Accrual Automation - Razorpay Loyalty

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<Project Plan>

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| **💡Note**  **Read following docs to get expert on different topics -**   * [**Format and Structure Your Doc**](https://docs.google.com/document/d/1gBvWjBWnrEfagqWRlVY-cZayU6PAfdZb64r4Ag-7cNA/edit#heading=h.xfi1xtal53lb) * [**How to document code in Google Doc**](https://docs.google.com/document/d/1OX-DNU7hNkB3f2cSZ9o4qvgVbogVMokJaT3B7uIitl4/edit) * [**API Design Guide**](https://docs.google.com/document/d/1vufulBF4-LYNJCixZTKtiwy4UZcqO3zcE9-hNl0iwY4/edit) * [**Crafting Product Experiences that create Customer Delight**](https://docs.google.com/document/d/1zwskZ9WPsui5OSzYJfz0LhLsbGxh3YKEnRptiNmYobg/edit) * [**A PMs’ sojourn with building a microservice**](https://docs.google.com/document/d/1iBvs5Tnz5c0EIg5c3SXiU-Zp76kz8Ws5-dRf9qVy8Ak/edit) * [**Put Google Doc in Presentation Mode**](https://docs.google.com/document/d/1TwAAJiKzEfFe68uZi191U5xkjI-IZq6FBMewfBZHqTs/edit#heading=h.7j8minvj5w8o) * [**PR-FAQ - Exceprts from Working Backward**](https://docs.google.com/document/d/1-Sm_Wmdpr-lLRPcl7my2wkQtg2BsCoXis7017lmeLKI/edit#)   **Full Reading List -** [**Link**](https://docs.google.com/spreadsheets/d/1yoOcGAede7AwWwnqQ59yIl0F4LCUDqxqe5a75IgtbPE/edit#gid=0) |
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# 1. PR-FAQ (Project Summary)

In a business landscape where customer acquisition costs continue to increase and rising cost of capital, the strategic focus has unilaterally shifted towards customer retention. Businesses are increasingly recognizing the significance of nurturing existing customers, seeking innovative ways to drive more revenue with lower costs. It is in this context that Razorpay proudly unveils the Razorpay loyalty, a cutting-edge loyalty solution that seamlessly merges the physical and digital realms to redefine customer engagement. This platform steps away from traditional discount-driven strategies, enabling businesses to foster real loyalty by rewarding customers for micro-interactions with a brand, from shopping to social sharing.

Razorpay Loyalty has been crafted with the modern, phygital business landscape in mind as legacy loyalty platforms have primarily been built with offline experiences in focus. It effortlessly integrates across all customer touchpoints — online platforms like Shopify, in-store POS systems, and mobile apps — ensuring that every purchase, referral, or other forms of engagement are recognized and rewarded. Points earned in one channel can be used on any other channel seamlessly. If a business is using Razorpay payment gateway and Ezetap by Razorpay, they can launch their loyalty program within minutes.

In our beta tests with businesses like Ferns and Petals and Decathlon, our solution demonstrated its exceptional capability by reviving 1-2% of their dormant customer base through personalised incentives. This is a testament to the platform's ability to not just engage but effectively re-engage customers, offering them compelling reasons to return.

The platform allows for the setting of specific rewards rules, such as offering additional cashback for purchases made in certain categories or excluding categories. This level of flexibility ensures that loyalty programs drive profitability to our merchants while also controlling any abuse. Marketing teams can experiment and iterate on different reward strategies without the intervention of their development team.

In future releases, Razorpay Loyalty will introduce sophisticated customer profile enrichment features, enabling businesses to harness intelligence on payment activity and customer behaviour patterns in Razorpay network to deliver highly personalised loyalty rewards.

"In today's market, where discounting has become all too common, Razorpay loyalty helps businesses drive more revenue at lower costs by giving them tools to engage and reward customers," shares Shashank Kumar, MD & Co-founder at Razorpay. "We've designed Razorpay loyalty to be at the heart of customer engagement, enabling businesses to appreciate and keep their customers through every interaction. We are building this on top of the best-in-class payment platform and that is what sets us apart"

As we introduce Razorpay loyalty to the market, we're setting a new standard for customer loyalty programs. Join us in this journey to transform customer engagement and deepen relationships. Razorpay Loyalty is here to redefine what true loyalty looks like in the phygital era.

Q1: How does Razorpay loyalty enhance customer loyalty for phygital businesses?  
A1: Razorpay Loyalty revolutionises loyalty programs by enabling businesses to reward customers for a broad range of interactions, not limited to just purchases. Whether it's through online shopping, in-store experiences, or social media engagements like referrals, Razorpay loyalty enables businesses to reward their customers instantly. For existing Razorpay merchants, the solution works with no/minimal additional integration effort.

Q2: Can businesses customise their loyalty programs with Razorpay Wallet? How?  
A2: Razorpay Loyalty offers businesses the flexibility to tailor their loyalty programs to fit their unique needs. Through our user-friendly dashboard, businesses can set specific rules for rewards, such as additional cashback for specific product purchases or time-sensitive rewards to encourage prompt redemptions, making the loyalty experience highly personalised and effective.

Q3: How does Razorpay Loyalty ensure a seamless loyalty experience across different platforms?  
A3: Razorpay Loyalty integrates smoothly with a variety of platforms, including e-commerce sites, mobile apps, and physical POS systems, thanks to our comprehensive APIs & SDKs, Shopify plugin and Out of the box integrations with Razorpay POS. This cross-platform integration guarantees that customers receive a consistent loyalty experience, whether they're interacting online or offline. We also intend to provide out of the box integrations with digital POS systems like rista, posist, Microsoft Business Central 360 etc in future.

Q4: How do businesses benefit from the analytics and insights provided by Razorpay loyalty?  
A4: With Razorpay loyalty’s advanced analytics which derives insights and affinity data using the vast payment data and other activities across merchants, businesses gain a deeper understanding into their customer behaviour. These insights allow for data-driven decisions, helping businesses refine their loyalty strategies, enhance customer engagement, and ultimately drive growth.

P.S: While the PRFAQ is for the overall product, this document covers only one of the building blocks of the product - Accrual automation/engine. Other blocks (like wallet on POS, Shopify plugin, integrations) will be covered in separate PRDs.

**Internal FAQ**

Q1: Why are we building this now?

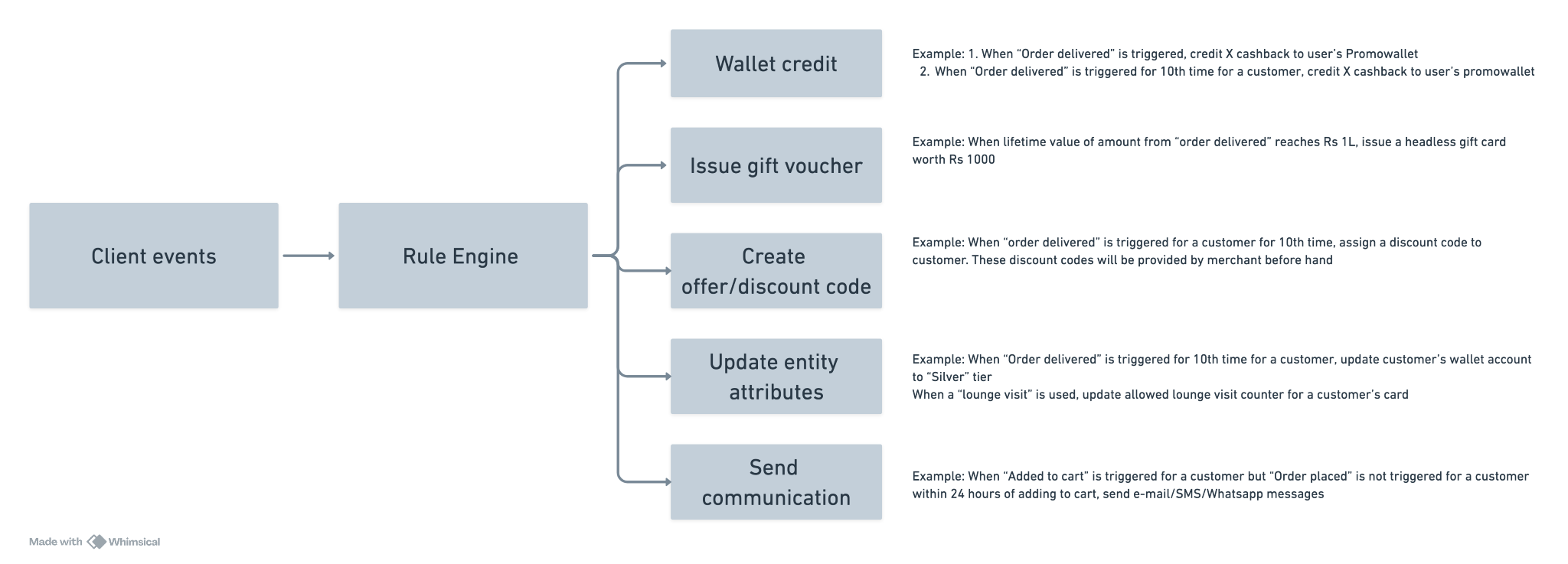
* Poshvine runs multiple bank programs where we have to credit points to customers based on transaction dumps shared by banks. Banks have their own rules that need to be followed to calculate the points. This translates to repeated and redundant effort in taking a new program live. This build hence will act as a platform capability that will enable faster time to market for our banking programs.
* We are also seeing interest from new segments like NBFCs (L&T FS for example) and new age businesses (Mid-market+/Start-ups) to launch their own loyalty programs. The needs and expectations of this segment are not fully met by incumbent solutions. With a modern API led solution we will test PMF for this segment
* This capability along with Billme’s CRM features helps us bundle an e2e solution for customer loyalty and engagement for our merchants

Q2: What are some of the other use-cases this platform will solve for Razorpay engage?

