Doozie Token (DZT)

Blockchain based personalized reward platform for the internet

Gigalogy Inc. February 13th, 2022

Abstract

User reward programs for digital products are not meeting their true purpose and the key components that affect it the most are user inactivity, low redemptions, time delays in receiving rewards, and reward expiration. User inactivity and low redemption happen due to the nature of the product and its centralized ecosystem. Centralized ecosystem gives users less options to redeem their reward which leads to less user engagement and results in low redemptions. It also takes away the freedom from users to spend their reward wherever they like. In some reward programs, longer waiting time results in decreased user engagement. Besides, some programs have reward expiration which leads to users losing their earned rewards in time. Organization ecosystem is no longer as simple as it used to be and for a lot of organizations, 3rd party contributors play a vital role in growth. Traditional reward programs are limited to points for action and neither consider user needs, business values nor have the infrastructure to support it. Sometimes managing a reward program becomes difficult after enabling it. Managing a high transaction system that would combine user needs aligned with business strategy is expensive and requires a dedicated technical team. It is more difficult for SMEs (Small and Medium Enterprises) as the above mentioned barriers affect them the most. The solution is a decentralized, secure, transparent personalized user reward program in the blockchain. DZT (Doozie Token), is a decentralized token which connects organizations, its contributors and its users. It solves not only the issues of existing reward programs but also creates a new user experience that we haven't seen before. Users and contributors receive DZT for fulfilling personalized offers given by organizations. DZT provides infinite opportunities to its holders to exchange it for the things they want, which leads to increased redemption rate, more engagement with the organization's ecosystem. It also reduces the cost of maintaining a reward program for the organizations on their own. We see DZT as the future of reward programs and it will revolutionize the user experience to maximize user satisfaction.

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1 Value Proposition

DZT is a token, organizations are willing to reward anyone involved in their ecosystem. DZT system provides the following:

- Users: Receive DZT for fulfilling specific offers designed by the organizations, use it in the same ecosystem or different one that supports DZT or exchange it for a different asset.
- Contributors: Ability to be a part of an ecosystem they love. Receive DZT for generating value in the organization ecosystem. The revenue stream is very transparent with no discrimination.
- Organizations: Transparent, efficient, nearly real-time, cost effective, secure personalized reward management leads to higher user engagement which ultimately will create brand loyalty.

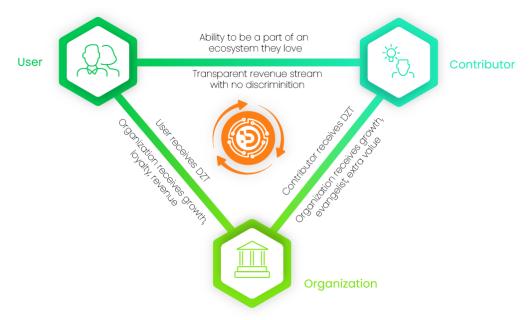


Fig 1: Value Proposition

2 Introduction

User reward programs are one of the key components in user loyalty for digital products. It creates loyal users who contribute more than the sales and marketing team of an organization for its faster growth. It was calculated that businesses worldwide spent 126 billion U.S dollars on customer management in 2019, out of which 75 billion was spent on loyalty management.[1]

Loyal users spend more time and money with the brand. On an average, existing users spend 67% more than the new users.[2] Loyal users become evangelists for any organization.

Reward programs also foster trust between users and organizations. Users who frequently return to an organization ecosystem get a higher value than they could get from any other competitors. 86% of loyal users are more likely to recommend a brand to their friends and family. On top of it, if the experience is personalized 51% of the users are more likely to purchase a product.[3] Another survey on global businesses showed 45% of businesses believe that personalized offers are important in loyalty programs.[4]

In recent years, we have seen significant growth in the creator economy where users become contributors and help grow the organization ecosystem. More than 50 million people are already active in this economy and more organizations are enabling monetization and support for their contributors.[5]

With DZT (Doozie Token) we want to create a harmony among users, contributors and businesses that not only solves the issues existing reward programs fail to address but also maximizes user satisfaction and brand loyalty. We believe users and contributors deserve appreciation for their part in the growth of an organization and organizations can achieve higher user engagement, ecosystem expansion and increased user loyalty by integrating DZT into their ecosystem.

