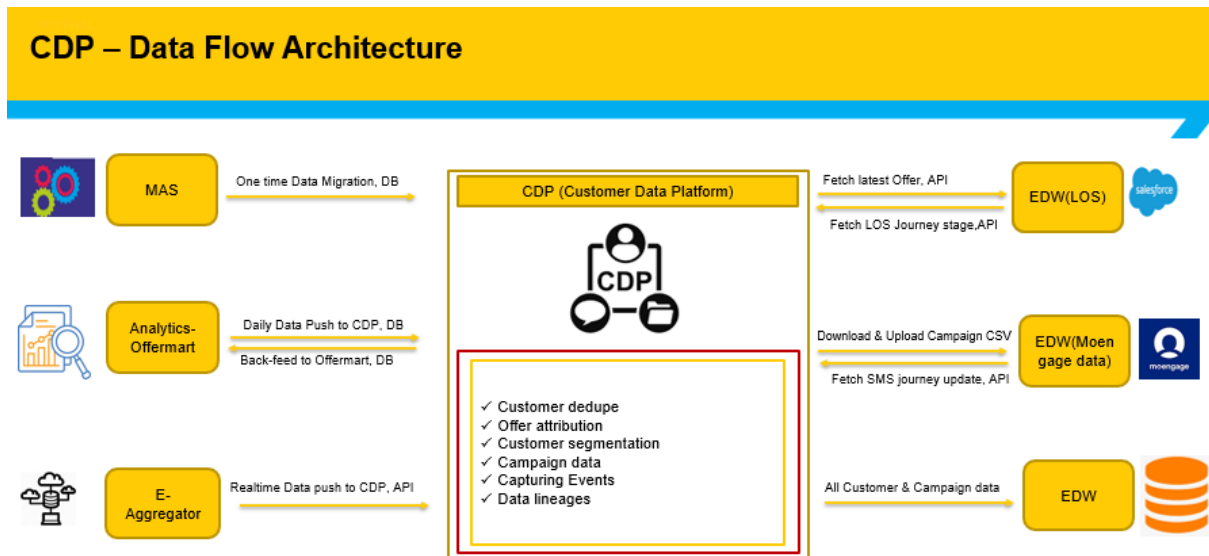
LTFS Offer CDP (Customer Data Platform) Features:

CDP System to be built in the Moengage architecture. CDP system will be present between Analytics Offer Mart and Moengage and will include the below functionalities

1. Customer Dedupe

2. Attribution logic

3. Customer segments

4. Customer events

5. Data lineage

6. Campaign data

1. Customer Dedupe:

System will check basic Column level validation while moving data from Offermart to CDP System, refer attached Excel.

Dataset_Validations
_UnifiedCL_v1.1 (1).x

This functionality will provide a single profile view of the customer for Consumer Loan Products. Dedupe will be based on
a. Mobile number or
b. Pan number or
c. Aadhaar reference number or UCID number match or previous loan Appln number.

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Reverse Feed to Offermart(Hourly)
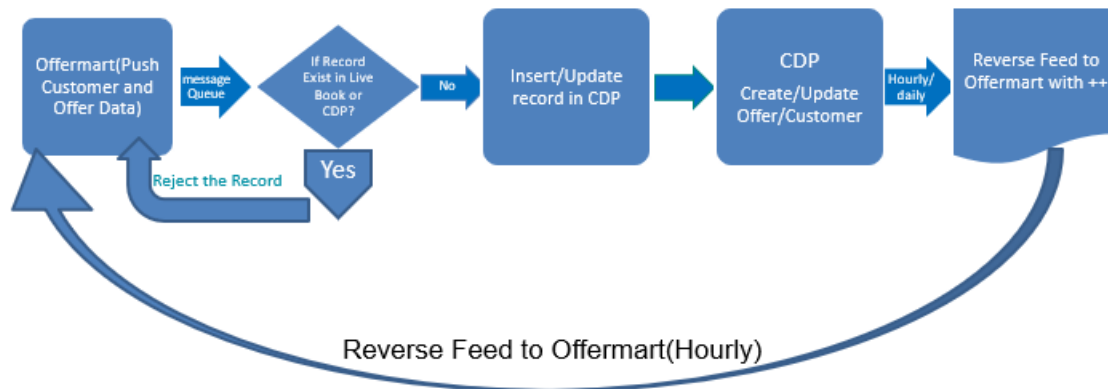
Dedupe Logic:

1.1. The dedupe logic above would be checked within all CL products (Loyalty, Preapproved, E-aggregator etc)

1.2. Live book for CL dedupes needs to be performed before offers get finalised. The dedupe against the live book needs to be performed based on – to mobile number or pan number or Aadhaar reference number or ucid number. Live book data will be available in Customer 360 - need to check Customer 360 for the same

1.3. Top-up loan offers should not be deduped against other CL products live book as it would result in matches found. Top-up offers should be deduped within other Top-up offers only and matches found to be removed.

1.4. All real-time offers generated for Insta or E-aggregator via apis coming into LTFS CDP would be pushed into Analytics Offermart on an hourly/daily basis. Old offers for same mobile number or pan number or Aadhaar reference number or ucid number match would be updated by the new data received from LTFS CDP in the Analytics Offermart basis the data sent from CDP.

1.5. There are 02 sources of Data to be pushed in CDP given as below:

a. **Offermart**- Offermart System will push Offer data and Customer data on daily basis by creating a staging area. Data will be pushed from Offer DB to CDP DB with daily frequency. – Offermart Team will share the Data templates (Tables, Columns and data type) for the data to be pushed in CDP. Similarly, CDP will push the daily reverse feed to Offermart including any Offer data updates from E-aggregators, frequency – hourly/daily basis.

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Refer the Data Field level details and Column Data type for Offermart and E-agreegator

Data type and Column level details
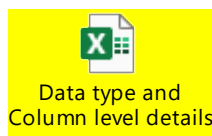
b. **E-aggregators**- Realtime data will be pushed from Insta or E-aggregators into the CDP via Open API, there are three API:
   a. Lead Generation API: This API validates the data before pushing the Record in CDP
   b. Eligibility API: This API do the Dedupe, Bureau and BRE before inserting the record into CDP
   c. Status API: This API return the current status of the Loan
   d.

As of today these API are being executed from MAS Application server and inserting the data in MAS DB Server. Now, CDP will modify these API so that data can be inserted into the CDP database instead of MAS database.

During Production Cut-over one time Data migration needs to be done into the new tables created in CDP database from MAS database

c. MAS- One-time base data will be pushed from MAS database to CDP database (Akhilesh/Paresh to share the Data structure (Cols and Data type)). Approach for Data push to be checked with Ram Chandra.

1.6. Customer offers with loan application journey started against them cannot be modified till the loan application is either expired or rejected. Post the loan application expiring or marked rejected, the loan offer can be checked for any new replenishment.

2. Customer segments:

2.1. Different customer attributes and different customer segments on the basis of those attributes should be maintained.

2.2. Flags for **Offer statuses** (e.g., Active, Inactive, Expired) should be maintained.

Business Logic for Offer Status:

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- Active - If loan journey has not started using the offer lead id till the offer expiry date then the status is Active

- Inactive - If loan journey has started using the offer lead id then the status is marked as Inactive

- Expired - If loan journey has not started using the offer lead id and the offer expiry date has passed then the offer is marked Expired. Offers with customer requests for DND are also marked as Expired. If a loan journey has started by the LOS returns a lead ID to be marked expired then the status is to be marked as Expired.

2.3. Flags for **Offer type** like 'Fresh', 'Enrich', 'New-old', 'New-new' type as per the business definition to be maintained for campaigning. Offer Type should be checked for Preapproved and TW-L Product. Fresh mean it is a new Offer either first time or against the Expired Offer. Enrich means the Offer is for given against the existing Offer which Journey may not be started or may be started. Fresh Offer will flow as it is a new Offer. For Enrich if journey is not started than it will flow to CDP and previous offer will be moved to Duplicate. If journey started for Enrich than it will not flow in CDP.