* There are more use cases within Razorpay engage which require the same architecture of no-code rule engine + action. These include -
  + CRM/Marketing Automation [Billme]: When action X is performed by user trigger marketing campaign Y
  + Campaigns for Banks through banking programs: When a customer is dormant for 3 months (no transaction from last 3 months) trigger marketing campaign for the segment
  + Lounge management system: When a customer uses a lounge visit, update the allowed lounge visits

The tech architecture will be built in a way it can be reused for the above use cases. Existing Razorpay platform solutions like governor, shield will be reused as applicable.

Below diagram shows the overall scope of the platform -



[Diagram Link](https://whimsical.com/solution-Mrizx1r2drVYcj5Gtc5CsA@2bsEvpTYSt1HjJEVFQsQZcEyXh5pGgy6uhJ)

Client events can be following:  
1. Merchant sends S2S event 2. Razorpay products/services can also send events: Ex: PG/Ezetap can send order paid, payment captured, Billme can send bill generated etc

This PRD covers only Wallet credit use cases (Loyalty platform). This is also split into following phases -   
  
1. Phase 1 which will cover only live triggers and an action based on that live trigger. Ex: Order delivered is triggered, credit X cashback to customer

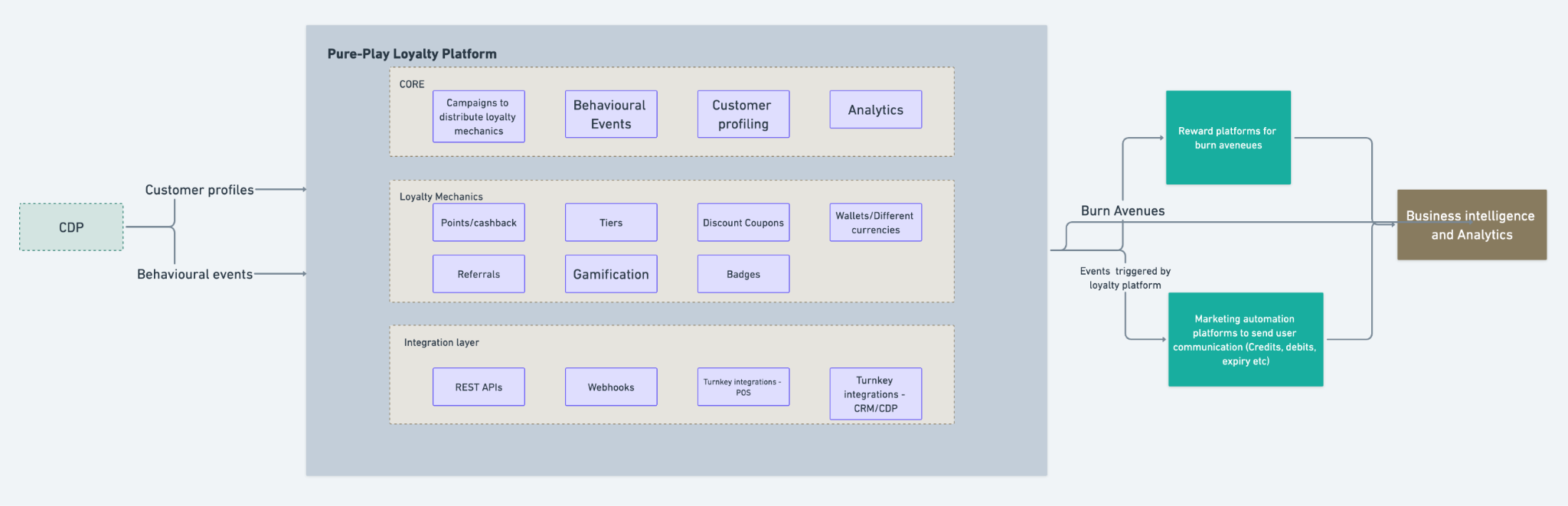
2. Phase 2 which will cover use cases which require to take action based on aggregate value of triggers in a certain timeframe. Ex: Order delivered for 10th time should update customer’s wallet account to tier silver

Q3: There are a lot of loyalty solution providers (both horizontal SaaS and sector focused vertical SaaS) that have the same pitch. How are we different?

* We are payment led loyalty platform and hence integration efforts, time to market is significantly lower for existing merchants
* Merchants get access to peripheral benefits from Razorpay engage suite with this - gift cards as loyalty incentives, gift card distribution with our banking programs etc
* Incumbents in the sector have largely focused on offline first enterprises (Capillary, easy rewards) with service + product model. New age companies which have started online and are going omni-channel need a product led solution that gives autonomy to merchant teams

Q4: How does this fit in the Martech stack of merchants and banks? Do merchants opt for a stand alone solution or do they need multiple offerings in the stack?

| **Category** | **Description** | **Ideal Target Segments** | **Characteristics of Target Segments** |
| --- | --- | --- | --- |
| Loyalty Management Service Providers (LMSPs)  Ex: Bond Loyalty, Rewards 360 | - Comprehensive and bundled services for managing loyalty program strategy, execution, and optimization | Banks which require rewards for loyalty to be sourced via coalition partnerships | - Need comprehensive, end-to-end solutions.  - Prefer outsourcing strategy and execution to specialised providers.  - Require advanced data analytics and unified data architecture.  - Limited in-house resources to execute and manage loyalty programs |
| Multisolution Loyalty Providers  Ex: Capillary tech, Easy Rewards | - Providers that can provide solutions for broader marketing and data initiatives along with loyalty as one module.  - CDP, CRM and behavioural analytics are part of the solution | Enterprises implementing loyalty along with broader marketing and data strategies.  Ex: Tata Digital, Aditya Birla (Capillary customers) | - Require implementation of loyalty programs with other marketing and data initiatives.  - Need advanced personalization and marketing automation.  - Retain control over data for multiple applications. |
| Pure-Play Solutions  Ex: [Talon.one](https://docs.talon.one/), [Antavo](https://antavo.atlassian.net/wiki/spaces/AUM/pages/501121368/Developer+Documentation), Open Loyalty etc | - Vendors focusing solely on loyalty program management, offering a rule engine for accrual/redemption, consumer data integration, and optimization solutions. | - Mid-sized to large enterprises with robust marketing stacks or CRM systems needing a specialised loyalty solution.  Ex: Decathlon, Flipkart, Nykaa, Thirdwave | - Already have a base marketing infrastructure.  - Need specialised loyalty solutions to complement existing systems.  - Require focused loyalty program capabilities.  - Often prefer integrating with existing marketing tools. |
| POS-Integrated Loyalty Solutions  Ex: Square loyalty, Thanx, Thrive | - Solutions integrating directly with POS systems, offering an easy-to-use platform for creating and managing loyalty programs | SMEs using POS systems as primary source of data and interaction with customers | - Need simple, easy-to-implement loyalty solutions.  - Prefer turnkey integration with existing POS systems.  - Limited marketing and IT resources. |

A Visual representation of combining all blocks of solutions provided by different providers would be as below -   
  


[**Diagram Link**](https://whimsical.com/solution-Mrizx1r2drVYcj5Gtc5CsA@2bsEvpTYSt1HipPMCoWDhaqignnnY5ea9nf)

We will start by being a pure-play loyalty platform to evolve into a multi-solution provider as we combine different blocks of other products like Rewards marketplace, Marketing Automation (Billme) and CDP.

# 2. Goal and Success Criteria

## 2.1. OKR / Outcome

### 1) Customer value creation:

* Improve repeat purchase rate by X%
* Improve LTV of customer by X%
* Cost of reacquisition of a customer reduce by Y%

### 2) Short-term outcomes: (Market validation + Platform Build)

1. 3 enterprise merchants for refunds and promotions

P/MF Thesis: Closed loop wallet with value add service like automated promotions credit to customers with redemption rules provides a differentiator compared to Quikwallet. This enables us to compete with QC

1. Extend to programs and integrations for enterprise merchants (Target merchants: Audi, TFS, L&T Finance)

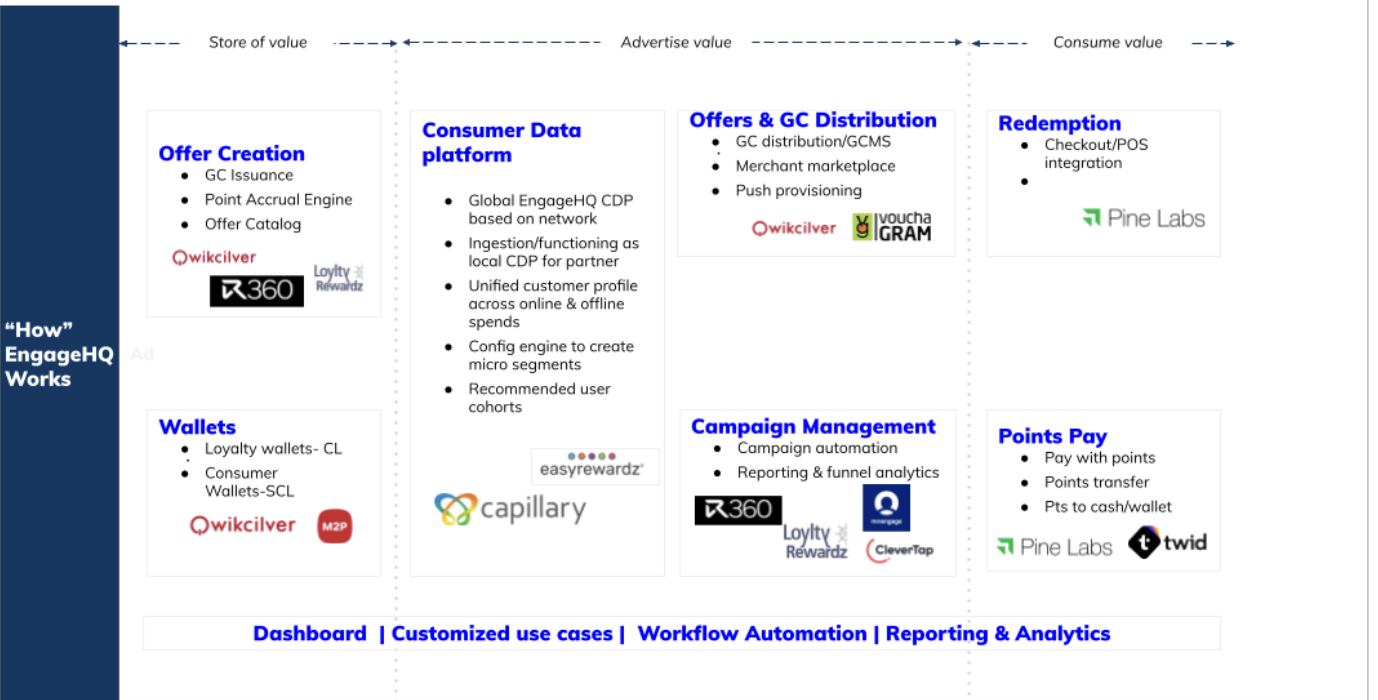
P/MF Thesis: Loyalty program deployments for non-tech savvy enterprises (offline enterprises,Banks,NBFCs) executed by programs POD needs a platform that can reduce TTM (time to market) by avoiding redundant build every time

1. 10 mid-market existing Razorpay PG/Ezetap merchants within 6-9 months of launch with v1 & v2 (Target merchants: TBD)

P/MF Thesis: Omni-channel Mid-market merchants need minimal integration, quicker TTM and no-code workflows for launching their loyalty program.

