Project Title: Rewards
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Abstract

The Rewards/addons project aims to provide extra benefits to customers when they purchase a specific plan. Three different plans are offered - Rewards123, Rewardsmini and Suraksha. These plans provide perks like cashback and insurance that regular savings accounts don't offer. The project targets 2 groups: LKY (low kyc) or wallet customers and SBA (savings bank account) customers. Thanks app and mitra app are used in order to provide these rewards and onboard the customer.

Introduction

In today's world customers want more than just a basic banking service. The rewards/addons project is here to meet that need by providing reward plans that offer great benefits. The three different plans aim to provide users with cashback and insurance making the service attractive. Thanks app and mitra app provided ensure that customers get a smooth experience from signing up to managing their rewards. As a rewards team we showcase the product to customers, so the entire journey from showcasing the product to them purchasing the product is facilitated by us.

Purpose of the Project

1. **Customer engagement:** Offer attractive rewards that encourage users to take advantage of benefits.
2. **Stand out:** To make our product stand out by offering benefits that encourage users to purchase plans.
3. **Seamless onboarding:** Make it easier for users to join or move from lky to sba.
4. **Boost loyalty:** Increase customer satisfaction and keep customers coming back.

Problem Statement

Many customers with regular savings accounts are not receiving any additional perks leading to low engagement and satisfaction. Major significance of this issue is that customers who do not feel rewarded are less likely to stay loyal to the bank which eventually leads to high drop offs. (Research was done on the same by going through industry reports and surveys, I currently do not have exact data)

Goals and Objectives

Goals

1. **Increase Customer Engagement:** Create attractive plans that encourage participation from users.
2. **Simplify Rewards:** Showcase the product in a way it is easy to understand and use.
3. **Streamline Onboarding:** Make the onboarding process smooth and user friendly.

Objectives

1. Creation of three rewards plans: Launch Rewards123, RewardsMini and Suraksha each offering different benefits for a certain amount of time.
2. Increase customer satisfaction
3. Reduce drop off rates.

Methodology

We offer 3 plans: Rewards123, RewardsMini and Suraksha. Rewards123 will be accessed through Thanks App, while RewardsMini and Suraksha will be available via Mitra app. Below is the deployment diagram illustrating high level architecture of the project.

Deployment Diagram
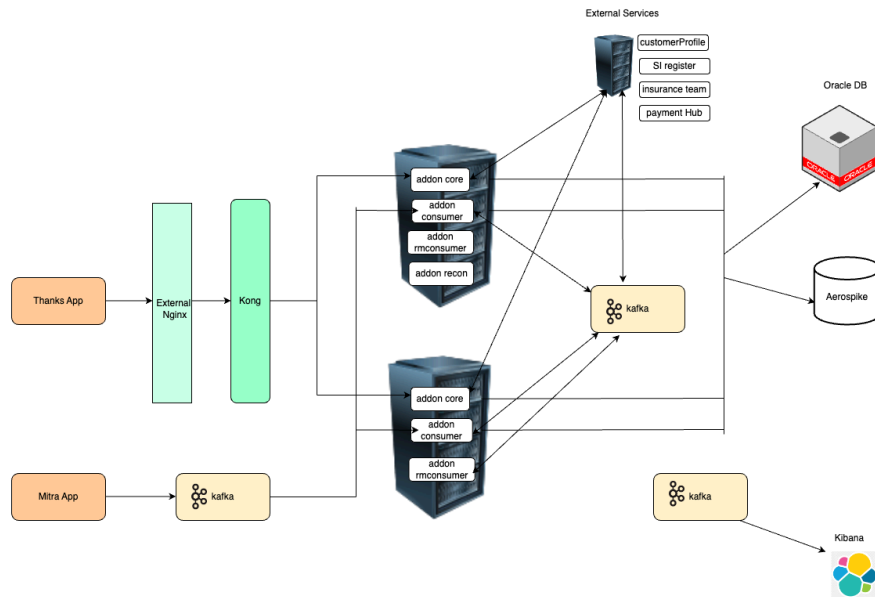
System consists of two main components: Thanks App and Mitra App. Here is how the architecture is structured:

1. External nginx: Acts as load balancer and security firewall.
2. Kong: Utilizes encryption decryption plugins for enhanced security. This ensures that sensitive information like mobile numbers and passwords are protected during transmission. In addition to it, through the UI provided by Kong we can distribute traffic according to our needs on various servers.
3. Kafka: Messaging queue system - kafka facilitates reliable communication between different components of the system.
4. Modules deployed on server: Multi module project where each module performs a specific task.
5. Oracle database: Used for logging purposes. Logging is crucial for tracking user activities, auditing and troubleshooting. Oracle's robust architecture provides querying capabilities and reliable storage.
6. Aerospike: Nosql database used because of its consistent write performance which is crucial for bank systems.
7. Kibana: For data visualization and analysis
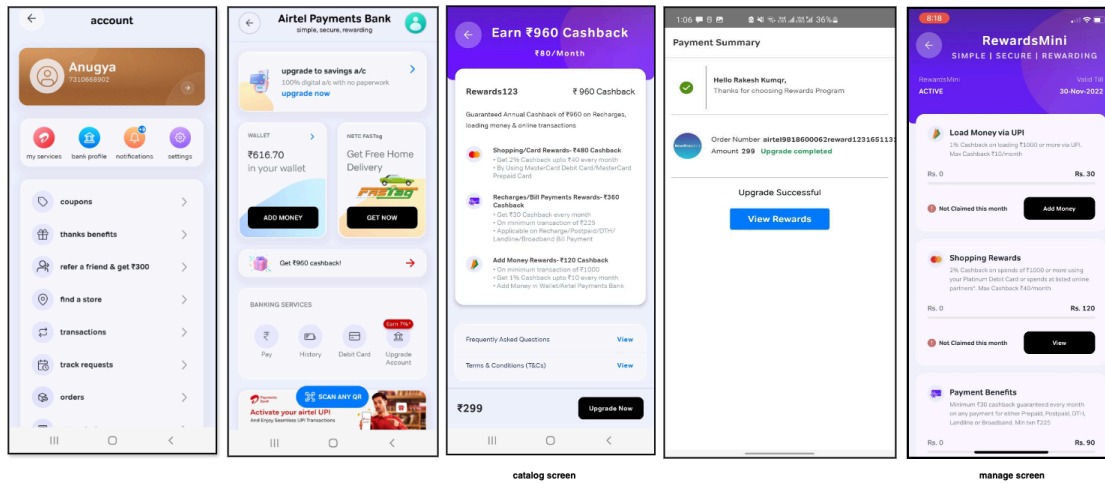
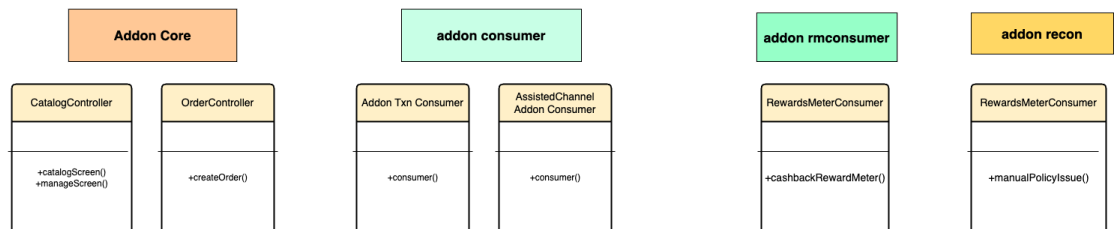catalog screen   manage screen

Modules

Rewards is a multi module project which 4 major modules:

1. Addon Core: This consists of all the controller level changes.
2. Addon consumer: All the consumers present in the project are inside this.
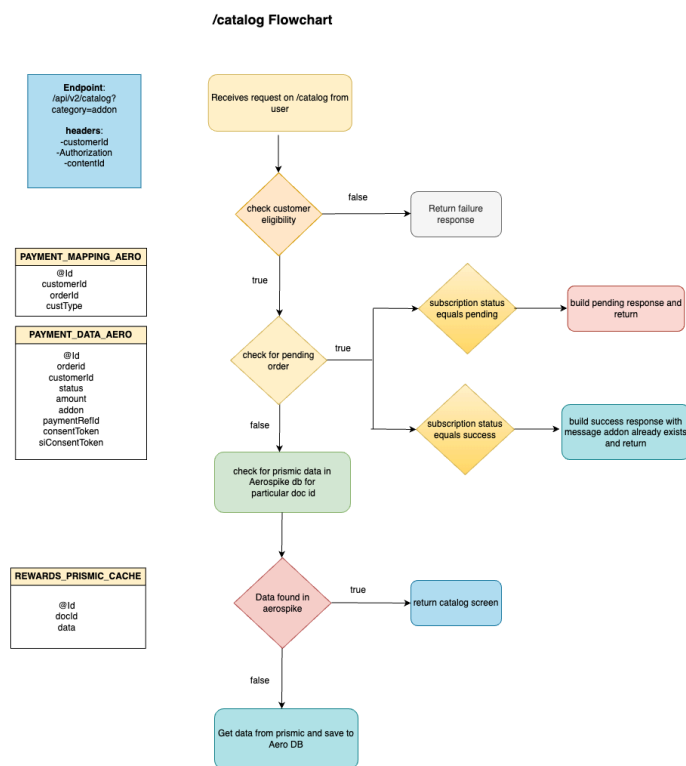
3. Addon rm-consumer: Once the user purchases the addon this module pushes the event to the growth team who takes care of providing the reward.
4. Addon recon: Takes care of all the cron jobs.