2.4. Other analytics defined flags for **Propensity** (e.g., dominant tradeline or any other suitable segmentation) to be maintained for campaigning. – No Business logic to be developed as the calculated values will be passed in CDP from Offermart.

2.5. **Offer history** for past N (analytics/business to decide) months to be maintained for reference purposes. – 06 months data to be retained. Need further confirmation from Senior management.

2.6. Customer segments like **C1 to C8** to be maintained. Any other segments prescribed by the analytics team from time to time should also be maintain. No Business logic to be developed as the calculated values will be passed in CDP from Offermart.

2.7. Offermart Team to share the Field level details with data type requiring what all data to be stored.- Prem to share

2.8. Front-End screen requirement- Offermart Team and Transformation Team will discuss with Business and update.

3. Attribution Logic

3.1. If a customer is already present in pre approved base (prospect or E-aggregator) but journey has not started and the same customer comes through CLEAG/Insta - In this scenario the CLEAG/Insta journey will prevail

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(attribution will be done to the partner/PLANET from whichever channel the case has come through). The uploaded pre approved offer in this case will get expired.

3.2. If a customer is already present in pre approved base (prospect or E-aggregator) and journey has started and the same customer comes through CLEAG/Insta - In this scenario the customer coming through CLEAG/Insta from whichever channel, will not be able to go through and will be directed to the pre approved offer.The attribution here will be as existing in the pre approved offer.

3.3. If a customer is already present through CLEAG/Insta mode (i.e.both for market place and PLANET) and whether the journey has started or not- In this scenario if the same customer comes through CLEAG/Insta again through some other channel, then the customer will not be able to go through and will be directed to the previous offer. The attribution here will be as existing in the previously available case.

3.4. If a customer already has a TWL or Top-up or EL offer & then the same customer details comes via CLEAG/Insta – In this scenario the customer will be shown that he already has an existing offer and he will do the journey as per his pre approved TW/EL/Topup offer.

3.5. If a customer is already present in pre approved base (prospect or E-aggregator)
and then the same customer receives an offer for TW Loyalty or Topup or Employee loan or Pre approved - E-aggregator or Prospect then, offer for the same customer cannot be uploaded. The same customer cannot have a TW Loyalty or Topup or Employee loan offer.

3.6. If a customer receives an offer via Employee loan first and then the same customer receives an offer for TW loyalty or Topup or Pre approved - E-aggregator or prospect then the offer for the same customer cannot be uploaded.

3.7. If a customer receives an offer for TW Loyalty first and then the same customer receives an offer for Topup or Employee loan or Pre approved - E-aggregator or Prospect then offer for the same customer cannot be uploaded.

3.8. If a customer receives an offer via Prospect first and then the same customer receives an offer for TW Loyalty or Topup or Employee loan or Pre approved E-aggregator then offer for the same customer cannot be uploaded. The same customer cannot have a TW Loyalty or Topup or Employee loan or Pre approved - E-aggregator offer.

4. Customer events:

4.1. Event data from Moengage and LOS to be stored back in the LTFS Offer CDP. DND Customers to be avoided

B. Event data to include everything from
   a. SMS sent, (This data will pass from Moengage to CDP)

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b. SMS delivered, (This data will pass from Moengage to CDP)

c. SMS click, (This data will pass from Moengage to CDP)

d. conversions, (This data will pass from LOS/Moengage to CDP)- Conversion can be basis on EKY achieved/Disbursement basis on Campaign type.

e. stages of application like (This data will pass from LOS to CDP)
   i. login,
   ii. bureau check,
   iii. offer details,
   iv. eKYC,
   v. Bank details,
   vi. other details,
   vii. e-sign, etc.