### 3) Razorpay value extraction

1. [**Engage Mission fit:**](https://docs.google.com/document/d/1EaeKON9h6uj0vCjOMo4COur7lh3SeXJpg0M6no6KLdw/edit#bookmark=id.azxax7kxrrix)Razorpay Engage’s strategy is to be a complete offer lifecycle management platform. Loyalty program is a key lever in issuing offers (promotional cashback, purchase cashback etc.).

The accrual module will be required in the offer issuance stage of the Engage value chain.   


1. If the short-term outcomes are favourable to Razorpay - Loyalty platform is a stand-alone business with potential NR of 2 Mn at 5% penetration of existing market (Benchmarked with Capillary, LR revenue for FY 23)
2. Loyalty platform also enables the internationalisation for Engage HQ and can be a good entry product since it is not under any regulation.

## 2.2. Success Metrics / Input Metrics

## Milestone 1 - Events framework implementation (EoQ Q2)

With events framework implementation programs pod can use this for automating accrual based on transaction dump received by bank instead of hardcoding the accrual rules.

**Success metric for this milestone:**

1. TWC’s launch of automatic cashback to promotional wallet upon cash wallet recharge.
2. Fnp’s launch of promotional cashback to promotional wallet upon credit to refund wallet
3. 3 enterprise merchants live with automated promotional cashback

## Milestone 2 - Dashboard implementation for rule engine for accrual (Mid Q3)

With this implementation, existing wallet merchants can be targeted to automate cashback to customer’s wallet on custom events and purchase events

**Success metric for this milestone:**

1. Decathlon wants to launch cashback into wallet for every purchase and needs control with Marketing team to experiment with slabs, rules etc
2. 1 merchant live with cashback for every purchase - Target mid-market+/Start-up merchant
3. LTFS live (as per current BRD scope, they need accrual for simple event based trigger only)

## Milestone 3 - Support milestone based accrual and tiered benefits (EoQ Q3)

**Success metric for this milestones:**

1. TWC loyalty program launch (requirements and intent provided already)
2. TFS program deployment
3. Enterprise loyalty program deployment for 1 omni-channel enterprise

## Milestone 4 - Events from PG and other Razorpay products plugin (EoQ Q4)

1. PG and Ezetap events available for rule configuration
2. Shopify plugin to include Shopify events also as trigger
3. Primary target - omnichannel merchants - Detailed GTM plan <TBD>

# 3. Problem Description and Validation.

Problem prioritisation matrix

| **Parameters** | **Priority** | **Impact** | **Nature** | **Depth** | **Build Effort** |
| --- | --- | --- | --- | --- | --- |
| **Rules** | P0 : (3/2 P0 + M/L)  P1: (2/1 P0 + M/L)  P2: (1/0 P0 + H/M) | Profitability/ revenue driver P0  Leaks P1  Cost Sav P2 | MUP- P0  Parity-P1  Diff- P0  Scale-P2 | H-P0  M-P1  L-P2 | Effort(H/M/L) |
| Ex1: | P0 | P0 | P0 | P0/P1 | M/L |
| Ex2: | P0 | P0 | P0/P1 | P0/P1 | M/L |
| Ex3: | P1 | P1 | P1/P2 | P1/P2 | M |
| Ex4: | P1 | P1/P2 | P1/P2 | P1/P2 | H/M |
| Ex5: | P2 | P2 | P1/P2 | P1/Pw | H/M |

| **Loyalty Programs Problem/Requirement Discovery** | | | | | | | | | | | | |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Product Lifecycle** | **Build version** | **Requirement** | **Problem Description** | **User Story** | **Priority** | **Impact** | **Nature** | **Depth** | **Build Effort** | **Target Segment** | **Validation**  *Source, facts, replacement, Budget allocated* | **Build Required - Possible Solutions** | **Benefit to merchant** |
| **E2E Integration**  **1. Transaction and engagement events**  **2. Redemption experience**  **3. UX requirements** | **v1** | **Easy integration across multiple channels - mobile app, website and offlined stores** | Long integration cycles to integrate with all channels of sales for accrual triggers and redemption experience | *As a merchant I should be able to integrate without significant effort from inhouse tech team and within a few weeks* | P0 | Profitability  P0 | Differentiator  P0 | High  P0 | XL | - Online first omnichannel merchants | Source - SuperK, TWC, Market conversations | **v1**  **-** REST APIs  v**2**  - Turn-key integrations with ezetap POS  **v3**  - SDKs  - Turn-key integrations with POS softwares (for omnichannel merchants) | Improved engagement with customers, driving revenue for merchants |
| **Loyalty program set-up - Redemption rules** | **v1** | **Convert business rules to micro-rules for redemption** | Businesses want to define loyalty programs in a way that doesn't hit profitability. Example: Loyalty points should not be applicable for SKUs that are on sale. It should not be applicable on categories of low margin, it should not be applicable with offer codes | *As a merchant, I want to apply restrictions on how the loyalty points are redeemed so that loyalty programs are run profitably* | P0 | Profitability  P0 | Differentiator  P0 | High  P0 | M | - Online first omnichannel merchants | Source - SuperK requirement Doc, Decathlon RFP, Flipkart rules for supercoins | - Store the rules for categories, SKUs  - Calculate usable balance based on cart items  - Use Order API to get input of the order - SKUs etc  - Take order ID in wallet debit request | Improved profitability on loyalty programs, allowing merchants to invest further |
| **Loyalty program set-up - Accrual of points/cashback** | **v1** | **Convert business rules to micro-rules for accrual** | Businesses want to have flexibility in business rules to drive optimised outcome. Ex: cashback slabs based on order value, double cashback on special sales etc | *As a merchant, I want to incentivise users to drive optimised objectives like higher order value, higher revenue on sale day etc* | P0 | Profitability  P0 | Differentiator  P0 | High  P0 | M | - Online first omnichannel merchants | Source - SuperK requirement Doc, Decathlon RFP, Flipkart rules for supercoins | - Store the rules for categories, SKUs  - Calculate usable balance based on cart items  - Use Order API to get input of the order - SKUs etc  - Take order ID in wallet debit request | Improved profitability on loyalty programs, allowing merchants to invest further |
| **Loyalty program set-up - Accrual of points/cashback** | **v1** | **Loyalty points/cashback for instant gratification - engagement events** | Merchants want to credit points to customers for immediate gratification - example signing up, sharing a link etc | *As a merchant I want to incentivise the user to engage on my platform so that their stickiness increases through increased engagement* | P0 | Profitability  P0 | Differentiator  P0 | Medium  P1 | M | - Online first omnichannel merchants | Source - SuperK, Decathlon, TWC, Kushal's conversations | - Events end point for cedit trigger | Improved profitability on loyalty programs, allowing merchants to invest further |
| **Loyalty program set-up - expansion of incentives (discount coupons, free products etc)** | **v3** | **Non loyalty points/cashback to be included in Loyalty program** | Businesses want to create a loyalty program that goes beyond points/cashback - ex: Coffee free for 5th transaction. | *As a merchant, I want to offer a loyalty program that includes rewards apart from cashback like discount coupons, free products or service etc* | P2 | Profitability  P0 | Parity  P1 | Medium  P1 | M | - Online first omnichannel merchants category | Source - SuperK, Decathlon, TWC, Kushal's conversations | - Store the rules for categories, SKUs  - Calculate usable balance based on cart items  - Validation at the time of debit? | Imrpoved engagement with customers, driving revenue for merchants |
| **Loyalty program set-up - milestone based tiering and differentiated incentives** | **v2** | **Tiered incentives** | Tiers based on milestones (lifetime purchase value/purchase value in X days) need to be defined. As we move up the tier, rewards will accelerate. | *As a merchant, I want to incentivise the user to move up in tier for higher benefits so that it will motivate users to spend more on my platform* | P1 | Profitability  P0 | Parity  P1 | High  P0 | XL | - Online first omnichannel merchants  - Fintechs  - Channel loyalty merchants | Source - RFPSs, merchant conversations, loyalty programs live | - Upgradation and downgradation logic etc | Imrpoved engagement with customers, driving revenue for merchants |
| **Loyalty program execution - redemption across 3P rewards** | **v2** | **Network rewards for burning loyalty points** | Businesses want to increase aspirational value of their loyalty programs by allowing users use their points to redeem offers from an extensive rewards catalog | *As a merchant, I want to increase the aspirational value of my loyalty programs so that my customers have incentive to accrue those points* | P1 - integration with Reward marketplace post build | Profitability  P0 | Differentiator  P0 | Medium  P1 | L | - Fintechs  - Channel loyalty merchants | Source - RFPs, closed deals with Audi, TFS | - Integration of reward marketplace and accrual engine | Integration cycle running into 5-6 months currently - cut it down to 1-2 months |
| **Targeted campaigns** | **v3** | **Micro campaigns for specific objectives, increase products per customer, occassion based campaigns, category based campaigns** | Credit points to select customer segments for specific objectives | *As a merchant, I want a tool which can help me run incentivised campaigns for specific objectives like increasing penetration of a category, increase sales for an occassion etc* | P1 | Revenue Driver  P0 | Parity  P1 | Low  P2 | L | Online first omnichannel merchants | Parity and merchant conversations | - Campaign management tools | Imrpoved engagement with customers, driving revenue for merchants |
| **Finops and reporting** | **v2** | **Manual reconciliation of method of payment and discounts on orders** | Finance team has to download multiple reports and match the numbers to arrive at month closing | *As a merchant I want to be able to close monthly and periodic reporting with accuracy and without significant manual efforts from finance team* | P2 | Cost savings on reporting  P2 | Parity  P1 | Medium  P1 | M | - Online first omnichannel merchants  - Fintechs  - Channel loyalty merchants | Parity and merchant conversations | - Automated recon reporting module |  |
| **Analytics of efficacy of campaigns** | **v3** | **Outcome of a objective specific campaign** | Analyse the outcome of a campaign and decision for other campaigns | *As a merchant, I want to analyse the results of the campaigns I run so that this can act as feedback for the same* | P2 | Cost savings  P2 | Parity  P1 | Low  P2 | M | - Online first omnichannel merchants  - Fintechs  - Channel loyalty merchants | Parity and merchant conversations | Analytics powered by data lake on merchant dashboard |  |

