



Me Protocol

The Rewards Layer for the Digital Economy

Technical Overview v1.0

Table of Contents

1.0 Introduction	2
1.1 Anatomy of the Problem and Opportunity	2
1.2 Solution	3
2.0 Participants	3
3.0 The Details	4
3.1 Rewards	4
3.2 Reward Pools	5
3.3 Rewards Valuation	6
3.3.1 Reward Valuation Mechanics	7
3.4 Costs Associated with Utilizing the Protocol	10
3.4.1 Gas Costs	10
3.4.2 Me Protocol Fees	10
3.4.3 Open Rewards Incentives	11
3.4 Treasuries and Bounties	11
3.6 Rewards Redemption	12
3.6.1 Same Brand Redemption	12
3.6.2 Cross-brand Redemption	12
3.7 Governance and Introspection	13

CONFIDENTIAL

Contact: Robert Wesley, CEO, My AI Inc., wesley@myai.life

Me Protocol

DRAFT Technical Overview

1.0 Introduction

The Me Protocol acts as a specialized Automated Market Maker (AMM) for rewards, and its components provide the fundamental infrastructure layer enabling what we call 'Frictionless Open Rewards'. The Protocol allows anyone - brand, company, individual, government, non-profit, DAO, etc. - to build instantly interoperable rewards into their products and services, without limitations.

1.1 Anatomy of the Problem and Opportunity

The tokenization of rewards has the potential to transform the antiquated \$185b global rewards industry by allowing rewards to be used across brands (or any other entity). This 'opening' up of rewards programs can lead to higher customer retention and an increase in frequency of purchase as consumers get more value out of rewards that can be redeemed across brands. Brands can also attract new customers through these 'Open Rewards', which was not really feasible before at scale without a blockchain approach.

Open Rewards are great for consumers and great for businesses. However, two general and interrelated problems must be solved to make them viable:

1. **Consumer-side Accessibility & Usability** – Simply creating a reward token that can be exchanged doesn't mean that it will be exchanged or is economically redeemable across brands.
 - a. Where do you go to redeem the rewards?
 - b. How do you exchange them?
 - c. Most consumers will not bother to search for loyalty redemption options, then go find a decentralized exchange (DEX), then find a peer and then calculate what they need to swap to get the rewards they need.
 - d. The majority of consumers still do not understand tokens or blockchains in the first place, so how are they supposed to make sense of the tokenised version of their rewards?

CONFIDENTIAL

Contact: Robert Wesley, CEO, My AI Inc., wesley@myai.life

2. **Business-side Exchange Dynamics and Liquidity Management** – Just because someone wants to release a tokenized version of their reward, does not mean these tokens can be easily exchanged or that they will bring shared value for all stakeholders.
 - a. How do you ascertain the value of a reward token?
 - b. How do we ensure that the exchange of reward tokens brings benefits to brands as well as consumers in an open system?
 - c. How do we balance inflow and outflow and drive new customers to brands so they are incentivised to adopt open rewards?
 - d. How is liquidity established and managed in a low-friction way so that even tiny brands can have their own interoperable rewards?

The reality is that current centralized and decentralized exchanges are ill-suited for the nuances of exchanging or redeeming tokenized reward assets. Closed tokenized rewards programs with centralized control, whether single- or multi-vendor, are also self-limiting; creating the dynamics of exclusion and friction that prohibit their extensibility. Every brand, big or small should be able to profit from the shared value that is inherent in open rewards and do so without the tradeoffs of traditional rewards coalitions.

1.2 Solution

Creating a limitless and frictionless cross-brand loyalty ecosystem requires specialized infrastructure and usability layers to succeed. The Me Protocol is part of the core infrastructure layer (or as we call it - the 'enablement layer'), that allows anyone to build open rewards into their products or services to incentivise behavior.

Marketplaces for the redemption of rewards, apps for the provision of rewards, and services to earn rewards (marketing, payments) are among the innumerable usability layers that can be developed on top of and integrated with the Me Protocol.

In the most basic sense, the Me Protocol operates as a kind of Automated Market Maker (AMM) for rewards, including a set of pools, with all the functionalities to create, manage and utilize them.

2.0 Participants

There are currently four major categories of participants on the Protocol. They include: businesses or brands (mostly referred to as 'brands' in this document); consumer applications; third-party integrators; and Protocol Administrators.

