



Libra Incentix

Redefining Loyalty Rewards Using Blockchain Technology

WHITEPAPER

Version 1.1



LIBRA
INCENTIX



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DISCLAIMER OF LIABILITY

The purpose of this White Paper is to present Libra Incentix and its LIXX Token to potential token holders. The information below may not be exhaustive and does not imply any elements of a contractual relationship.

LIXX Token is a utility token. This product is not a digital currency, security, commodity, or any other kind of financial instrument. It has not been registered under the Securities Act, the securities laws of any state of the United States or the securities laws of any other country, including the securities laws of any jurisdiction in which a potential token holder is a resident.

LIXX Token cannot be used for any purposes other than those provided in the White Paper, including but not limited to, any investment, speculative or other financial purposes.

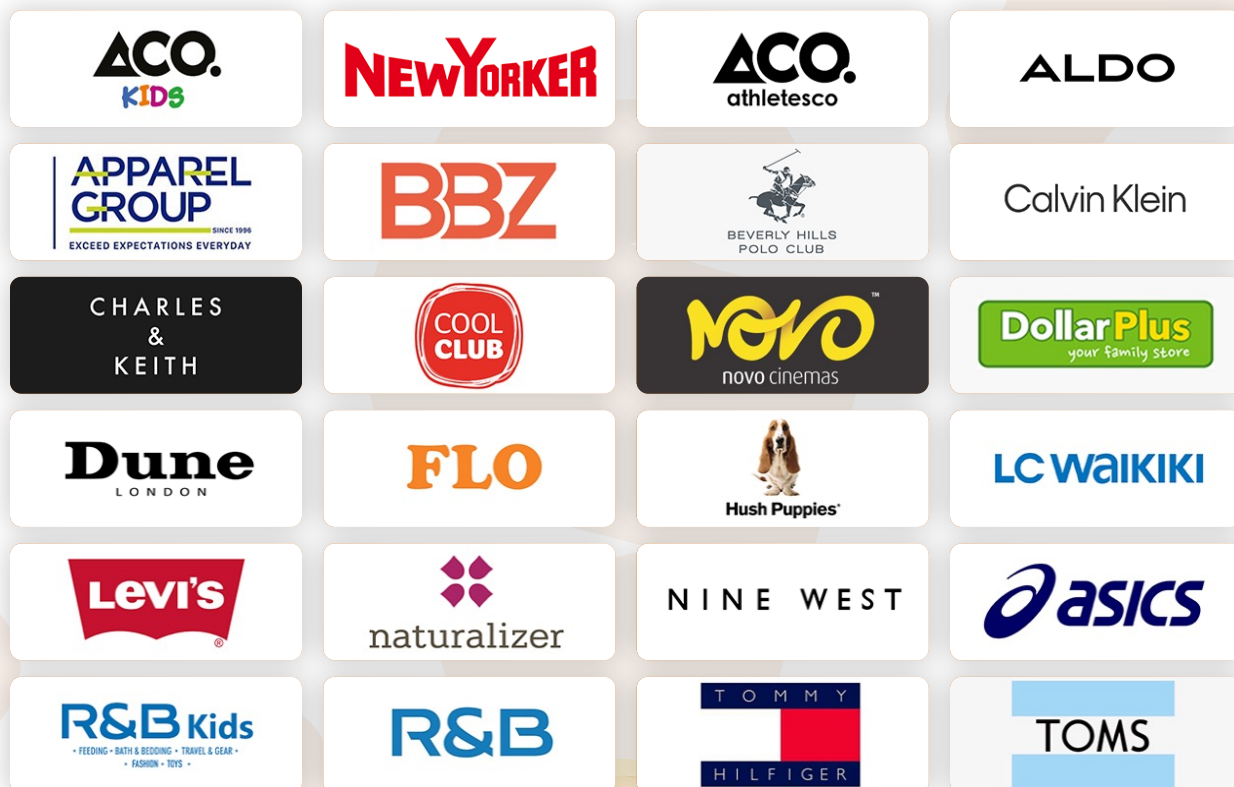
LIXX Token confers no other rights in any form, including but not limited to any ownership, distribution (including but not limited to profit), redemption, liquidation, proprietary (including all forms of intellectual property), or other financial or legal rights, other than utility usage described explicitly in the White Paper.