## 3.1. Merchant anecdotes

* **Increasing focus on retention through engagement:** Enterprises and medium-sized businesses which already have a critical mass of customers like Decathlon, Ferns and Petals have shown interest in implementing wallets as a store of value for engagement rewards. In addition, we have been able to get traction with multiple merchants like Audi, Xiaomi, TFS for loyalty programs for their platforms.
* **Fragmented Experience**: Giva has not been able to offer a loyalty program that works across mobile app, Shopify website and in-store. They had built a wallet in-house for the mobile app but they couldn’t extend it to the Shopify website and in-store.
* **Lack of business rule customisation:** Nykaa and Decathlon want to run promo programs with load level expiry, Third wave coffee etc which is not available with existing players (Qwikwallet)
* **Ready to use plugins and integrations**: D-Mart is okay to switch their EDC provider for wallet as a payment method rather than trying to integrate with existing Billing POS solution

# 4. Customers

## 4.1. Customer Segments

| **Long Tail D2C Brands** | **Online first insurgent brands** | **Offline first enterprises** | **NBFCs/Challenger Banks** | **CPG players with channel loyalty** |
| --- | --- | --- | --- | --- |
| **Key Characteristics** | | | | |
| 1. 25L-5Cr monthly GMV  2. Sales channel - Marketplaces, Shopify  3. Major Categories - Apparel and BPC Ex: Floryo, Nutcase, Iba cosmetics etc | 1. 5Cr - 20Cr monthly GMV  2. Sales channel - Marketplaces, Shopify plus, Offline own stores and/or modern retail  3. Major categories - Apparel, BPC, Home care, Electronics  Ex: Sugar, Snitch, Mokobara | 1. >100 Cr monthly GMV  2. Sales channel - Established offline presence, foraying to online  3. Major categories - Apparel, BPC, Home care, Horizontal B2C  Ex: Decathlon, D-Mart | 1. Fast growing order/loan book 2. Have basic/no reward program  * Ex: RBL, L&T Finance | 1. Wide network of channel partners - Distributors, affiliated partners 2. Existing incentives scheme - combination of gift cards, kind, cash etc   Ex: Coca-cola, Unilever etc |
| **Merchant Priorities** | | | | |
| **Acquisition**  1. Building brand awareness (SEO, reviews, influencer marketing, social media)  2. Focus on acquisition to build critical mass of customers  3. Create customer driven acquisition loop (referrals) | **Revenue expansion**  1. Move sales to direct channels (Shopify website/Offline Stores) from marketplaces  2. Increase repeat sales from customer base  **Low cost customer acquisition**  3. Use existing base to drive new acquisition (referrals) 4. Tap into new and cheaper revenue/acquisition channels (Gifting) | **Adapt to changing consumer behaviour**   1. Establish online sales channel by leveraging wide offline network 2. Provide coherent customer experience offline and online   **Low cost customer acquisition**   1. Use existing base to drive new acquisition 2. Tap into new and cheaper revenue/acquisition channels (Gifting) | 1. Acquisition of users from new segments entering banking ecosystem 2. Increase repeat transactions/wallet share of users 3. Increase aspirational value of reward program and hence the brand itself   <TBD> | 1. Motivate channel partners to reach higher goals ex: More sales   <TBD> |
| **Identified needs** | | | | |
| 1. Retention not a focus, but customer acquisition & easy payments experience  2. Distribution & Discovery (Marketplaces, apps like Cred etc) | **Loyalty platform needs**   1. Earn online and redeem offline 2. Easy integrations with existing channels and marketing stack 3. Rapid experimentation on reward campaigns 4. Digital wallet for refunds and customer recharges 5. Easy tracking for Finance teams for discounts   **Acquisition through gifting channel**   1. Pay by GC/Rewards at all touchpoints 2. Distribution of own GC across platforms | **Loyalty platform needs**   1. Earn online and redeem offline 2. Full stack solution including CDP and marketing automation 3. Consultation on customer segmentation, campaigns to improve loyalty program metrics 4. Digital wallet for refunds and customer recharges 5. Reports for reconciliation   **Acquisition through gifting channel**   * Pay by GC/Rewards at all touchpoints * Distribution of own GC across platforms | * Wide choice of rewards for customers while controlling cost * Multi-tiered logic of accrual of points to drive aspiration * E2E management of program, including customer facing interface for reward redemption and usage   <TBA> | * Wide choice of rewards for partners, * Targeted rewards to control costs and maximise value * E2E management of program, including customer facing interface for reward redemption and usage   <TBA> |

| **Market size (Million USD)** |  |  |  |  |
| --- | --- | --- | --- | --- |
| Segment | Enterprise (B2C) | Mid-Market | Banks/NBFCs | Channel Loyalty |
| Method | Competition benchmark | Extrapolation | Competition benchmark | Competition benchmark |
| Confidence in data | High | High | Low | Low |
| Facts | - Capillary revenue at 32 Mn USD FY23, majority from APAC  - Easy rewardz has 7.4 Mn USD | [- Omnichannel D2C brands are growing 30% faster than categories](https://drive.google.com/file/d/1RL8uDivXwHLDzpW2XjkfkciznWQGsw2y/view?usp=drive_link)  [- ~200](https://drive.google.com/file/d/1RL8uDivXwHLDzpW2XjkfkciznWQGsw2y/view?usp=drive_link) brands in India currently at this inflection point  - Annual ACV of these brands are at 15L INR (from current closed deals) | [-Loytly Rewardz](https://tracxn.com/d/companies/loylty-rewardz/__eOmcy6u6qSy_XWcFulLvxdxv9BSiah5R6T7AEeeE168) at 62 Mn  - Reward 360?? | [Almonds.ai](https://drive.google.com/file/d/1FPdCF0C6tGC2o1-_h6g6PkK-Z4XJaeKf/view), a 4 year old start-up has managed to get revenue of 3.8Mn in FY23 |
| Assumptions | - Together they may hold 75% market share in India | - These brands will focus on omnichannel loyalty as a tool to differentiate themselves | Loylty rewardz has 50% share | Almonds would have tapped 25% of the market |
| Market size (Million USD) | 50 | 3.75 | 125 | 16 |
| TAM - 5% in enterprise, 30% in mid market, 5% in Banks/NBFC, 25% Channel Loyalty | 2.5 | 1 | 6 | 4 |

## 4.2. Selected target segment

|  | **Long Tail D2C Brands** | **Online first insurgent brands** | **Offline first enterprises** |
| --- | --- | --- | --- |
| TAM  [Calculation](https://docs.google.com/document/d/1Mwq_dJGC6Ry5JzlygGKTErYBGqOwWDnAlAcvUH4hgv8/edit#bookmark=id.2qkeec25lfbq) | ~ 800 brands in Razorpay ecosystem ~ 5000 Shopify stores (India)  **Qualification criteria**  Minimum 500 orders per month on Shopify  **Low TAM to pursue product led acquisition** | ~ 200 brands  **Qualification criteria**  Minimum 1k orders per month on Shopify, have offline stores/have plans of launching offline  **Growing TAM** | <TBA> |
| Potential ACV (Willingness to pay) | 5k - 15k per month  **Low ACV - Not suitable for sales led acquisition** | 30k per month - 1L per month + per debit charges  **Moderate ACV - Sales led acq** | > 2L  **High ACV** |
| Problem - Solution fit  [Proof Points](https://docs.google.com/document/d/1Mwq_dJGC6Ry5JzlygGKTErYBGqOwWDnAlAcvUH4hgv8/edit#bookmark=id.jb9ed57ibl2y) | **Retention not a focus**, Low ROI when tried to do loyalty  (Merchant anecdotes, VC inputs and Competition data) | **Retention P0 focus**, need a platform that can solve omnichannel | **Retention P0 focus**, need a platform that can solve omnichannel |
| Competition and opportunity to differentiate | 15+ apps available on Shopify with similar features  [Detailed Comparison](https://docs.google.com/document/d/1Mwq_dJGC6Ry5JzlygGKTErYBGqOwWDnAlAcvUH4hgv8/edit#bookmark=id.kkwz7jrdhp7d) | No affordable and easy to integrate omnichannel platform | Full stack loyalty solutions (LMS) that includes CDP and engagement platforms - Capillary, Easy Rewards etc |