CONFIDENTIAL

Contact: Robert Wesley, CEO, My AI Inc., wesley@myai.life

Brands are participants of the Protocol that aim to create and manage new rewards or to expose existing rewards to the Protocol. The Protocol makes these rewards accessible to participants in the ecosystem (e.g. consumers) via smart-contracts known as pools. Brands can initiate a pool on the Protocol and provision it with rewards. The amount of rewards supplied into the pool defines the immediate amount of exposure of that brand to participants on the network. Once the pool is set up, customers with rewards from any existing brand on the network can immediately start utilizing their rewards with this new brand. It is envisaged that brands will mostly opt to interact with the Protocol using Consumer Applications or Third Party Integrations such as the Me Marketplace.

Consumer Applications is the general category for solutions that provide an interface from which brands and/or their customers can utilize the Protocol. Through these applications, the Protocol allows users to redeem their rewards with the issuing brand or with other brands in the ecosystem. Examples of consumer applications would include: e-commerce solutions; brand aggregators like the Me Marketplace; service aggregators (e.g. Airbnb, Uber); service providers, etc. Anyone can connect to the Protocol as a Consumer Application.

Third Party Integrators are Protocol users that create other innovative solutions leveraging the Protocol. They are a unique category because they could require some separate level of authorization on the Protocol to deliver their services.

Protocol Administrators are users with administrative privileges capable of making updates to the Protocol based on governance decisions.

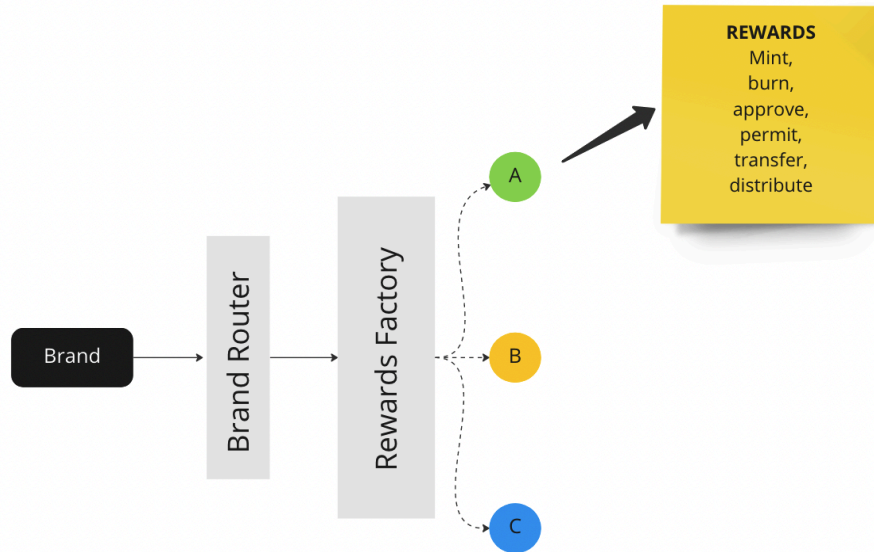
3.0 The Details

3.1 Rewards

Anyone can create rewards on the Protocol. Rewards in this iteration of the Protocol are primarily ERC20 or PSP22 tokens which can be minted, transferred, and burnt at the owner's discretion. In addition, the Protocol allows bulk distribution of these rewards to a maximum of 100 accounts per transaction and is not limited to single transfers inherent in the token standards.