2.1 Issues with existing Reward Programs

The existing reward programs are in no way user friendly and also come with many challenges for the organization itself.

- High Cost: Enabling, maintaining, securing a high transaction reward program is not simple since it requires a dedicated technical team. This affects SMEs (Small Medium Enterprises) the most. Large stores and successful ecommerce shops often pay high prices to set up and maintain their third-party integrations or custom solutions for customer loyalty programs. Whether they are making adjustments to an existing app or building their own from scratch, developer and maintenance fees can range from \$2K - \$15K a month for an enterprise-level solution.[6]
- User Inactivity: Since these reward programs run on a centralized ecosystem users have limited options to redeem from. In some cases, the process is overly

- complicated and as a result, the users lose interest with time. This is one of the main causes behind low redemptions. Roughly \$140 billion in loyalty points go unused each year.[7]
- Liability: When users do not redeem their rewards it stays as a liability in the organization balance sheet until they expire. This fails organization earning repeated business.[6]
- Expiration: Most of these centralized rewards come with an expiry date. It is very unfair for users that they cannot use their earned reward after a certain time.
- Slow to Receive Rewards: In some cases it takes a long time for users to receive their rewards. This also creates a negative impression about the organization.
- Fraud: It is estimated that \$3.1 billion worth of points redeemed are fraudulent each year.[7]
- Security: In 2017, 11% of attacks on existing financial accounts (not involving payments on credit and debit cards) were on loyalty accounts, compared with 4% in 2016.[8] Besides, 71% of consumers were less likely to join a loyalty program that collected personal information beyond just name and phone number.[6]
- Personalization: Users like to see offers that are relevant and have a personal touch. Sending users non-relevant offers makes them lose interest in the brand. Traditional reward programs do not have this ability as they mainly focus on points for purchase.

2.2 Why Blockchain?

- Secure Environment: Blockchain creates an immutable and time-stamped distributed database entry of every single transaction ever made, making each transaction and its record easily traceable, but also rendering them irreversible, preventing double spending, fraud, abuse, and any other type of manipulation of the transactions. In short, blockchain-based user reward programs are not only inherently more difficult to hack, but also have the ability to provide security on multiple levels that were not possible previously.[9]
- Interoperability and Cost: Blockchain can be used to connect different
 organization ecosystems and rewards can be used seamlessly. This will also
 decrease transaction cost significantly as it does not require a third party.
 Blockchain also reduces system management costs and smart contracts automate
 processes. Interoperability will directly address the issues existing reward
 programs have with user inactivity and low redemptions.[8]

- Frictionless System: Through a trustless, decentralized technology solution, blockchain can synchronize user reward programs. From a user perspective, the ability to access, manage, and use their rewards will be frictionless.[8]
- Near Real Time: Blockchain can enable a transaction to be recorded and accessed by multiple involved parties in near real time, increasing the chance that an organization can reward users faster.[8]
- No Expiration: User rewards will never expire.

3 Personalized User Reward Platform on Blockchain

3.1 Token Technology

DZT (Doozie Token) runs on Stellar, an open source network for currencies and payments. Stellar is designed to make it easy to issue digital assets and build applications that take advantage of a publicly distributed ledger that allows for near-instant payments and universal currency conversion. It runs across a decentralized, open network and handles millions of transactions each day. Like Bitcoin and Ethereum, Stellar relies on blockchain to keep the network in sync, but the end-user experience is more like cash. Stellar is much faster, cheaper, and more energy-efficient than typical blockchain-based systems.[10]

Stellar uses a consensus mechanism called Federated Byzantine Agreement (FBA), a model suitable for worldwide consensus. In FBA, each participant knows of others it considers important. It waits for the vast majority of those others to agree on any transaction before considering the transaction settled. In turn, those important participants do not agree to the transaction until the participants they consider important agree as well, and so on. Eventually, enough of the network accepts a transaction that it becomes infeasible for an attacker to roll it back. Only then do any participants consider the transaction settled. FBA's consensus can ensure the integrity of a financial network. Its decentralized control can spur organic growth.[11]