**Short term (3-6 months)** - Mid size businesses which start-out as internet first and go omnichannel

**Long term (6 -12 months)** - Enterprises   
  
**Opportunistic deals [Platform build for Engage Stack]** - NBFCs, Channel partners

## 4.3. User Persona

| User Persona | Goals and Needs | Pain Points |
| --- | --- | --- |
| Developer | Clear, well-documented APIs and SDKs  Robust support channels  Security and reliability | Poor documentation  Limited customization options  Downtime and security concerns |
| Growth marketing Associate: | Intuitive platform for loyalty and promotional campaign management  Adaptability based on analytics  Seamless integration with marketing tools like clevertap, moengage | Rigid platform structures, dependency on developers for any experimentation  Steep learning curves and inefficient UIs |
| Marketing Manager/Sponsor of the project | In-depth insights into customer behaviour and loyalty program effectiveness across all channels (Website, mobile app and in-store)  Flexibility on customisation of business rules for redemption  Scalable and adaptable platform | Limited or superficial analytics  Platforms not flexible, scalable or adaptable  Needs to navigate multiple platforms for actionable insights |
| Finance Associate | Easy to use reports for financial closing  Reconciliation of funds and liabilities | Incomplete reports requiring manual reconciliation |
| Product Manager | Robust end user experience for customers for earn and burn programs, marketing led campaigns  Easy experimentation with different constructs of user incentives | Rigid platform structures, dependency on developers  Steep learning curves and inefficient UIs |

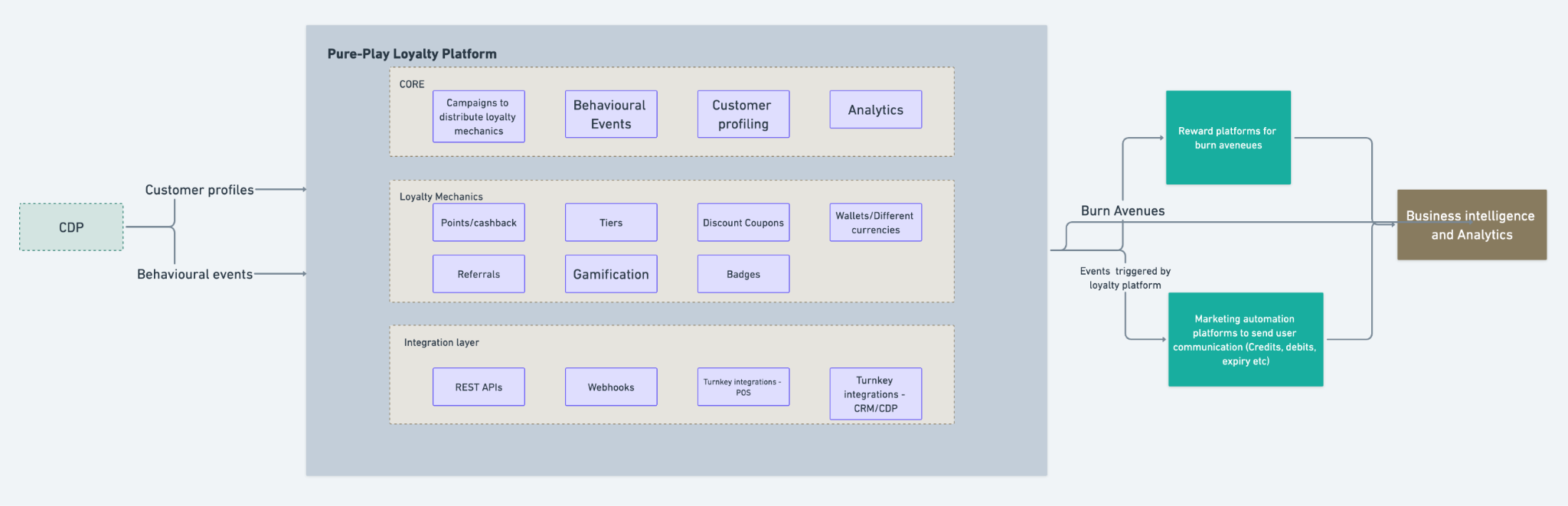
# 5. Current Alternate

This section should describe how the customer works currently in the absence of this problem being solved.

# 6. Competitive landscape (optional)

## Overview

| **Category** | **Description** | **Ideal Target Segments** | **Characteristics of Target Segments** |
| --- | --- | --- | --- |
| Loyalty Management Service Providers (LMSPs)  Ex: Bond Loyalty, Rewards 360, Loyalty rewards | - Comprehensive and bundled services for managing loyalty program strategy, execution, and optimization | Banks which require rewards for loyalty to be sourced via coalition partnerships | - Need comprehensive, end-to-end solutions.  - Prefer outsourcing strategy and execution to specialized providers.  - Require advanced data analytics and unified data architecture.  - Limited in-house resources to execute and manage loyalty programs |
| Multisolution Loyalty Providers  Ex: Capillary tech, Easy Rewards | - Providers that can provide solutions for broader marketing and data initiatives along with loyalty as one module.  - CDP, CRM and behavioural analytics are part of the solution | Enterprises implementing loyalty along with broader marketing and data strategies.  Ex: Tata Digital, Aditya Birla (Capillary customers) | - Require implementation of loyalty programs with other marketing and data initiatives.  - Need advanced personalization and marketing automation.  - Retain control over data for multiple applications. |
| Pure-Play Solutions  Ex: [Talon.one](https://docs.talon.one/), [Antavo](https://antavo.atlassian.net/wiki/spaces/AUM/pages/501121368/Developer+Documentation), Open Loyalty etc | - Vendors focusing solely on loyalty program management, offering a rule engine for accrual/redemption, consumer data integration, and optimization solutions. | - Mid-sized to large enterprises with robust marketing stacks or CRM systems needing a specialized loyalty solution.  Ex: Decathlon, Flipkart, Nykaa, Thirdwave | - Already have a base marketing infrastructure.  - Need specialized loyalty solutions to complement existing systems.  - Require focused loyalty program capabilities.  - Often prefer integrating with existing marketing tools. |
| POS-Integrated Loyalty Solutions  Ex: Square loyalty, Thanx, Thrive | - Solutions integrating directly with POS systems, offering an easy-to-use platform for creating and managing loyalty programs | SMEs using POS systems as primary source of data and interaction with customers | - Need simple, easy-to-implement loyalty solutions.  - Prefer turnkey integration with existing POS systems.  - Limited marketing and IT resources. |

A Visual representation of combining all blocks of solutions provided by different providers would be as below -   
  


[**Diagram Link**](https://whimsical.com/solution-Mrizx1r2drVYcj5Gtc5CsA@2bsEvpTYSt1HipPMCoWDhaqignnnY5ea9nf)

We will start by being a pure-play loyalty platform to evolve into a multi-solution provider as we combine different blocks of other products like Rewards marketplace, Marketing Automation (Billme) and CDP.

## Feature Split by merchant journey

| **Feature group** | **Features** | **Antavo, Open Loyalty, Loyalty Lion etc** | **Talon One** | **Capillary** | **Loylty Rewardz** | **PRIME** | **Razorpay Build Plan** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Integration and set-up** | **Turn-key integrations with POS** | Ready to use integrations with POS systems like Microsoft Dynamic 365 and some POS systems local to geographies | Ready to use integrations with POS systems like Microsoft Dynamic 365 and some POS systems local to geographies | Integration with DB stream, support provided to merchant IT teams | Ready to use integrations with Pine labs |  | **Phase 1**   1. REST APIs that can be integrated with any POS   **Phase 2**   1. Turnkey integration with Ezetap by Razorpay |
| **APIs for data pipeline** | Available | Available | Available and customised as per merchant needs | Not available |  | **Phase 1**   1. REST APIs |
| **Turn-key integration with e-commerce platforms like Shopify, Woocommerce** | Available | Available | Not supported | Not supported |  | **To be decided after phase 2** |
| **Turn-key integrations with marketing platforms (Clevertap, Moengage etc)** | Available | Available | Own CRM | Custom integration based on merchant inputs |  | **Phase 1**   1. REST APIs that can be connected to these tools   **Phase 2**  1. Own tool or turnkey integration with platforms TBD |
| **Business rules Customisation capabilities** | **Business rules customisation for Earn** | High customisation - define rules with any attribute of the order | High customisation - define rules with any attribute of the order | Low customisation - rules are allowed to be defined on usage limits per user, per month etc. | Low customisation - rules are allowed to be defined on usage limits per user, per month etc. |  | **Build in Phase 1** |
| **Business rules customisation for burn** | Merchants can add a reward catalogue consisting of discount coupons and non monetary rewards for burn of loyalty points.  Customers can burn loyalty points and get the coupon that can be redeemed on cart. | Merchants can add a reward catalogue consisting of discount coupons and non monetary rewards for burn of loyalty points.  Customers can burn loyalty points and get the coupon that can be redeemed on cart. | Merchants can add a reward catalogue consisting of discount coupons and non monetary rewards for burn of loyalty points.  Customers can burn loyalty points and get the coupon that can be redeemed on cart. | Merchants can add a reward catalogue consisting of discount coupons and non monetary rewards for burn of loyalty points.  Customers can burn loyalty points and get the coupon that can be redeemed on cart. |  | **Phase 1:** 1. Instead of generating a coupon, Razorpay will evaluate the redemption based on cart items and the rules set up  **Phase 2:**  1. Extension to burning points for non-monetary rewards like free product |
| **Accrual engine capabilities** | **Tiered Benefits for users** | Supported - multiplier effect on earn based on defined tier milestone | Supported - multiplier effect on earn based on defined tier milestone | Supported - multiplier effect on earn based on defined tier milestone | Supported - multiplier effect on earn based on defined tier milestone |  | **Build in Phase 2** |
| **Instant credit to users for engagement events** | Events streams through API that can be used as triggers for instant credit | Events streams through API that can be used as triggers for instant credit | Events streams through API that can be used as triggers for instant credit | Events streams through API that can be used as triggers for instant credit |  | **Build in Phase 1** |
| **Revival and occasion based promotions** | No code workflows/custom templates | No code workflows/custom templates | Extensive campaign management coupled with marketing consulting services | Extensive campaign management coupled with marketing consulting services |  | **Build in Phase 1 - v1 where customer base can be uploaded for credit** |
| **Referral program incentives to wallet** | Supported | Supported | Supported | Supported |  | **Build in Phase 2** |
| **Milestone Based rewards. Ex: Credit X on reaching 10 transactions lifetime** | Supported | Supported | Supported | Supported |  | **Build in Phase 2** |
| **Peripheral capabilities** | **Reporting & BI capabilities** | - Reporting Dashboard  - Ability to export data to BI tools / data lake | - Reporting Dashboard  - Ability to export data to BI tools / data lake | - Reporting Dashboard  - Ability to export data to BI tools / data lake | - Reporting Dashboard  - Ability to export data to BI tools / data lake |  | **Build in Phase 2** |
| **AI capabilities** | Churn prediction | Churn prediction | Analytics and marketing consulting services as part of professional services | Analytics and marketing consulting services as part of professional services |  | **Build in Phase 3** |
| **Gamification elements** | Leaderboards, badges | Leaderboards, badges | Supported | Not supported |  | **Build in Phase 3** |
| **A/B Testing capabilities** | Multi-variant testing | Multi-variant testing | Not supported | Not supported |  | **Build in Phase 3** |