CONFIDENTIAL

Contact: Robert Wesley, CEO, My AI Inc., wesley@myai.life



3.2 Reward Pools

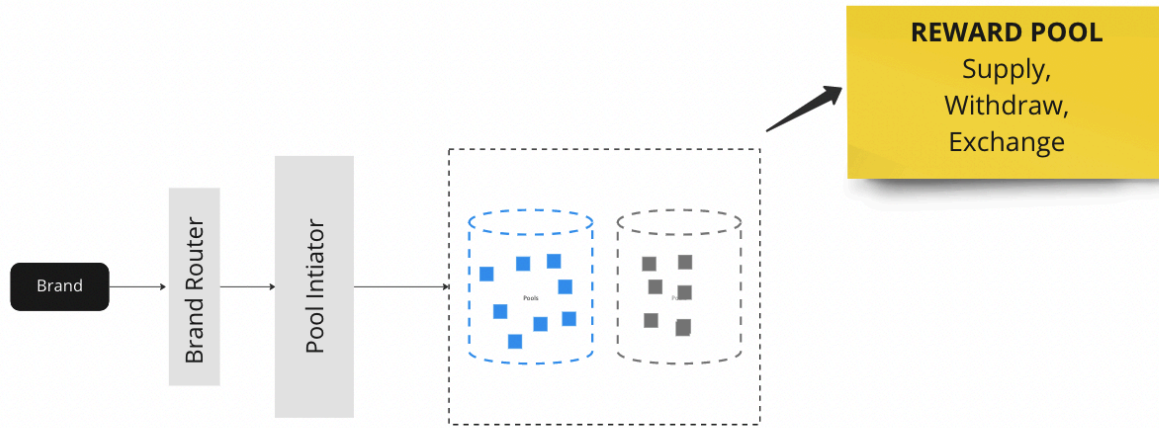
Reward Pools are smart contracts holding a portion of a brand’s reward that the brand is willing to expose to customers from other brands. These Pools are operated in an Automated Market Maker (AMM) fashion and are at the core of cross-brand redemption on the Protocol. Pools hold two tokens: the brand’s reward token and the Protocol token also called the Me Token or simply ‘Me’. The Me Token serves as the liquidity and reward valuation component of the Protocol.

During cross-brand rewards interaction, brand rewards do not leave the pools, but rather they translate to an equivalent amount of Me Tokens that can flow freely in the Protocol. It is this equivalent amount that flows in and out of the respective brand pools. The equivalent amount at any given point in time is a function of the supply and demand of brand tokens, the amount of Me in the pool at that instance of time, and the initial valuation of the brand rewards.

Anyone can initiate a pool, and at the time of initiation would be required to provide some rewards and an equivalent amount of Me to the pool. This initiation sets the initial valuation of the brand’s rewards based on the amount of Me Tokens deposited, and it is recommended that this initiation is carried out such that the valuation of the rewards corresponds to the off-chain valuation when used as incentives, cashback, or loyalty points. Brands can supply or withdraw rewards or Me Tokens to and from the pool at any given time.

CONFIDENTIAL

Contact: Robert Wesley, CEO, My AI Inc., wesley@myai.life



3.3 Rewards Valuation

Traditionally, 'loyalty rewards' are given to incentivise customers to repeatedly purchase from a company. The value of these rewards is largely related to their 'redemption value', meaning that they hold a value based on what the customer can use them for.

For example, if Starbucks were to give you a 'Starbucks Coin', and this one coin gets you a \$1 discount on a coffee, we can say that the coin's value is approximately \$1. If it gets you \$2 off a coffee, then it's value is probably around \$2. That is, if people like Starbucks coffee. If Starbucks Coin cannot be used for anything, then its value may be closer to \$0.

Due to the fluctuating nature of rewards, they usually do not act as long term stores of value, and especially for fungible rewards, their value does not intrinsically appreciate. This makes them behave quite differently than crypto-currencies and protocol utility tokens that most exchanges are designed for.

Additionally, companies can adjust the redemption value or distribution to play around with profit margins and customer lifetime value, meaning that the rewards behave more like true utility tokens than commodities (or commoditized liabilities). The utility being retaining a customer, attracting a new customer, or encouraging behavior like higher frequency or volume of purchase. These features also make rewards exciting tools for both companies competing for customers and customers leveraging their power to gain the most value from their engagements with brands.

These features also make the fair and equitable exchange of rewards very complicated to achieve. The Me Protocol was thus created to attend to the nuances of rewards and can

CONFIDENTIAL

Contact: Robert Wesley, CEO, My AI Inc., wesley@myai.life

manage fluctuations in value in a way that preserves the intention of the issuer - i.e. to incentivise a specific behavior, such as purchasing a product.

3.3.1 Reward Valuation Mechanics

In the basic model of the system, a coffee shop issuing a 'CoffeeCoin' will always be able to determine how many CoffeeCoins it will accept for 50% off a cup of coffee in its store (e.g. one CoffeeCoin = 50% off a cup of coffee). Regardless of the exchange value of the CoffeeCoin vs. any other token, one CoffeeCoin will get you 50% off a coffee at that coffee shop. In this sense a brand does not have to worry about the exchange value of their reward, just what it can be redeemed for.