1. LIBRA INCENTIX EXECUTIVE SUMMARY

1.1 Trusted by the world's fastest growing ecommerce brands

The first customers to join Libra Incentix were challengers and innovators. Today, Libra Incentix's rewards engine fuels growth for startups as well as Fortune 100s. They help the world's fastest growing brands acquire new customers, increase customer lifetime value and forge long-lasting relationships.



Brands listed here adopted LIX within Qatar in 2022

1.2 The Future of Customer Loyalty Through Tokenization

Loyalty programs have a long history; the first one being initiated in 1793 when an American merchant issued copper coins to their customers upon every purchase in order to incentivize repeat business. This trend continued until 1972 when the concept was introduced to the airline industry where loyalty programs became a central element to a strong marketing strategy.

Decades on and loyalty programs have evolved and become a multi-billion-dollar industry. Ever increasing innovation has brought around applications and online marketplaces that offer digital experiences to replace physical loyalty cards. Studies show that the international loyalty management industry was estimated to be worth 7.9 billion dollars in 2021 and 24.7 billion dollars in 2028, growing at a compound annual growth rate (CAGR) of approximately 17.6%.

Inevitably, as the industry scales, it is bound to face its challenges. Consumers already belong to an average of 14.8 loyalty programs, but only 54% of them are active. Often loyalty rewards represent a poor value exchange, the redemption options are complicated to navigate and have little relevance to personal preferences.

Another fundamental problem is the lack of engagement. If loyalty programs do not encourage customers to engage with the brand or business in meaningful ways, it can not be effective in building loyalty.

1.3 LIX, a platform that aims to redefine the loyalty rewards

Libra Incentix have designed a more inclusive, efficient and attractive method of managing loyalty with a new loyalty management system called LIX, which leverages blockchain technology. The system was proven during a major sporting event in Qatar in 2022 where over 320 stores utilized the platform via integration with a well-known Point of Sale software provider.

The result; the most intuitive and automated coalition loyalty ecosystem in the world.

Through a trustless, decentralized technology solution, customer loyalty programs can be consolidated, and points can be redeemed anywhere in the world with complete transparency.

Simply put, the LIX loyalty management system transforms traditional loyalty reward systems from both the brands and the consumer's perspectives.



The LIX platform utilizes the public blockchain during its initial phase of implementation however future plans include the development of a private blockchain better suited to accommodating larger brands with higher transaction volumes.

1.5 Benefits of the LIX Platform

The LIX platform is a pay-as-you-go loyalty management system that aims to connect people to brands. As a company, rewards can be triggered by the completion of any task configured in the platform. Examples can include positive social media engagement, referring a friend or providing a 5-star rating. Through an API integration with Point-of-Sale (POS) software and e-commerce platforms, LIX can automatically reward customers based on real-time expenditure.