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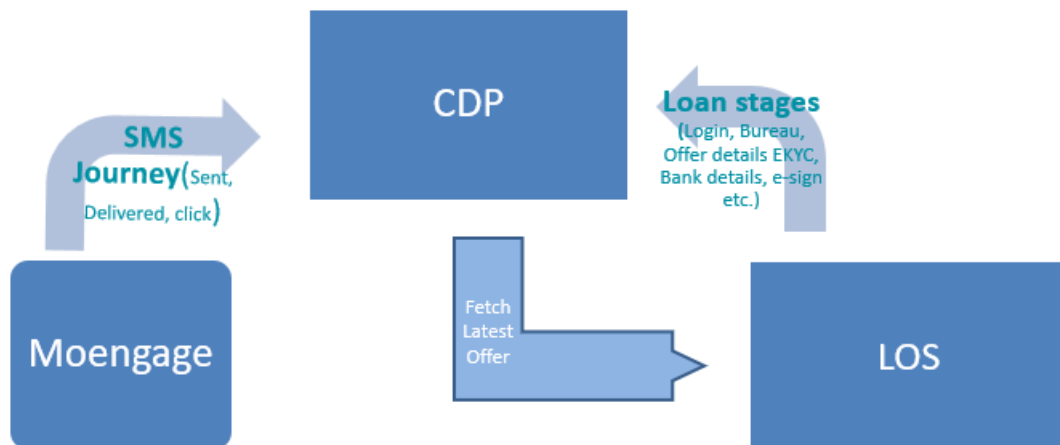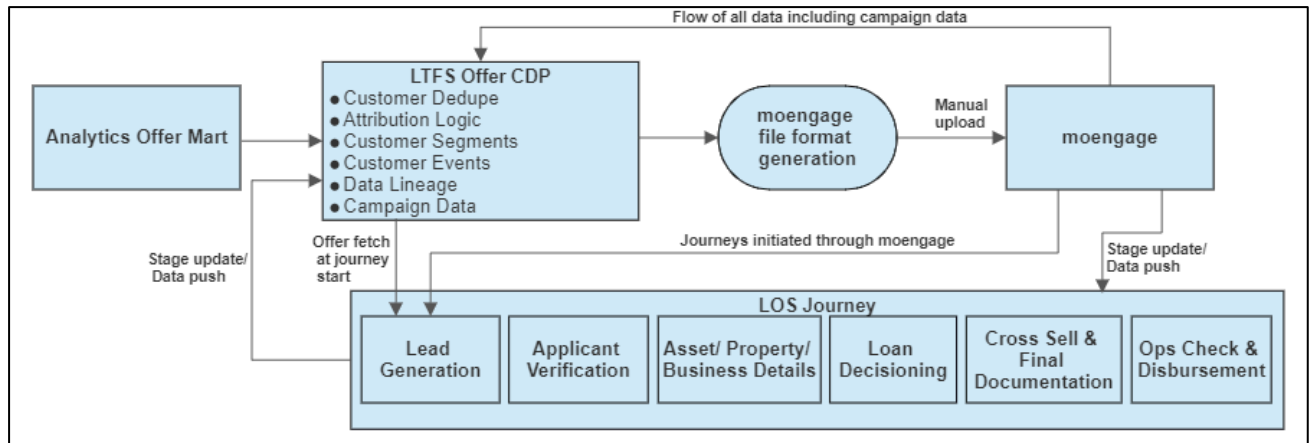
5. Data lineage:

5.1. All data including the campaign data will be passed to LTFS Offer CDP. From LTFS Offer CDP data will be passed to EDW.-