Stellar Consensus Protocol (SCP) is the first provably safe consensus mechanism to have the four key properties mentioned below simultaneously:

- Decentralized Control: Anyone is able to participate and no central authority dictates whose approval is required for consensus.[11]
- Low Latency: In practice, nodes can reach consensus at timescales humans expect for web or payment transactions—i.e., a few seconds at most.[11]

- Flexible Trust: Users have the freedom to trust any combination of parties they feel fit. For example, a small non-profit may play a key role in keeping much larger institutions honest.[11]
- Asymptotic Security: Safety rests on digital signatures and hash families whose parameters can realistically be tuned to protect against adversaries with unimaginably vast computing power.[11]

Mechanism	Decentralized Control	Low Latency	Flexible Trust	Asymptotic Security
Proof of work	✓			
Proof of stake	✓	maybe		maybe
Byzantine agreement		1	1	1
Tendermint	✓	✓		✓
SCP	✓	✓	✓	✓

Fig 2: Comparison between different consensus mechanism[11]

Stellar comes with a lot of benefits from a usability perspective as well.

- Quick settlement: 3-5 seconds for a token holder to send the token to someone else.[12]
- Cheap transactions. Suitable for payments.
- Built in exchange with any other token, asset or currency in the network.[12]
- Optionally control who can hold your token.[12]
- Ability to do voting, dividends or awards all in the same network.[12]
- Unify how exchanges and others can deal with your token. If an exchange supports Stellar then it can easily list all other tokens issued on Stellar.[12]

3.2 What is an Offer?

Offer defines rewardable actions the user needs to fulfill in order to achieve the reward. Key components of an offer are frequency, actions, reward, receiver, and period. Frequency determines the lifetime of an offer. It could be a one time offer, scheduled at a specific time, run on a certain interval. Actions are what users need to fulfill in order to

receive the reward. Each action comes with a reward attached to it in DZT. Actions can be designed in a marketing funnel way where users go through a guided path designed by organizations / offer personalization or they could be independent from each other. Every offer needs a receiver. It represents who will be eligible for this offer. Final major component of an offer is its validation period. Period represents the time range an offer is available for users' acceptance. A high level structure of an offer looks like below:



Fig 3: Offer Structure

3.3 Offer Personalization

Personalization is the key for users to receive the most suitable offers they can fulfill to receive DZT. It also increases user engagement which leads to brand loyalty. Gigalogy's personalization engine is integrated into Doozie Platform to ensure personalized offers for end users.

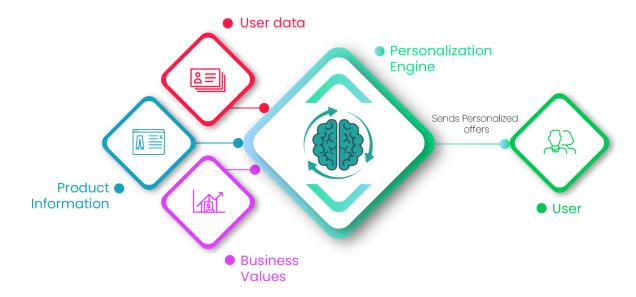


Fig 4: Offer Personalization

Personalization engine takes into account three major data sources:

- User data
- Product / Inventory information
- Business values, priorities

Personalization engine combines these data and creates offers with the optimum values of frequency, actions, rewards and period for each user in the ecosystem. Each offer also comes with a redeem probability score that prioritizes in which order users should receive the offers.

Handling all aspects of user data comes with privacy concerns. We believe in user data protection and Gigalogy never utilizes any user data that is gathered without user consent.

3.4 Doozie Platform

Reward payments in DZT (Doozie Token) happen via Doozie Platform. When a user fulfills an offer, Doozie platform creates a new reward with DZT attached to it and after successful verification that DZT is sent to the user.

Organizations can purchase DZT from Doozie Platform or different exchanges it is listed on. Organizations can use developer friendly ready to use REST APIs or SDKs to integrate the DZT ecosystem to their existing infrastructure with minimum effort. Doozie is a fully managed platform which means all the necessary actions required to setup offers and run them can be done from Doozie UI. With a few lines of code organizations will be able to integrate the DZT ecosystem to their product. Doozie platform takes a small transaction fee for every successful reward generation.