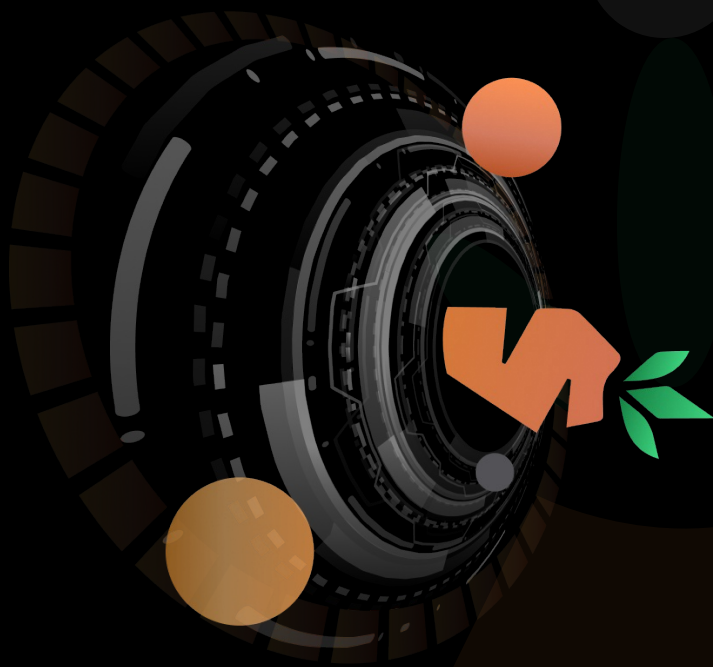
1.5.1 Reducing cost

Using LIX, all the rules governing a loyalty program, such as the earning logic, redemption options, value, and expiration date, are coded into smart contracts, eliminating the administrative overhead associated with reconciliation and settlement. Points can be backed by any currency selected by the organization owner or replaced with the native utility token, LIXX.

1.5.2 Efficient service delivery

By operating over blockchain, very little negotiation is ever required between participating partners because every part of the chain is transparent and indisputable. If a point is spent with a merchant at a certain value, there is no possibility the value is incorrect because the logic chain wouldn't allow it. Furthermore, many loyalty programs can be consolidated across multiple industries in several countries, allowing them to be redeemed in a borderless fashion. Points become interchangeable because they are all backed by the same platform within the blockchain.





1.5.3 Broad marketplace

LIX enables a brand to quickly form coalition models where a common loyalty token is earned and redeemed in multiple places, giving more value and less restriction to the reward. An organization can configure their own loyalty rewards with complete control over the earning and redemption logic.

LIX is also the bridge to other coalition programs where points are seamlessly transferrable anywhere in their global ecosystem.

1.5.4 Supporting digital transformation

LIX is building a multi-organization crypto-based platform-as-a-service (PaaS) with corresponding add-ons into popular productivity platforms used by millions worldwide, such as ERP, CRM, Accounting, and Task Management Solutions. In doing so, LIX can also be used as an employee incentive program for businesses that struggle to modernize their internal working environments or to roll-out software solutions to their employees. Via API integration, LIX can recognize which software systems or features are being underutilized by staff. Rewards can be automatically sent to employees when they use which ever features are considered the most valuable to the business.

1.5.5 Fast and efficient

A critical aspect of rewards programs is simplicity and speed when earning and accessing their rewards. Blockchain technology addresses this by allowing transactions to be recorded and accessible in near real-time. LIX enables it's brand customers to credit points and tokens with varying reward values, following configurable logic that can be executed immediately, thus improving the customer experience.

1.5.6 Transparent, traceable, and safe

LIXX comprises a complex string of mathematical numbers that cannot be changed. Each time the rewards are recorded on the blockchain using LIX, an audit trail is provided to track where the rewards are given. Because each new transaction is encrypted and connected to the prior transaction, LIX is significantly more secure than conventional record-keeping systems. The security of the system has been audited and under constant evaluation.

1.5.7 Current status

Over eighteen months, the team at Libra Incentix has been building the web and mobile version of the LIX platform on which its loyalty services will be launched. The next stage in development will be the completion of the marketplace that will use the LIXX token for the transactional processes among brands, stores, and consumers. This release will be deployed live in the first half of 2023.

In addition to the utility usage in the LIX loyalty platform, Libra Incentix offers pre-payment for LIXX tokens.

- Libra Incentix allocated 2.5 Bn tokens at the initial market value of \$0.004 USD per LIXX.
- During a pre-sale, the price rose from \$0.0001 USD to \$0.004 USD in just 6 months; a 4,000% growth rate

Further details of the ICO and the potential utility usage of LIXX tokens are provided in this Whitepaper.

2. EXISTING LIX PLATFORM OVERVIEW

2.1 Loyalty programs can be limited in value, difficult to combine and easy to forget about

Many companies from startups to Fortune 500 have been using loyalty programs to retain customers and generate repeat business. With perks including discounts and exclusive access, these programs are the essential tactic to retain and form loyal customers. Coalition programs have powerful advantages for participants however even where brands enter coalition loyalty models (for example, an airline allowing its points to be spent on car rentals, hotels, etc.) they are difficult to manage. When millions of customers are redeeming points in multiple locations with different values and redemption rules, reconciliation and reward settlement is demanding. This discourages innovation and personalization because, the more complex and bespoke a program, the more effort required to operate it.