The exchange value of course matters more when the brand wants to create liquidity so that its reward can be more freely exchanged. But how is the exchange ratio between rewards determined? The Me Protocol has adopted a unique approach for answering this question at any given time.

For each reward that is exchangeable on the Protocol, there are two major valuations:

- The Optimal Reward Valuation (R_{opt}) also called the Initial Valuation, Passive Valuation or Valuation at Rest; and
- The Reward Exchange Valuation (R_i) or Active Valuation.

The **Optimal Reward Valuation** is the valuation of a reward at pool initiation. This is also the valuation of a reward when it is considered in isolation (i.e when it is not being exchanged for other rewards).

Let's assume at a given time t there exists X_t amount of brand tokens and M_t amount of Me Tokens in the pool, the ratio of both tokens R_t is such that

$$R_t = \frac{X_t}{M_t}$$

At pool Initiation where $t = 0$, the ratio of both rewards in the pool is the Optimal Valuation (R_{opt})

$$R_0 = R_{opt} = \frac{X_0}{M_0}$$

CONFIDENTIAL

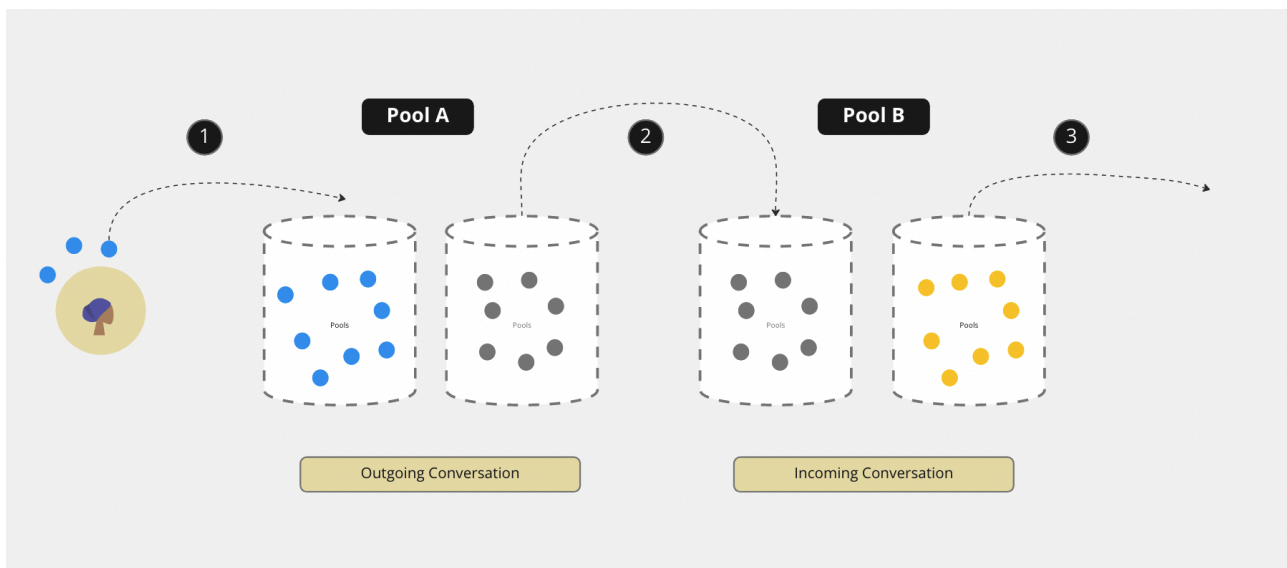
Contact: Robert Wesley, CEO, My AI Inc., wesley@myai.life

This valuation R_{opt} would be used at every time t when this reward is not being exchanged for other rewards.

The **Reward Exchange Valuation** is the valuation of a reward when it is to be exchanged for another reward. To understand this valuation, it is important to know how cross-brand reward interactions work on the Protocol.

The Protocol implements cross-brand rewards interactions through conversations between the pools of the brands whose rewards are to be exchanged.

Let's assume the rewards of brand A are to be redeemed with brand B



The user would typically deposit the rewards of brand A into brand A's reward pool, specifying which brand they would like to spend it on. The Protocol determines the equivalent of the deposited rewards in Me Tokens, based on the Reward Exchange Valuation R_i and then transfers this equivalent value to the pool of brand B. On receiving these rewards at brand B, the Protocol uses the Optimal Rewards Valuation R_{opt} of brand B to calculate the amount of rewards B to release based on the amount of Me Tokens transferred into the pool. The processes that took place at pool A are referred to as **outgoing conversations**, and those that took place at pool B are called **incoming conversations**.