Flowchart:

Thanks App - Rewards123

Catalog api: To showcase the product to customers

Rewards123 FLOW Digram for Digital channel

/catalog Flowchart

Endpoint:
/api/v2/catalog?
category=addon

headers:
-customerId
-Authorization
-contentId

Receives request on /catalog from user

check customer eligibility — false → Return failure response

PAYMENT_MAPPING_AERO
@Id
customerId
orderId
custType

true

PAYMENT_DATA_AERO
@Id
orderId
customerId
status
amount
addon
paymentRefId
consentToken
siConsentToken

check for pending order — true → subscription status equals pending → build pending response and return

false

subscription status equals success → build success response with message addon already exists and return

check for prismic data in Aerospike db for particular doc id

REWARDS_PRISMIC_CACHE
@Id
docId
data

Data found in aerospike — true → return catalog screen

false

Get data from prismic and save to Aero DB

After customer view the product and decides to purchase **order api** is called:

/orders flow chart

Endpoint:
/api/v1/orders
POST Method
Body:
amount
action
custId
mpin
name

BuySubscriptionRequest

orderId
customerId
status
amount
action
addon
contentId

Receives request on /orders

↓

generate orderId

↓

create buysubscription request

↓

Save PAYMENT_DATA_AERO in aerospike and mark status = INITIATED

↓

Request and Customer eligibility

— false → return failure response

↓ true

check for pending orders

— found → Return BAD_REQUEST and mark status FAILURE

↓

Initiate PaymentHub request

↓

SUCESS response received

— false → Build fail response and mark status = FAILURE

↓ true

save PAYMENT_MAPPING_AERO AND mark status of PAYMENT_DATA_AERO = Pending

As a reward team, our task is to showcase the product to customers. However, we are not the ones who deduct the payment. Across the bank we have PaymentHub who does the same. Once we send the payment request to the payment hub we receive payment_id from them which we can track. After deducting the payment they push an event to addon consumer.

Addon Consumer
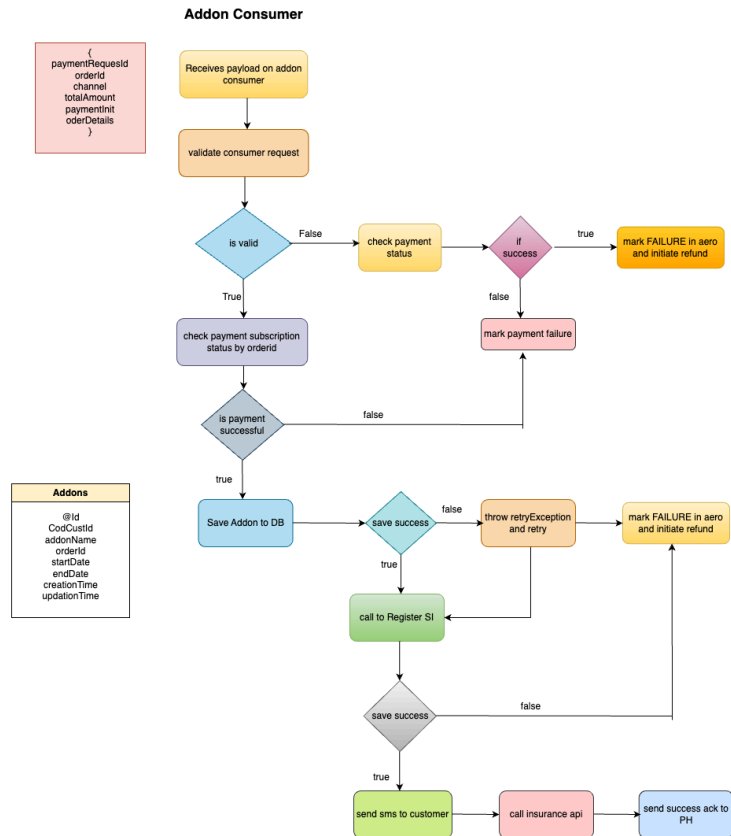
Result

We were successfully able to engage users through the rewards offered via these 2 platforms. The suraksha plan provided customers with valuable insurance benefits while Rewards123 offered cashbacks. These approaches resulted in customer engagement and satisfaction. Additionally, there was an on-site single point of contact for Mitra app, assisting users who may not be very tech savvy in opening their SBA accounts.This support resulted in a broader customer base. Overall, our efforts increased the customer engagement and enhanced their loyalty with our banking service.