2.2 LIX Blockchain Platform

Libra Incentix tackles the issue of merging fragmented loyalty programs into an all encompassing blockchain ecosystem. Brands regardless of industry or location can join the platform to configure loyalty programs faster and manage the distribution, recording time, and redemption automatically and cheaply, thanks to the smart contracts. Legacy reward points have no real-world value. They only provide discounts or other benefits within the brand's system. LIXX is a utility token based on the Binance Smart Chain, designed to unlock discounts across a wide range of brands participating in loyalty programs that utilize LIXX. As the value of LIXX increases, the potential for discounts within the platform also grows, allowing brands to accept fewer tokens for the same exclusive offers. The transaction is publicly recorded, ensuring a transparent and fair loyalty system without the risk of loss or expiration.

LIX allows companies to create their own loyalty point systems, which can be transferred to other programs if permitted. This enables consumers to seamlessly maintain loyalty to multiple brands, reducing the effort to remember different rules and credentials, and connecting various programs through LIXX tokens.

2.3 Overview of existing LIX Platform (Phase 1)

LIX is designed to empower communities, whether they're sports enthusiasts, food lovers or fashion advocates by rewarding every interaction with their favorite brands. The platform was built on the principle of community-building, recognizing that a strong sense of connection and belonging is key to fostering loyalty. LIX offers tools for existing communities to monetize their memberships and for new groups to drive adoption, creating a space where every engagement is valued and rewarded. The current LIX platform can be seen and used here: <https://app.libraincidentix.com/>

2.4 The LIX Platform consists of:

2.4.1 Organization (Brand)

At the heart of any LIX loyalty program is the Organization or Brand. An organization is the equivalent of a workspace in other platforms

- An Organization consists of a group of Projects (Campaigns)
- Users can belong to many organizations
- The Organizations table has a 'Teams' table
- The Teams table specifies the users that belong to the organization and their roles in that organization – the user could be a member of the loyalty program or an employee for the brand
- An organization can have multiple wallets. Each wallet can contain a reward currency e.g. LIXX or a variation of LIX points
- An organization can fund their wallet by clicking a 'fund wallet' button. This button submits a request to a currency where the brand is able to subscribe
- An organisation can create a custom currency of their own
- Once an organisation is funded with LIX points, all the other modules under the organisation have access to the LIX points
- Task and Project creators can set a limit to the total amount of LIX rewards that can ever be consumed or the maximum number of submissions within the Task or Project, i.e. only 100 members can earn rewards for referring a friend or following a social media account

2.4.2 Projects and campaigns:

- A project or a campaign is a group of tasks users can earn LIX from
- A project belongs to an organization, otherwise referred to as a Brand
- An organization can have many projects or campaigns

2.4.3 Tasks:

- A task is a group of activities such as "shop online" or "refer a friend"
- Every task belongs to a project
- One task can have multiple subtasks
- Subtasks are simply actions that belong to other tasks using the field `parent_task_id`
- An upper limit to the amount of token a task can earn can be set
- Every task has a custom token attached to it from which users who complete the task are rewarded



2.5 Rewards used in the LIX Platform

2 type of rewards used in the 1st Phase



Blockchain Token (LIXX)



Custom Rewards

2.5.1 Blockchain token (LIXX token)

Libra Incentix has designed the LIXX token using the BEP20 standard and deployed it in BSC (Binance Smart Chain).

The token is created by using the following audited smart contract:

SYMBOL: LIXX

ADDRESS:
0x16530b5C105fcB7c50
BC84A039a0a4ed806a
5124

NETWORK: Binance
Smartchain(BEP20)

LIXX token is used as a utility token to provide functionality for loyalty campaigns launched by brands/stores on the LIX platform.

2.5.2 Custom Rewards

Currently, the LIX platform is using custom rewards or tokens to launch and run loyalty programs. Only Brands can issue custom rewards. The issuing brand/store define the number of created points based on the loyalty programs they run. After creating a custom point, an organisation can then distribute units of that reward point to their members.