The **Exchange or Active Valuation** can hence be described as the valuation of a reward when the reward pool engages in **outgoing conversations**. At every other time, the reward is valued at its **Optimal Valuation**.

The **Exchange Valuation** R_i of a reward at any given time t is given as

CONFIDENTIAL

Contact: Robert Wesley, CEO, My AI Inc., wesley@myai.life

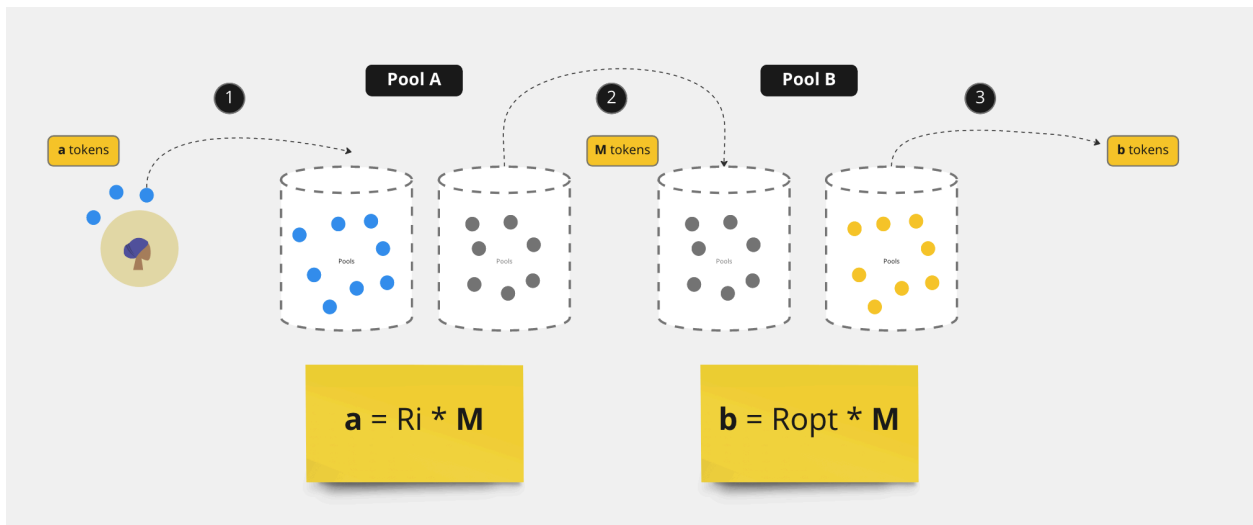
$$R_i = R_t (1 + 0.809\alpha)$$

$$\text{Where } \alpha = \frac{M}{M_t}$$

and R_i is such that $R_i \geq R_{opt}$

The constant 0.809 is half the Fibonacci Golden Ratio.

Let's assume an unknown amount a of reward A is to be redeemed for a given amount b of reward B



Knowing b the amount of M needed for a cross pool conversion can be obtained as:

$$M = \frac{b}{R_{b-opt}}$$

$$a = R_{a-i} * M$$

$$\text{Hence } a = R_{a-t} * \left(1 + 0.809 \frac{b}{R_{b-opt} * M_{a-t}}\right) \frac{b}{R_{b-opt}}$$

CONFIDENTIAL

Contact: Robert Wesley, CEO, My AI Inc., wesley@myai.life

Where R_{b-opt} is the optimal valuation for reward B, R_{a-t} is the pool ratio for reward A at that time, and M_{a-t} is the amount of Me tokens in pool A.

To account for the possibility of slippage in the AMM pools, the Protocol increases the valuation slightly based on the specified slippage factor $\rho\%$

Hence,

$$a = (R_{a-t} * (1 + 0.809 \frac{b}{R_{b-opt} * M_{a-t}}) \frac{b}{R_{b-opt}}) (1 + 0.01\rho)$$

Every reward pool has a default value of slippage factor, but for each exchange, this value can be overridden.