5.2. From EDW, data will be used for Qlik Sense Dashboard and Analytics Mart.

5.3. Data will be passed from LTFS Offer CDP to EDW on daily basis by day end. - Raj to share the data template

5.4. All the data should be maintained in LTFS Offer CDP for previous 3 months before deletion from CDP.
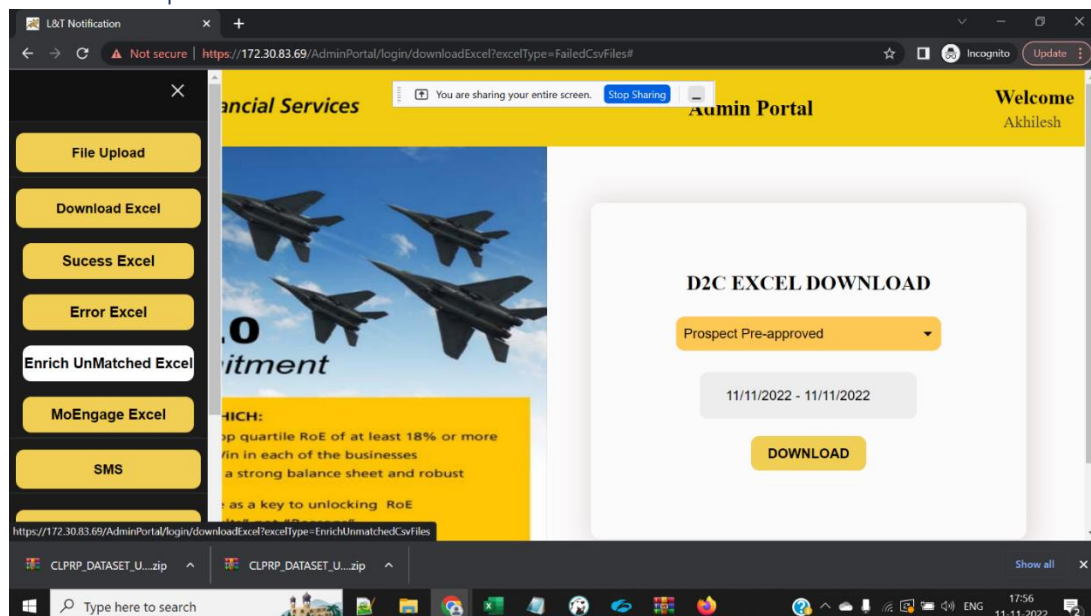
MAS Table Structure:

1. CLEAG_DATASET_UPLOAD
2. CLPRP_DATASET_UPLOAD
3. CLTWL_DATASET_UPLOAD
4. CLEML_DATASET_UPLOAD
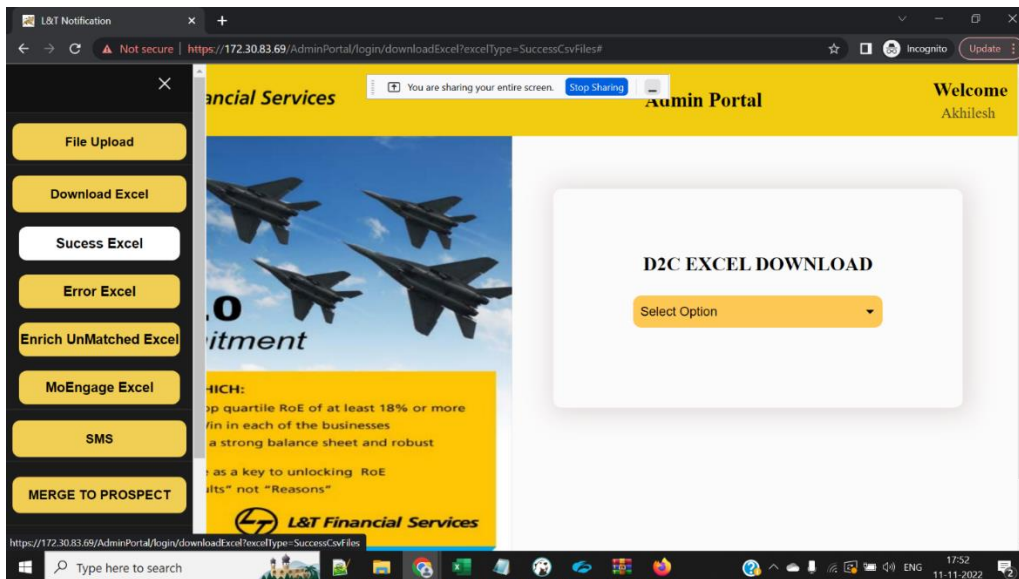5. CLTOP_DATASET_UPLOAD