Any organisation can add any custom reward to their wallet and request to get units of that reward into it by clicking the "fund" option. The organisation that created the custom reward can then approve this request and the transfer of units will go through.

2.6 LIX points

Currently, the LIX platform utilizes LIX points as a custom reward for loyalty programs. These points are automatically used for new brands/stores joining the platform. Key aspects of LIX points include:

- LIX points operate without a private blockchain.
- They can be acquired through subscription packages on the LIX platform and, once issued to loyalty members, can be used to unlock discounts within the LIX marketplace.
- LIX points can be backed by fiat currency, referred to as CASH-POINTS.
- Cash-Points can be converted to LIXX tokens, but tokens cannot be exchanged for cash.

2.7 Wallets

2.7.1 User Wallet

Each user on the LIX platform is equipped with a blockchain-linked wallet, enabling access to real-time information about their LIXX token balance.

This wallet, integrated with the blockchain via MetaMask using Web3, serves as a repository for custom rewards that users can earn or redeem within the LIX ecosystem.

Currently, users are unable to transfer funds from their LIX platform wallet to external wallets.

Key functionalities include:

- Transferring selected custom rewards and LIXX tokens between brand wallets within the LIX platform
- In the future (Phase 2), enabling peer-to-peer exchanges of Custom Tokens and LIXX tokens, based on their public exchange value



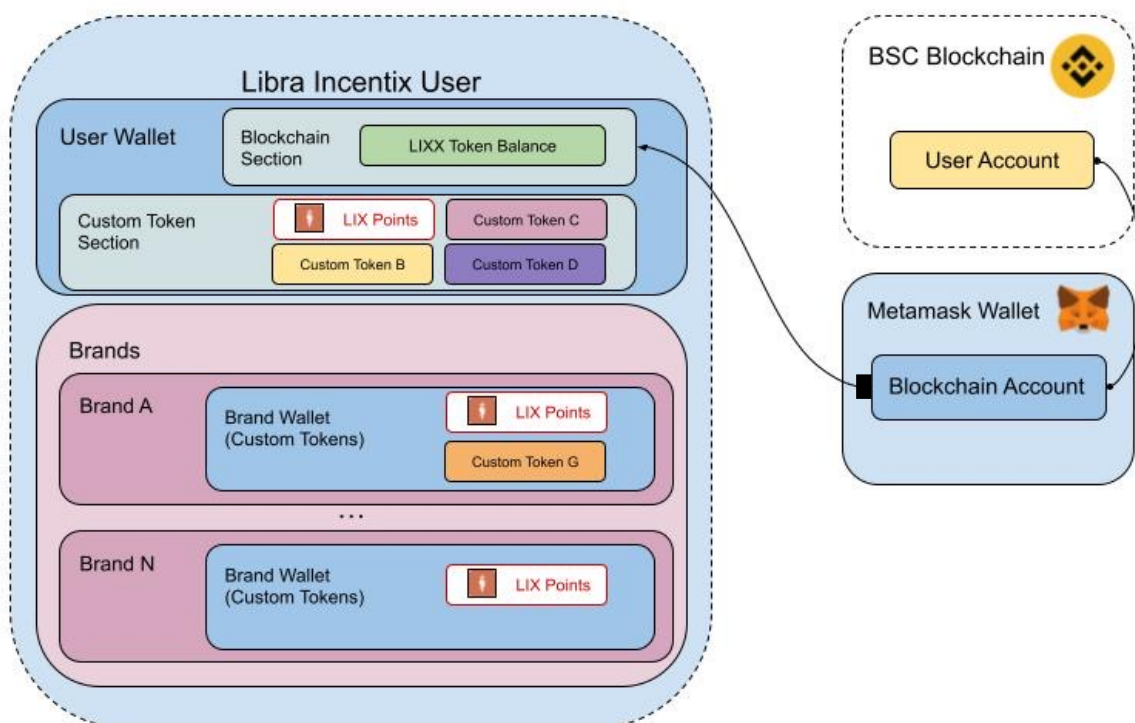
2.7.2 Organisation wallet

Brands and stores on the LIX platform each have a wallet for storing LIXX Tokens and creating new loyalty points. These points can represent a monetary value, assisting issuers in determining the number of points to issue and the discount to offer to members. For example, a brand may choose to reward 2% of a customer's invoice as loyalty points. To facilitate calculations and conversions, 1 point might be equivalent to 1 cent. However, in this initial phase, the monetary equivalent of points cannot be used as a form of payment, nor can points be cashed in. Members can use their customer reward points or their LIXX tokens to engage in various actions.