3.4 Costs Associated with Utilizing the Protocol

Using the Protocol can incur certain costs to brands, consumers, and third-party applications. These costs are can be broken down into:

3.4.1 Gas Costs

Gas Cost (Gc): The Me Protocol is being deployed across blockchains. Traditionally gas fees need to be paid to the blockchain node operators and validators in the blockchain's native coin e.g Ether, Dot, GLMR, Matic, etc. To reduce friction, My AI has established a mechanism to directly pay these gas fees but will pass on the costs to the appropriate brands, consumer applications and third-party integrators. Participants must set up a wallet, called the Fee Wallet, funded with Me Tokens for which the Me Protocol has spending approval. These tokens are used to fuel the respective transactions and, if the balance runs below an acceptable threshold, cost-incurring requests from the participants would no longer be processed until the wallet is topped up.

3.4.2 Me Protocol Fees

Me Protocol Fees (Pf): These are tiny fees paid by participants for certain services such as reward utilization, interoperation, etc. offered by the Protocol. These fees are also charged in Me Tokens and deducted from the Fee Wallet when a transaction occurs.

CONFIDENTIAL

Contact: Robert Wesley, CEO, My AI Inc., wesley@myai.life

3.4.3 Open Rewards Incentives

The Me Protocol and its ecosystem are being designed to incentivise businesses to adopt Frictionless Open Rewards™ that can be freely redeemable. One of the key value propositions is that by participating in an open system, brands can better retain their existing customers by making them want to earn more rewards from the brand (because the rewards are more immediately useful), and to attract new customers through the exchange process. Along with the valuation management features previously elaborated, the Protocol has two additional innovative ways to help encourage the fair exchange of rewards.

- Customer Acquisition Incentive (CAI) (Optional): These are small amounts of Me Token sent from one brand to another brand when a customer exchanges from one brand's token to redeem an offer from another brand. The first brand is in effect 'sharing' the customer with the second brand, and so the second brand sends a tiny CAI to the first, as a kind of 'tip' or 'thank you'. The Me Token transferred is deducted from the second brand's Fee Wallet during the cross-brand redemption operation.
- Bounty Contributions (Bc) (Optional): These are small contributions that a consumer may make during cross-brand redemption. When Bounty Contributions are enabled in a Consumer Application, a brand's customer will be required to pay a slightly higher amount of that brand's reward when redeeming an offer from another brand. For example, instead of charging 10 CoffeeCoins, 11 will be deducted from the user's wallet when redeeming for a pizza. This excess amount (one CoffeeCoin) is collected and deposited into a separate smart contract, called the Bounty Pool. When the Bounty Pool reaches a defined threshold, the rewards in the Bounty Pool are released to fund certain promotional activities on the associated brand. These promotional tasks are known as *bounties*. For example, if lots of consumers are using their CoffeeCoins to redeem for pizza, a bounty will soon be released by the Protocol that can be used to promote the coffee shop (whose customers are exchanging to buy pizza). While the rewards were not used on the coffee shop's offers, they were used to advertise and drive new customers to the shop. So, the coffee shop's customers will buy more coffee because they love their rewards and the coffee shop gets promoted to new customers in the process.

3.4 Treasuries and Bounties

The Treasury is essentially a wallet owned by the participant into which rewards that have been redeemed are transferred. The Treasury also receives Customer Acquisition Incentives during an outgoing cross-brand redemption by the brand customer.

Bounty Rewards or bounties are simply rewards obtained from Bounty Contributions as discussed in the previous section or added by other participants including the brands themselves whenever they want to offer tasks for users to earn rewards. These rewards are

CONFIDENTIAL

Contact: Robert Wesley, CEO, My AI Inc., wesley@myai.life

readily available for brands to provide as incentives to users when they perform tasks to promote the concerned brand.