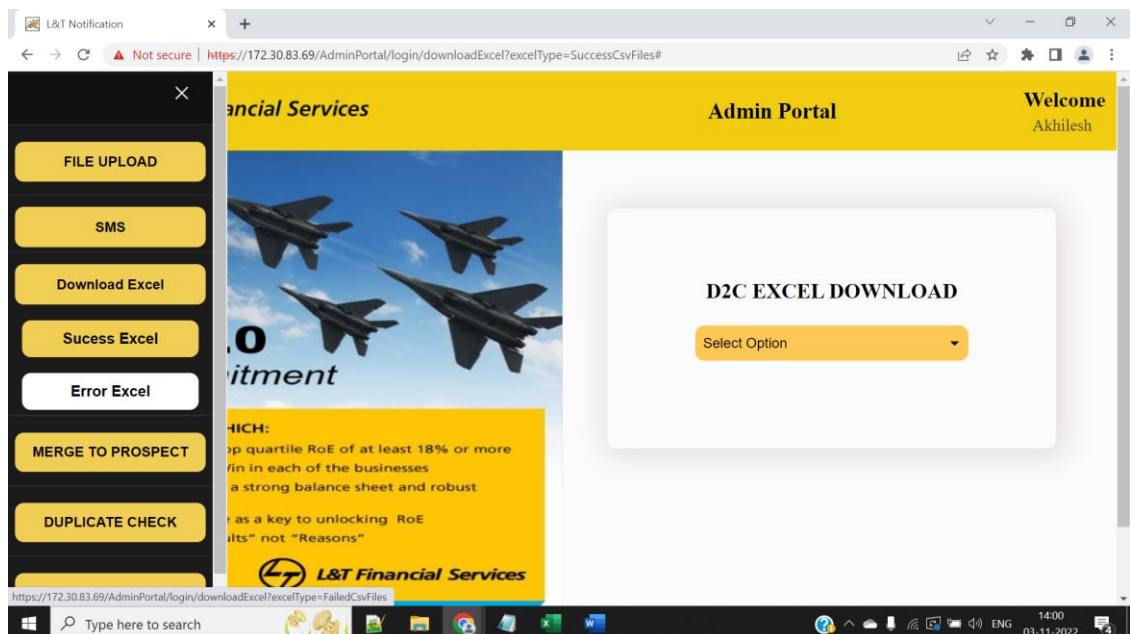## 6. Screen for Download Excel or CSV

1. Download Moengage File

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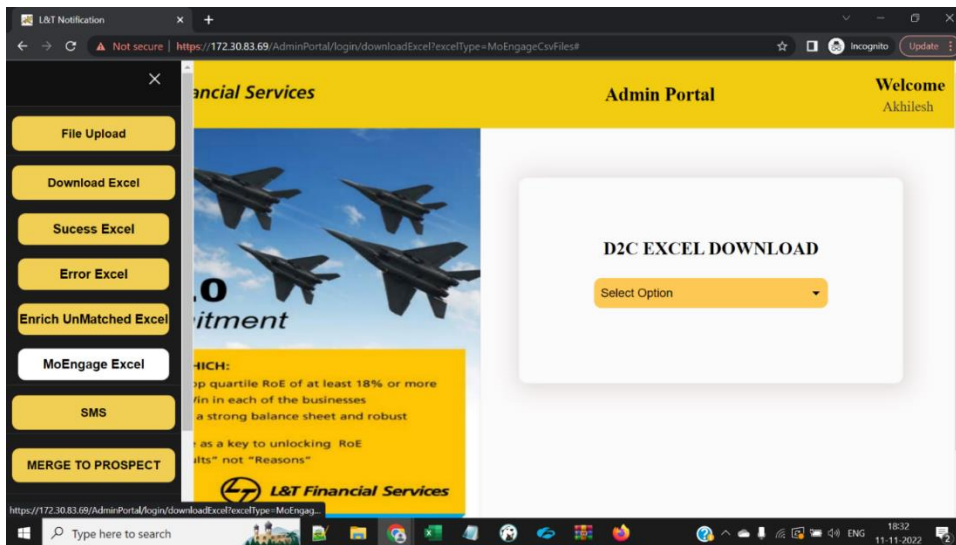
2. Down Duplicate Data File