# 7. Assumptions (optional)

**Assumptions**1. Loyalty program is a lever that businesses of large B2C categories will focus on for growth in top line along with efficient bottom line

2. Online first but omni-channel merchants are under-served category in the Indian market for loyalty program orchestration

3. Time to market with existing solutions is extremely high because of integration effort, onboarding time

# 8. Solution

## 8.1. Solutions Evaluated

NA

## 8.2. Solution Shortlisted / Finalised

Solution covers the first use case that will use the platform - wallet credit which will be used by merchants to launch their loyalty programs

### Phase 1 Solution Scope

| Feature | Benefit | Business goal | Modules (Detailed Requirement section mapping) | User Story |
| --- | --- | --- | --- | --- |
| Credit cashback for every rupee spent/purchase | Incentive for customer to come back and use cashback | Increase repeat transaction for a customer | Module 3: Campaigns | As a merchant, I should be able to define a rule to credit cashback for every purchase. I can choose to give absolute flat points or flat % cashback or slabs of %. |
| Credit cashback for engagement event | Incentivise customers to engage with merchant's brand | Increased stickiness and brand perception | Module 1: Event Configuration Module 3: Campaigns | As a merchant I should be able to provide flat points to customers for any engagement event on my application. |
| Credit cashback for a static set of users | Select a set of customers who need spend stimulation and credit them cashback to stimulate their spend | Reactivate dormant customer base by crediting cashback to them | Module 3: Campaigns | As a merchant I should be able to create a campaign that can be used to credit cashback to a static customer base |
| Restrict redemption of cashback with rules | Control cost of running loyalty program while maintaining customer perception of loyalty program | Control cost of running loyalty program while maintaining customer perception of loyalty program | Module 2: Wallet Programs | As a merchant I want to set the following rules in redemption of cashback -  1. Maximum % of order amount that can be paid via cashback  2. Exclude order amount corresponding to pre-defined categories for calculating allowed amount to redeem |
| Expiry communication with customers | Send reminders to customers about expiring cashback and nudge them to use the same | Send reminders to customers about expiring cashback and nudge them to use the same | Module 4: APIs and Webhooks | As a merchant I should be able to send communication to my customers about expiring cashback and nudge them to use it |
| Analytics of campaigns | Track efficacy of loyalty campaigns | Track efficacy of loyalty campaigns and adjust strategy based on feedback | Module 5: Reporting | As a merchant I should be able to view a campaign result on how much cashback is credited and what is the usage |
| Reports of campaigns | Accurate financial reporting | Accurate financial reporting | Module 5: Reporting | As a merchant I should be able to download reports which allows me to identify cashback usage for each order |

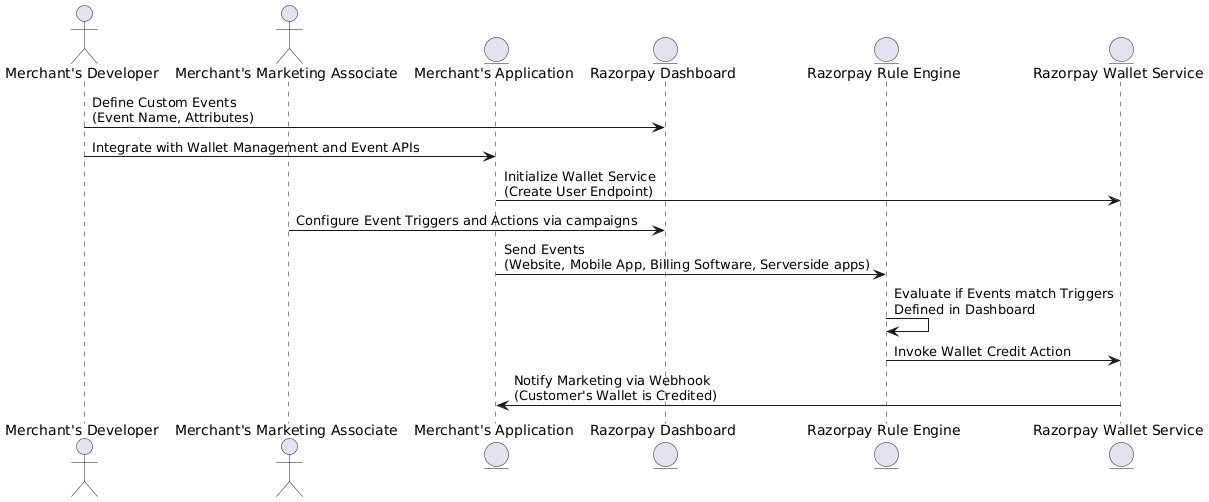
### Phase 2/v2 Solution Scope <WIP>

| Feature | Benefit | Business goal | Modules (Detailed Requirement section mapping) | User Story |
| --- | --- | --- | --- | --- |
| Credit cashback for purchase only after the waiting period | Prevent abuse of loyalty program | Ensure loyalty program is not abused by customers who return frequently | Module 3: Campaigns | As a merchant, I should be able to set a waiting period from the date of purchase for crediting cashback. If the order is cancelled, the cashback should not be credited to customer's wallet |
| Milestone based rewards Ex: Additional bonus cashback on 10th order | Incentivize customers to reach spending thresholds | Increase average order value and customer LTV | Module 3: Campaigns | As a merchant, I want to set rewards that customers unlock at specific spending milestones to encourage continued engagement and higher spending. |
| Tiered incentives Ex: Customer who does a total spend of Rs 10k in 30 days will upgrade to Gold If they do not do 10k spend in the next thirty days they will be downgraded All gold tier customers earn 2x cashback | Offer exclusive benefits to high-value customers | Increase customer engagement and create perception of higher value for being loyal to the brand | Module 3: Campaigns |  |
| Non cashback rewards for loyalty program Ex: For every 10th purchase of fashion category, give a discount coupon on home care for next purchase  Or For every 10th purchase,give a free product | Gamify loyalty program | 1. Increase customer engagement and create perception of higher value for loyalty program 2. Drive cross category penetration | Module 3: Campaigns |  |
| Referrals: Set up a referral program and also track referrer and referee activities | Loyalty program | Leverage existing customer base to | Module 3: Campaigns |  |
| End user journey nudges for conversion | Improve conversion of by communicating benefits of the purchase (how much cashback they can earn) |  |  |  |

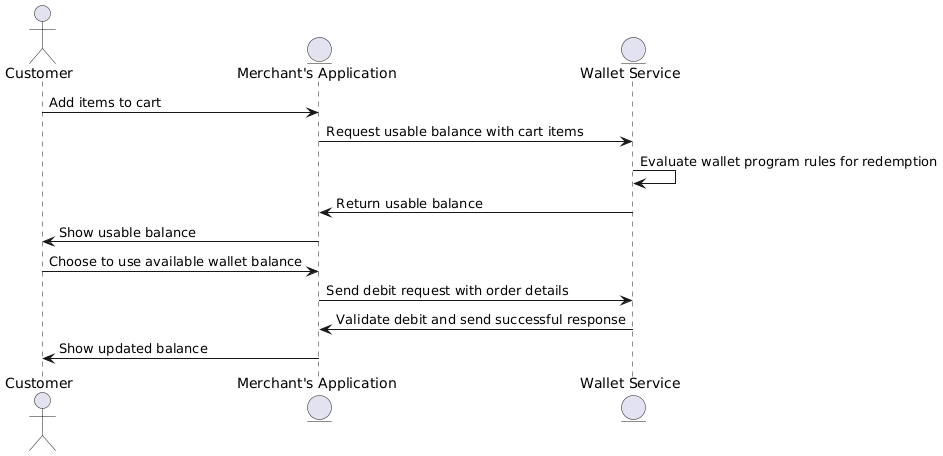
### 

### Solution Overview

[Merchant Journey](https://planttext.com/api/plantuml/png/RLFDRjim3BxhAOXUkW3T2-nGr4jpw255qMpefHV6fcqYicH8j8lqwKVPZXCdkuKo-VsHUOg2GRh66ip51xZRKiXhT78VuPbwihwbS0TuKVsdSulXGCAkWYn6dpCA3JFpko4dBCV5KDQsbdCKzcverdfkUyTl7reymZF6Ukyn5AE6KtNR-DvPWeshs8tKgHxBszuFj9O4TXHwpiVsyMbwCMOs2pyVpwpmIrCe5HBMNHJVmAPNxFZfVWm_u1KRUe1C9F2-4ugh9OuQL8GN9rG5JGY-MEgJbYqwhAX9AEYA4HYojvTepkmAiP0vWB4mMlwcArEgQHqeiVoDohvnHUlPoSgSLtNbRErToLKNQ2B_4xYgACH1JvQdDKMJBEZSELmTtD59S4hYW_QHHMFO-ZthIdJY0NwpjObovqlvmg1Vaqm5vu80srQJke2y9jZqQBjaXSk91ngKl9ubVhfnBGMmkxYH9UHjTBq_pB5fM0NBvDCiU-VLlNhXydXnxJqZgE7Q-qCAV3WA2lUdSmAE4p0LA_EaEUaVxHy0)



[End customer Journey - Redeeming wallet credit](https://planttext.com/api/plantuml/png/TP8nRiCm34LtdOB8qgaNo50a23fsIO1sfYMc5Y1BhaWvwErBMOc1EEaaYEH_-f_GZWMpb24Oj98o70fB6YWRYkBb5pOVb6sFKLuOzkCOl4NnAMu0v_iozeKXaC29ykGjpUrMkbQCkP7XzQqgOGjxvy0B3GoImAeDK-lQlbFgu95-2h50OUm2GOS1epOkNlfProZcNlQ4ypvXA2YgR6x7dBup3f1B88Qpni_aQ1XhmaTQCtqaAJckhDoCBnctSEhJPJtrk893dn9JpL_qm0bzc1LNWolyEi-9eWD7dHSrtbOqxoHbfuyu4iKzMKjx-XE3TtKP3O2AuihZOYqndqjGA8yfyl_nnWfmYqspKq3zIty0)



**Step 1: Define Program with redemption rules**

* Merchants can define redemption rules for each wallet program. Following rules are allowed -
  + Expiry of credits to this wallet program
  + Maximum % of order amount that can be used for an order from the wallet
  + Exclude order amount corresponding to chosen categories for calculating allowed amount to redeem
* Once defined, the rule will apply to all credits to this type of wallet

**Step 2: Create campaigns under a program**

Merchants can choose to create a campaign either as an event as a trigger (dynamic type of campaign where credit happens every time the trigger is met) or just for a segment of users (static type of campaign where all users in the list will get wallet credit).