3.6 Rewards Redemption

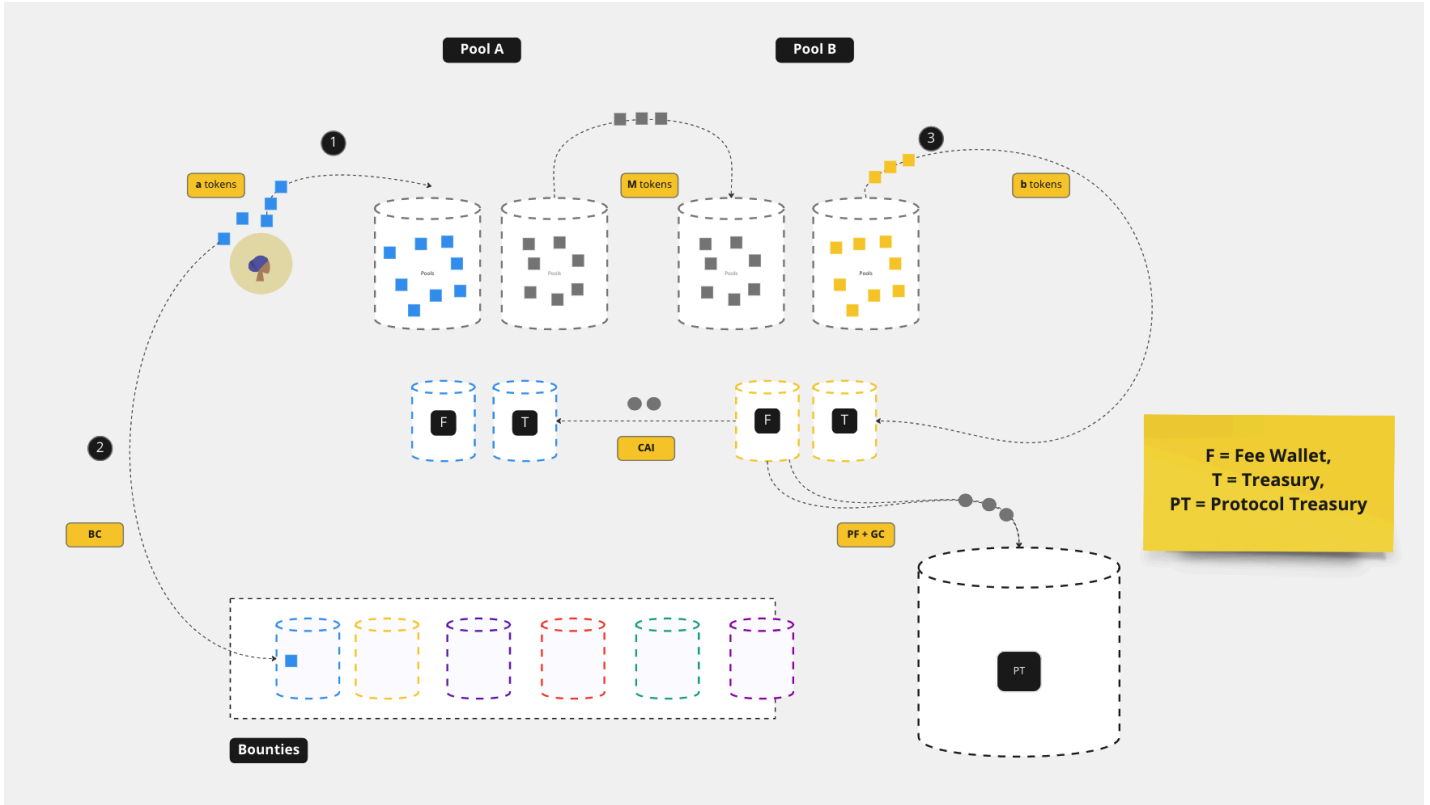
3.6.1 Same Brand Redemption

Redeeming rewards with the same brand or third-party integrator is as straightforward as transferring these rewards from the consumer application to the brand/third-party treasury, the Protocol emits an event when this transaction is completed, and connecting applications can listen to this event, await on-chain confirmation and then approve the rewards as redeemed.

3.6.2 Cross-brand Redemption

To redeem rewards across brands, the redeemer typically needs to have a certain reward from a given brand, know the brand that these rewards are intended to be redeemed with, and the value of other brand's reward. Based on these variables, the consumer application would query the Protocol for the number of rewards that should be provided. The user provides this reward and all the necessary pool conversations will take place under the hood, causing the brand reward to be sent to the appropriate brand as if the user had possessed that reward all along. The Protocol then emits an event, and connecting applications can listen to this event, await on-chain confirmation and then approve the rewards as redeemed.

During cross-brand redemption, users can be required to make a Bounty Contribution, this contribution is embedded into the valuation coming from the Protocol query. The acquiring brand can be required to pay the Gas Costs, pay Me Protocol Fees, and tip the issuing brand with some Customer Acquisition Incentives.



3.7 Governance and Introspection

The Me Protocol provides an administrative module called the Governor which allows for Protocol updates based on the governance decisions and also exposes the secretary and oracle facets, which provide introspection on the valuations and liquidity in the Protocol.