2.8 The Custom token creation description:

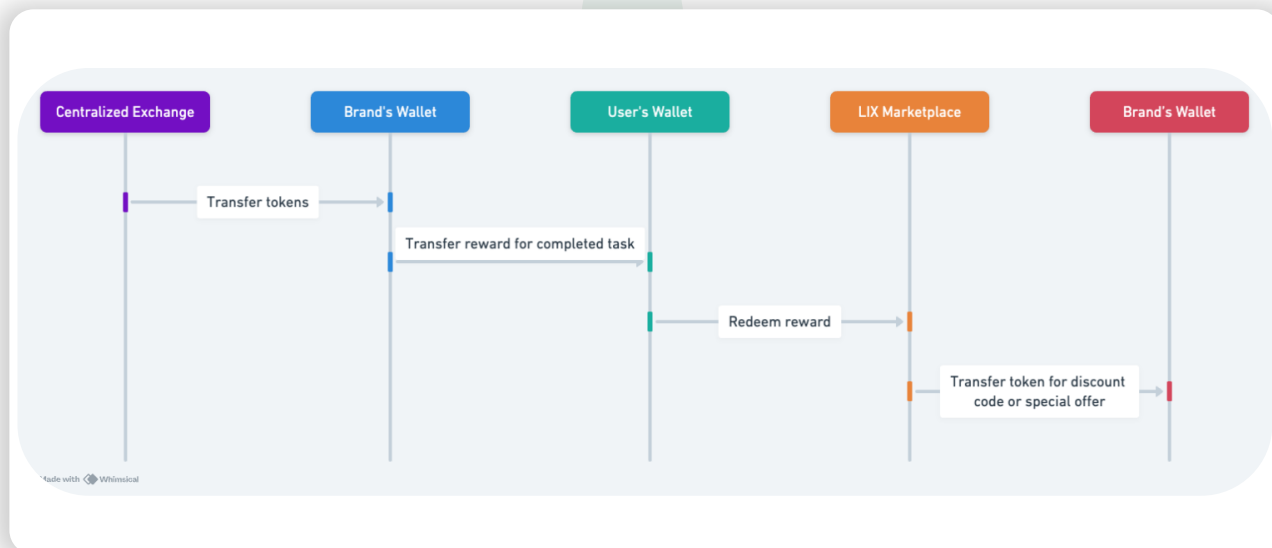
The schema below shows user and token interactions (phase 1)

Note in Phase 1, 'custom tokens' are not blockchain tokens, they are traditional loyalty reward points



2.10 Rewards distribution and redemption

Schema: How rewards for loyalty program participation are distributed (phase 1)