* A campaign is a workflow that the merchant can set up. It will have the following components
  + Trigger: An event that kickstarts the workflow.
    - For merchants who are on Razorpay products (PG, Ezetap) these could be existing events like order paid, transaction created
    - Merchants can also integrate with a generic events end point to define their own event and event attributes
  + Action: Action for now is always credit to a type of wallet
* Instead of a trigger and action model, merchants can also simply upload a list of customers and assign action of credit to the wallet. Limits are not applicable in this type of the campaign.

**Step 2C: Override program rules for redemption** **under a campaign**

* Change expiry in program

**Step 2D: Set campaign limits**

* Limit per user for a day and for a month

**Step 3: Subscribe to webhooks**

* Merchants can subscribe to webhooks for wallet credited, expiry and wallet debited
* Post consuming webhooks, merchants can trigger events to their respective customer engagement platforms (like moengage, clevertap etc) for communication
* Eventually, we will have Billme’s capabilities integrated to trigger campaigns upon these events.

# 9. Detailed Product Requirements

(For Phase 1/v1)

## 9.1. Event Configuration

Event configuration module allows merchants to set-up events that can be used as triggers for loyalty campaigns. Merchants have to configure an event, define the attributes post which they can register the events when a user performs the corresponding event action.

**Event module view**

1. View Razorpay wallet built-in events list - wallet credited, wallet debited
2. View custom events list - these are events that are defined by merchant
3. Event list should contain - event name, type of event (built-in/custom), Edit option (only custom event)
4. Action to create a new custom event

**Custom Event Configuration**:

1. Merchants can define events with specific attributes relevant to their operations, like transactions during checkout.

Data Types Supported:

* 1. String: For textual data like names or descriptions.
  2. Integer: For numerical values without decimals.
  3. Float: For numerical values with decimals.
  4. Boolean: For true/false values.
  5. Date: For dates without time.
  6. DateTime: For dates with time.
  7. URL: For web links.
  8. Array: For lists of values, such as multiple product IDs.
  9. Object: For structured data composed of multiple attributes (supporting only one level of nesting).

#### **Detailed Steps for Adding a New Event:**

##### **Step 1: Access Event Configuration**

* Merchants log into their dashboard and navigate to the "Events Management" section.

##### **Step 2: Create a New Event**

* Select "Create New Event".
* Input details:
  + **Event Name**: "Order delivered"
  + **Event id:** Machine readable name for event - auto generate: order\_delivered

##### **Step 3: Define Event Attributes**

For each attribute of the event:

* **Attribute Setup**: Add attributes specifying the name, data type, and whether it is required.

##### **Example Attributes for "**Order delivered**" Event:**

* **Transaction ID**:
  + **Type**: String
  + **Required**: Yes
* **Total Amount**:
  + **Type**: Float
  + **Required**: Yes
* **Currency**:
  + **Type**: String
  + **Required**: Yes
* **Items**:
  + **Type**: Array of Objects
  + **Required**: Yes

Within "Items", define object attributes such as:

* **Product ID**:
  + **Type**: String
  + **Required**: Yes
* **Product Name**:
  + **Type**: String
  + **Required**: Yes

**Actions for already added event**:

1. Event can only be deleted OR additional attributes can be added once added

[Competition example](https://docs.antavo.com/docs/custom-events?highlight=events)

**Events API:** Once a merchant configures a custom event on the dashboard, they can trigger the same using the events end point from their applications. These events will be available to be used as triggers for the campaigns on the dashboard.

Event is a write once read many times type entity - once accepted, it cannot be modified.

##### 

| POST | /v1/events |
| --- | --- |

**Request - Example 1**

{

"user\_id": "iuser\_abc",

"event": "order\_delivered",

"data": {

"transaction\_id": "TR37882412",

"total\_amount": 100,

"total\_quantity": 2,

"currency": "INR",

"items": [

{

"product\_id": "prd\_987654",

"product\_name": "Vintage Leather Jacket",

"product\_url": "https://example.com/products/vintage-leather-jacket",

"price": 50,

"quantity": 1,

"discount": 0,

"subtotal": 50

},

{

"product\_id": "prd\_123456",

"product\_name": "Classic Denim Jeans",

"product\_url": "https://example.com/products/classic-denim-jeans",

"price": 50,

"quantity": 1,

"discount": 0,

"subtotal": 50

}

]

}

}



**Request - Example 2 (Event from programs service ex from Jana bank)**

{

"user\_id": "iuser\_abc",

"event": "transaction\_created",

"data": {

"transaction\_id": "TR37882412",

"total\_amount": 100,

"total\_quantity": 2,

"currency": "INR",

"account\_type": "exclusive",

"card\_type": "select",

"eligibility\_tag": "AGGREGATE\_POS\_ECOMM"

}

}



**Request - Example 3 (Internal event from wallet service)**

{

"user\_id": "iuser\_abc",

"event": "wallet\_transaction",

"data": {  
 "id": "ientxn\_<id>",

"entity": "engage.transaction",  
 "amount": 100,

"type": "credit",

"currency": "INR",

"user\_id": "iuser\_<id>",

"wallet": {

"user\_id":"iuser\_<id>",

"name":"cash",

"balance": 100

},

"payment\_id": "pay\_abc",

"source\_id": "iload\_<id>",  
 "reference\_id": "Ref0000000005",

"description": "Load for xyz",  
 "notes": "{\"\": \"\"}",

"linked\_transaction\_id" : null,  
 "created\_at": 1671156227  
}

}



**Response: Success - 200 OK**

**Response: Error**

HTTP Status 400

**Error messages**

| **Case** | **error\_reason** |
| --- | --- |
| Invalid event Id | Invalid event id |
| Data type mismatch | Data type mismatch |
| Required field is not passed in event payload | Missing required field |
| Customer doesn’t exist | Customer doesn’t exist |

{

"error": {

"code": "BAD\_REQUEST\_ERROR",

"description": "Data type mismatch error.",

"source": "business",

"step": "event\_trigger",

"reason": "input\_validation\_failed",

"metadata": {

"field": "total"

}

}

}



{

"error": {

"code": "BAD\_REQUEST\_ERROR",

"description": "Missing required field",

"source": "business",

"step": "event\_trigger",

"reason": "input\_validation\_failed",

"metadata": {

"field": "card\_type"}

}

}



**Scale projections**

1. Event payload limit - Max limit to be of cart items assumed to be 20, total lines in an event can be capped at 200 to start with. Order in Retail segment is the most complex event, all other events are likely to be simpler
2. On an average, Merchants may have 5 events per active user per month (active user definition - at least one credit to wallet in the month) - Hence, for now, we can assume that we need to support a TPS equivalent to 5 times of wallet credit. i.e if we support 15 TPS credit to wallet, we need to support 75 TPS per merchant on events

**Future scope**

1. Bulk event acceptance

## 9.2. Set up wallet programs and Redemption rules

A wallet program holds redemption rules for all credits into that wallet. Merchants can create as many wallets they would like to and can use campaigns to credit these wallets.

1. Merchants can create multiple types of wallets/currencies for their users
2. Each type of wallet/currency is governed by a program that holds rules of redeeming/using that currency
3. Each type of wallet program can have the following types of rules -
   1. % of order amount that can be paid using the wallet balance
   2. While calculating the % of order amount, merchant can define if a list of categories or product IDs whose portion of order amount are to be excluded

Merchant should be able to define a program on the merchant dashboard that holds relevant details of the program. Each program rolls up to a wallet type/currency. All credits under this program will follow the rules of redemption defined here.

1. Merchants should be able to define a wallet program name and description. Description will be used for user communication on merchant applications.
2. Merchants should be able to define the expiry period for the program - ex: 30 days from credit date. Minimum days - 1 and maximum - 10 years. All credits to this wallet will follow this expiry unless over-ridden in campaign.
3. Merchants should be able to define three types of redemption rules for all credits under this program. Allowed rules are as below -
   1. Define a minimum balance in the wallet to be eligible for redemption
   2. Define the maximum % of order amount that can be paid with wallet balance.
   3. Define % cashback for different slabs of order value
   4. Add a list of product IDs or categories that are to be excluded in the % of order amount that can be paid with wallet balance
4. Once published, Merchants should be able to edit the program settings of expiry and redemption rules. However, the redemption rules defined in a program hold true for all credits (done before changing the rules and after changing the rules).

**Integration layer - Wallet Debit API and Usable Balance changes**

Once these rules are defined, merchants can trigger the usable balance API to get the amount that can be redeemed from the wallet for a given cart. The usable balance API should have the cart details that are required to do computation of usable balance.

This API also serves the purpose of communicating to customers on cart pages on how much they can redeem. Once a usable balance is available, the merchant has to pass the same amount along with other details of the order for us to complete validation and debit the wallet.