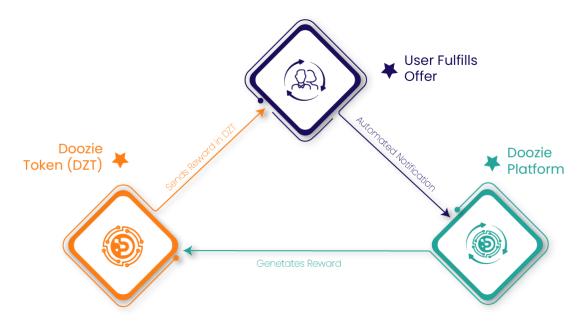


Fig 5: Doozie platform

Users can create a new account or add an existing one to receive DZT in Doozie Wallet.

3.5 Organization Journey

Organizations can create offers on Doozie, attach DZT (Doozie Token) on every action of an offer. If an organization chooses to use the offer personalization feature, their journey can be fully automated as well. Organizations have the flexibility to choose both manual offer creation and personalization features together.



Fig 6: Organization Journey

3.6 User Journey

Users receive DZT (Doozie Token) as reward for fulfilling specific offers created by the organizations. Users can use it on the same ecosystem / different ecosystem that supports DZT / exchange it for something they want.

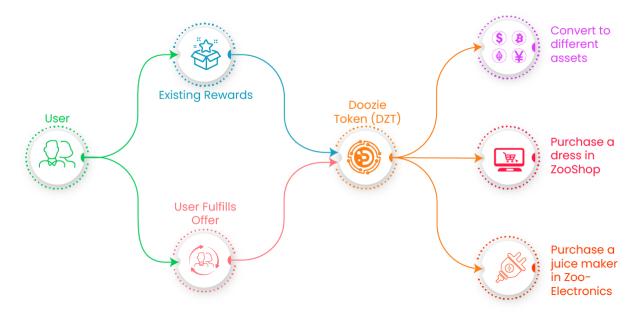


Fig 7: User Journey

3.7 Exchange between Existing Rewards and DZT

We believe that users already have a lot of existing rewards which are isolated from each other and only support specific ecosystems. With DZT integrated, different ecosystems can sync between each other. Users can use the reward conversion feature from Doozie Platform to convert their existing rewards into DZT.

3.8 Roadmap

- DZT v1.0 Gigalogy AI Platform Integration: A platform for ready to use, end-to-end automated AI solutions that can be integrated to any product with minimum effort and maximum efficiency. Customers who are looking for AI solutions to integrate to their digital product come to this platform and can purchase subscriptions for the solution of their choice using DZT. 3rd party contributors can build and publish AI solutions and earn DZT as reward. If a customer enables DZT rewards, their end users will receive personalized offers via customer product or other necessary means and by fulfilling offers their end users will be rewarded in DZT as well. Besides, for contributors when any of their published solutions is subscribed by a customer they can earn DZT recurrently. Gigalogy AI platform will allow us to build a fully functional DZT ecosystem which covers every aspect of user journey. At this point users will have functionality such as receiving, buying, selling DZT from their wallet.
- DZT v1.0 -- Doozie Shop Integration: An e-commerce shop that provides a personalized experience for each user. Users can fulfill various offers designed for them and earn DZT. They will also be able to purchase specific items from the shop using DZT.
- DZT v2.0 Enhanced User Experience: A single wallet to manage rewards, payments in cryptocurrencies. Make it easy, user friendly to manage cryptocurrency the way we manage cash. Enable features for users to earn DZT and profit for depositing their assets into a liquidity pool.
- DZT v3.0 -- Doozie Platform for Organizations: We intend to make the DZT ecosystem available for organizations to integrate to their ecosystem.
 Organizations can easily integrate the DZT ecosystem to their product via REST APIs / SDKs. Doozie is a fully managed platform which means the integration process will require very minimum effort on the organization side.