3. Download Unique Data File

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4. Download Error Excel

7. Admin Portal

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Currently, customer details can be uploaded on Admin Portal for Prospect, TW Loyalty, Topup and Employee loans. This generates a lead for the customers in the system for the corresponding journey post which they can login and start their their loan application journey.

Below are the sample file formats that are uploaded:

1. Prospect

    Dataset_CLPRP.xlsx

2. TW Loyalty

    Dataset_CLTWL.xlsx

3. Topup

    Dataset_CLTOP.xlsx

4. Employee loan

    Dataset_CLEML.xlsx

If all the data in the corresponding upload file is correct then the file gets uploaded successfully on Admin Portal and leads get generated in the system. In this case, a success file gets generated.

Sample success file:

CLTOP_DATASET_U
PLOAD_Dataset_Vali

If any of the data in the file is entered incorrectly or the file is not in a correct format then file does not get uploaded on Admin Portal. In this case, an error file is generated. This error will contain a column name 'Error Desc' which will contain the reason for file upload failure.

Sample error file:

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CLTOP_DATASET_U
PLOAD_VALIDATION

8. Campaign data

All the data related to customers and campaigns should be maintained in CDP. – Akhilesh/Paresh to share the data template along with data pass method to Offer CDP DB joins/API/Excel etc

This will include data of all the customers targeted through campaigns and data for all campaigns like attempted, successfully sent, failed, success rates, conversion rates, date of campaign, campaign unique identifier, etc.

Reports:
1. Front end for daily reports for the data tally- Akhilesh/Paresh to share the report format
2. Front end for customer level view with stages- Akhilesh/Paresh to share the report format

Expiry Logic

8.1. The offers would be depended on the offer end dates for non-journey started customers. Post the expiry of any of the offers, any new offers for the customers to be checked to replenish the offers for the non-journey start customers. - what is the Field level details for the Offer to be retained and Data type

8.2. Any journey started customers whose LAN validity post the loan application journey start date is over needs to be marked as expired within the offers data. Flag can be maintained to identify these offers. - Clarification is required to understand the period after which the LAN to be marked as Expired for that Offer.

Moengage format

- A front-end utility needs to be given to LTFS users to download the Moengage format file generated. Data would be in .csv file format which is uploadable in Moengage.

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- Akhilesh /Paresh to share the Screen design to be build to download Excel .CSV file which will be uploaded in Moengage.
- Akhilesh and Paresh to share the DB credential to refer the what all DB tables exist in Moengage System

User Stories:

1. User Stories- Refer Excel Attached

CDP User Stories
-Draft Ver 1.0.xlsx

Assumption:

1. To Build CDP Database, initially MAS Tables needs to be imported in CDP Database. Akhilesh//Pares Team to share the Tables name, Columns and Data Type etc.
2. Analytics Team will share the One time consolidate data to initially build the CDP Database on top of MAS data. Incremental data from Offermart to CDP will be pushed on daily basis.

Out of Scope:

1. Except one No other screen or Report to be design for the following functionality in CDP. Only Excel/.CSV file with download feature through screen to be design and developed by CDP System. The Campaign data to be manually uploaded in Moengage System by Product/Business Team
   a. Customer Dedupe

   b. Attribution logic

   c. Customer segments

   d. Customer events

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e. Data lineage

f. Campaign data

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