**Usable balance API**

| GET | /v2/issuing/users/iuser\_sampleId000001/usable\_balance?wallet\_name=”promotions” |
| --- | --- |

**Request**

{

"data": {

"total\_amount": 100,

"store\_location": "Mysore",

"items": [

{

"product\_id": "prd\_987654",

"product\_name": "Vintage Leather Jacket",

"product\_url": "https://example.com/products/vintage-leather-jacket",

"price": 50,

"quantity": 1,

"discount": 0,

"subtotal": 50

},

{

"product\_id": "prd\_123456",

"product\_name": "Classic Denim Jeans",

"product\_url": "https://example.com/products/classic-denim-jeans",

"price": 50,

"quantity": 1,

"discount": 0,

"subtotal": 50

}

]

}



**Response: Success**

{

"order\_amount":100,

"usable\_balance": 500,

"balance": 10000

}



**Response: Error**

HTTP Status 400

**Error messages**

| **Case** | **error\_reason** |
| --- | --- |
| Customer doesn’t exist | Customer doesn’t exist |

**Wallet debit API**

In S2S integration, the debit request is not validated against the redemption rules. Since the merchant has already triggered a usable balance, it is up to the merchant to decide if they want to debit more or less than the usable balance. Razorpay validating the request at debit leg in S2S has no value addition to the merchant. No changes to existing wallet debit API

## 9.3. Campaigns module - Defining trigger for campaign and effect of campaign

Merchants can run campaigns that are targeted towards specific objectives under a program - this is a trigger for accrual. In phase 1, we will support following types of campaigns (triggers) -   
  
Campaign on a live trigger

1. When “Order placed” is triggered for a user, they should get credit in their wallet under the selected program
2. When “Wallet is credited” under program 1 (program name/id will be a parameter), the user should get credit in program 2. Ex: FNP wants to credit 5% under promotional balance whenever there is a credit under cash balance.

Campaign on static segment

1. Upload a user segment and trigger credit to the users - merchants may want to do segmentation based on dormancy etc and will upload a list of users to whom we need to credit Rs X.

**Live trigger campaign capabilities**

1. Select start date and end date for campaign
2. Events configured in events module will be available for selection of trigger
3. Merchant can design up to 4 rules ex:

When transaction created is triggered

AND account\_type = Exclusive

AND card\_type = select

AND eligbility\_tag = BBPS

AND transaction\_amount between 2500 and 3000

1. Merchant can define the effect of trigger as credit to a specific type of wallet
   1. It can be flat number of points
   2. Or it can be % value of one of the attributes of one of the events
2. As part of campaign settings, merchant can choose to override the expiry
3. As part of campaign settings, merchant can define maximum amount that can be credited to users wallet per day, per month and lifetime
4. Publish the campaign. Once published, the campaign can only be paused but not modified.

Example UI from Moengage for rules. Operator (is between, is not etc) depends on the attribute data type - which is defined in the event configuration module.



In phase 1, the effect of trigger is accrual of points/cashback to wallet

## 9.4. Webhooks and Internal events

Webhooks are required for merchants to propagate events like wallet credited and wallet debited to other platforms which handle communication or to CDP etc. These internal events can also act as triggers for accrual campaigns.

**wallet.transaction**

{  
 "entity": "event",  
 "user\_id": "iuser\_abc",  
 "event": "wallet.transaction",  
 "contains": "wallet.transaction",  
 "payload": {  
 "transaction": {  
 "id": "ientxn\_<id>",

"entity": "engage.transaction",  
 "amount": 100,

"type": "credit",

"currency": "INR",

"user\_id": "iuser\_<id>",

"wallet": {

"user\_id":"iuser\_<id>",

"name":"cash",

"balance": 100

},

"payment\_id": "pay\_abc",

"source\_id": "iload\_<id>",  
 "reference\_id": "Ref0000000005",

"description": "Load for xyz",  
 "notes": "{\"\": \"\"}",

"linked\_transaction\_id" : null,  
 "created\_at": 1671156227,  
 }

"created\_at": 1458640348  
}



**Webhook notification for expiry**

Merchants also want to send reminders to their customers using their respective customer engagement platform. Webhook notification for expiry will help them trigger these notifications via CEP/marketing engagement platforms like clevertap/moengage.

1. Merchants can subscribe to expiring balance notifications that summarise the expiring balance of users as per pre-configured “n” days. To start with, we will allow 3 triggers, example - 5 days before expiring balance, 6 days before expiring balance, 10 days before expiring balance
2. The notification can be batched to n users at a time - <TBD what is the optimal n>
3. To start with, we will have the configuration information communicated to us offline, we can add this on the dashboard later down the line

{

"TotalResultSize": 1000,

"Data": [

{

"expiry\_date": "2024-08-24",

"wallet\_program\_name": "testwallet",

"user\_id": "iuser\_URNGV8294NV",

"expiring\_balance": 100

},

{

"expiry\_date": "2024-08-24",

"wallet\_program\_name": "testwallet",

"user\_id": "iuser\_URNGV8294NW",

"expiring\_balance": 100

}

....

],

"NotificationType": "expriring\_balance"

}



## 9.5. Analytics & Reporting

### Reporting

In the current wallet transactions report, additional columns need to be added for credit transactions - campaign id and campaign name.

### Analytics

Basic analytics on campaign efficacy should be provided on the dashboard. This includes -

1. Merchant should be able to filter on a date range and campaign name
2. # users credited under campaign
3. Total value of credits under campaign
4. Total points expiring under campaign
5. % credits used under campaign (% debits)

**Phase 2 <WIP>**

## 9.7. Tier management module

<TBA>

## 9.8. Extending campaigns module - Milestones, user tags and discount coupons

In phase 2, campaigns module will be extended to add following capabilities

1. A new type of campaign where merchant can define milestone as triggers
2. New effects like assigning discount coupons
3. Addition of user tags in trigger rules

Milestone Campaigns

1. Select start date and end date for campaign
2. Events configured in events module will be available for selection of trigger
3. Merchant can select the trigger to be either a frequency milestone or value milestone
4. Frequency indicates a certain event (along with event parameters condition) occurring nth time
5. Value milestone indicates that the cumulative value of a certain parameter of an event
6. Both frequency and value milestone can be defined as
7. Merchant can define the effect of trigger as following types:  
   - Credit to a specific type of wallet
   1. It can be flat number of points
   2. Or it can be % value of one of the attributes of one of the events

- Assign a reward to the customer ex: Gift card or discount coupon

1. As part of campaign settings, merchant can choose to override the expiry
2. As part of campaign settings, merchant can define maximum amount that can be credited to users wallet per day, per month and lifetime
3. Publish the campaign. Once published, the campaign can only be paused but not modified.

## 9.9. Addition of user tags to campaign trigger rules

In phase 2, campaigns module will be extended to adding user tags as well

## 9.10. Impact on Secondary Stakeholders (Optional)

<TBA Customer Support and Tech Support>

# 10. Instrumentation Requirements

<TBA - Instrumentation once design is available>

# 11. Release strategy and milestones

## Milestone 1 - Events framework implementation (EoQ Q2)

With events framework implementation programs pod can use this for automating accrual based on transaction dump received by bank instead of hardcoding the accrual rules.

**Success metric for this milestone:**

1. TWC’s launch of automatic cashback to promotional wallet upon cash wallet recharge.
2. Fnp’s launch of promotional cashback to promotional wallet upon credit to refund wallet
3. 3 enterprise merchants live with automated promotional cashback

## Milestone 2 - Dashboard implementation for rule engine for accrual (Mid Q3)

With this implementation, existing wallet merchants can be targeted to automate cashback to customer’s wallet on custom events and purchase events

**Success metric for this milestone:**

1. Decathlon wants to launch cashback into wallet for every purchase and needs control with Marketing team to experiment with slabs, rules etc
2. 1 merchant live with cashback for every purchase - Target mid-market+/Start-up merchant
3. LTFS live (as per current BRD scope, they need accrual for simple event based trigger only)

## Milestone 3 - Support milestone based accrual and tiered benefits (EoQ Q3)

**Success metric for this milestones:**

1. TWC loyalty program launch (requirements and intent provided already)
2. TFS program deployment
3. Enterprise loyalty program deployment for 1 omni-channel enterprise

## Milestone 4 - GTM with PG and Ezetap merchants (EoQ Q4)

1. PG and Ezetap events available for rule configuration
2. Shopify plugin to include Shopify events also as trigger
3. Primary target - omnichannel merchants - Detailed GTM plan <TBD>

**Success metric for this milestone:**

1. 10 Razorpay’s omnichannel merchants live with solution

# 12. Future scope (Optional)

| **Features** | **Razorpay Build Plan** |
| --- | --- |
| **Turnkey integration with Razorpay products - single customer id** | **Build in Phase 2** |
| **Reporting & BI capabilities** | **Build in Phase 2** |
| **Tiered Benefits for users** | **Build in Phase 2** |
| **Referral program incentives to wallet** | **Build in Phase 2** |
| **Ease of integration with offline store and Shopify website** | **Build in Phase 2** |
| **One store of value for all incentives** | **Phase 1 - Cash + Refunds + loyalty incentives + Gift Cards**  **Phase 2 - offer/discount codes** |
| **Milestone Based rewards. Ex: Credit X on reaching 10 transactions lifetime** | **Build in Phase 2** |
| **AI capabilities** | **Build in Phase 3** |
| **Gamification elements** | **Build in Phase 3** |
| **A/B Testing capabilities** | **Build in Phase 3** |
| **Integration with marketing platforms** | **Build in Phase 3** |
| **Marketing automation through Billme integration** | **Build in Phase 3** |

# 13. Non-Goals / Out of Scope (Optional)

What are non-goals for this project and hence out of scope.

# 14. Appendix (Optional)

## 14.1. Internal Dependencies (optional)

1. Wallet on POS (For offline)

## 14.2. External Dependencies (optional)

This should contain external dependencies for this project.

## 14.3. Pre-mortem (What could go wrong)

<TBA>

## 