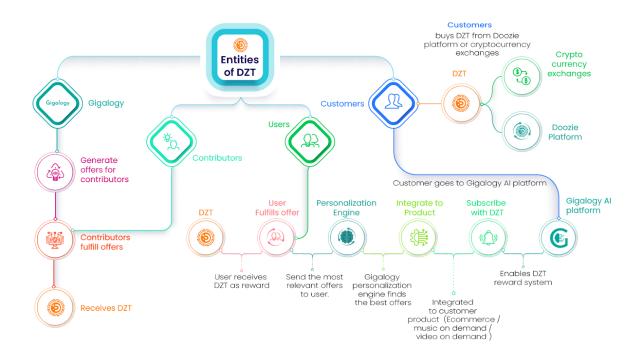


Fig 8: DZT ecosystem on Gigalogy AI Platform

4 DZT Landscape

4.1 DZT Overview

The DZT (Doozie Token) is developed to address the issues with existing reward programs for digital products, how they are failing to satisfy both users and organizations and to create a unique user experience that we have not seen before. DZT, a token built on the Stellar network, will be the unit of exchange for a decentralized, secure, transparent, personalized reward system.

4.2 DZT Advantages

Existing Centralized System	Doozie Platform
Walled gardens	Free software
Low redemptions due to centralized ecosystem, overabundance of reward programs	Decentralized token which is interoperable among all ecosystems that support it

Users losing their rewards due to expiration	No reward expiration
In most cases very slow to receive	Nearly real-time, secure
Sometimes user do not get their promised reward	Transparent and guaranteed to deliver
Building, managing a high transaction reward system is expensive	Highly reliable, zero system fee and fully managed
Vulnerable to fraudulent activities	Resistant to fraudulent activities
Mainly focused on points for purchase. User receives non-relevant offers	Designed to personalize offers for each user that ensures most relevant offers

4.3 Competition

- DigitalBits is an open-source blockchain network that's focused on supporting
 consumer digital assets. It helps brands to launch their own digital asset in the
 form of digital currency or non-fungible tokens (NFTs) that can be used on their
 own application.[13] The hurdle to integrate it to the organization ecosystem is
 relatively high. Also not focused on interoperability of these digital assets and
 personalization of rewards.
- Loyyal offers a blockchain-as-a-service solution for incentive management. The company leverages blockchain and smart contract technology to help brands manage their loyalty programs more efficiently.[13] Good for organizations but flexibility for users to use their reward however they like is something not in focus. Also not focused on personalization of rewards.
- Traditional centralized point systems. Clearly these traditional point systems have too many critical issues that affect organization goals and user satisfaction which we addressed throughout this paper.

4.4 Market Adoption

• Initially our goal is to onboard existing customers from Gigalogy AI platform. Integration of the DZT ecosystem will take very little time and effort as we already have the bridge with customer products.

- Early stage customers will be rewarded with DZTs for integrating the DZT
 ecosystem to their product. They can use this to reward their users via
 personalized offers. This will continue until our business growth fund is
 exhausted. Also for early adopters, engineers from Gigalogy will help with the
 integration of DZT to their ecosystem free of charge.
- Gigalogy Academy will create awareness on the importance of decentralized reward management and how it can revolutionize user experience and brand loyalty.
- Our marketing team will run campaigns to target potential early adopters, create events to build a community.
- Our business development team will also work on building partnerships with organizations that can play a vital role in growth and expansion of DZT.

4.5 Key Team Members

- Mosleh Uddin, CEO & Co-Founded Gigalogy. Previously worked as Software Engineer at Rakuten, Product Manager at Catalina Marketing. Responsible for DZT ecosystem development, strategy, and market adoption.
- Moin Uddin, CTO & Co-Founded Gigalogy. Previously worked as Software Security Lead at Rakuten. Responsible for designing and developing highly scalable, secure infrastructure for the DZT ecosystem.
- Mehedi Hasan, CFA, FRM, MBA, Adjunct Assistant Professor of Bangladesh University of Professionals and Independent University, Bangladesh.
- Tariqul Islam, Community Manager, UI/UX Designer.
- Michael Nelson, Building disruptive software for over a decade in Japan. From robotics to fin-tech, Michael has worked on the most cutting edge technologies.

5 Token Launch

5.1 Token Sale Summary

Our goal is to raise a maximum of \$10 million USD from the token sale.

- Maximum financing: 36 million XLM, this may change with exchange rates
- Exchange rate: 1 XLM = 50 DZT (Doozie Token), this may change with XLM exchange rates.

- Token sale website address: Will be shared with people who subscribed to our mailing list and discord channel 48 hours before the event starts.
- Launch date and time: 2022-02-14 1:00 PM JST
- Token sale time frame: 30 days
- Token sale completion: When maximum number of XLM raised

5.2 Token Distribution

- Gigalogy: 450 million DZT
- User growth fund: 450 million DZT.
- Business growth fund: 300 million DZT
- Token available to public at launch: 1.8 billion DZT

5.3 User Growth Fund

User growth fund will be used to incentivize users for participating in the DZT ecosystem.

- 3rd party contributors will be rewarded with DZT from the user growth fund for participating in the developer program, successfully publishing AI solutions on Gigalogy AI platform.
- Users of Doozie shop will be rewarded with DZT from the user growth fund for registering and fulfilling personalized offers.
- All DZT holders will receive a dividend based on their DZT amount every quarter from the user growth fund.
- We will continue to reward early adopters until the user growth fund is exhausted.

5.4 Business Growth Fund

Business growth fund will be used to incentivize organizations to participate in the DZT ecosystem.

- Any early adopter organizations which will participate into the DZT ecosystem via Gigalogy AI platform or other means will be eligible for reward from business growth fund.
- Organizations can use rewards received from DZT growth fund for payment in Gigalogy AI platform, incentivize their users and contributors.
- Business growth fund will continue until it is exhausted.

5.5 Budget Allocation

We are planning to use the raised XLM in the following manner,

- Product Development: 60% → Gigalogy product team will be responsible for developing the DZT ecosystem based on our roadmap.
- Marketing: 15% → Market adoption of DZT. Creating awareness, evangelism, events to create a strong DZT community.
- Partnership: $10\% \rightarrow 3^{rd}$ party partnership, programs to expand the DZT ecosystem.
- Administration: 10% → Legal, security, accounting and other administration costs.
- Others: 5% → Unforseen costs.

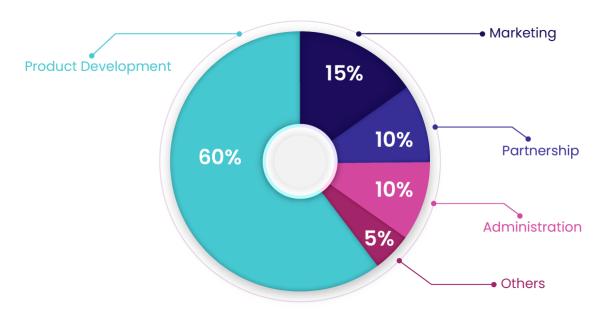


Fig 9: Budget Distribution

6 DZT FAQs

• What is DZT?

Doozie Token. It is developed to address the issues with existing reward programs for digital products, how they are failing to satisfy both users and organizations and to create a unique user experience that we have not seen before. DZT, a token built on the Stellar network, is a unit of exchange for a decentralized, secure, transparent, personalized reward system.

• What does DZTs represent?

DZTs are token in a blockchain and personalized reward platform for digital products. They are not refundable, nor are they securities or for speculation. There is no promise of future performance. There is no suggestion or promise that DZT has or will hold a particular value. DZTs give no rights in the company and do not represent participation in the company. DZTs are sold as functional goods. Any value received by the company may be spent without conditions.

• What amount is being raised? What's the cap of tokens?

We are targeting to raise a maximum of \$10 million USD. Cap is 3 billion tokens.

• What crypto-currencies are accepted in the token sale?

XLM (Lumen) will be accepted in token sale. We will send information about the token sale website 48 hours before the event on our discord channel and mailing list. You would require to have a Stellar account with XLM in it in order to participate in the token sale. If you have other cryptocurrencies such as BTC, ETH you need to exchange them to XLM first using any cryptocurrency exchange.

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