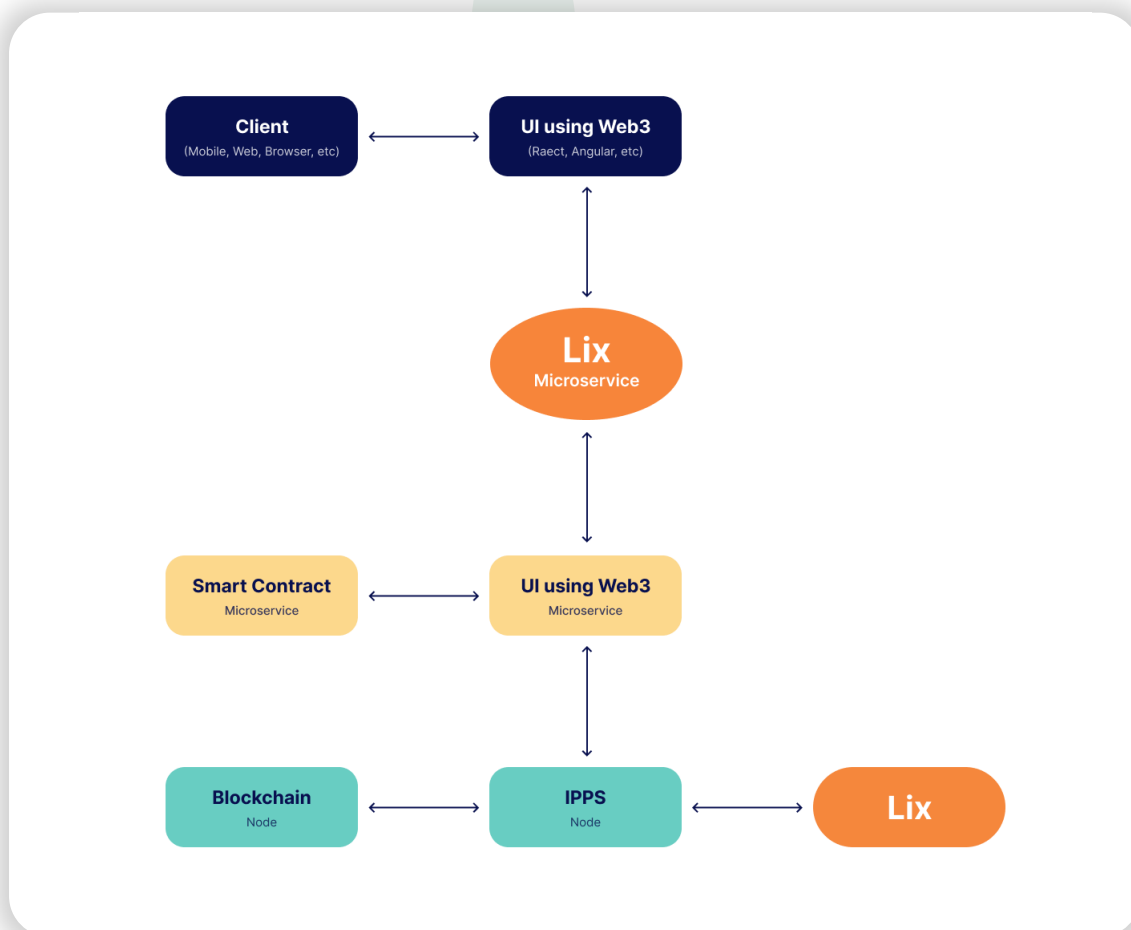


This schema describes how rewards are awarded for participation in loyalty programs. A brand is required to have enough LIXX tokens in its wallet before users/shoppers start to participate in the loyalty program.

Token Flow:

1. Centralized Exchange transfers tokens to Brand's Wallet
2. Brand's Wallet
3. Holds the tokens ready for loyalty rewards
4. Member Completes Task
5. Upon task completion, a member earns tokens
6. Transfer Reward
7. Tokens are transferred from the Brand's Wallet to the User's Wallet as a reward
8. User's Wallet
9. The user receives and holds the tokens
10. Redeem Reward in LIX Marketplace
11. The user decides to redeem the tokens for a reward
12. Token Moves to Issuer's Wallet
13. In exchange for the tokens, the user receives a discount code or special offer from the issuer
14. End: Redemption Complete
15. The process ends with the user having redeemed the tokens for a reward

2.11 How the LIX Platform is currently organized



Client: This can be a mobile device or desktop computer that a client will use to access the system

UI using Web3: This can be any UI framework like react, Angular, Vue.js etc., the UI will also have a Web3 Component so that signing of transactions can be done on the frontend through a client wallet like MetaMask. When Loyalty points need to be transferred then this is where the signing for the transfer will happen

LIX Microservice: This is just a representation of the business logic microservice that the system uses, it also provides a set of APIs that other system can use to hook into the system.

Smart Contract Microservice: This is where the system does the Minting and/or burning of Loyalty points and executing the smart contracts on the backend. Since only the owner of the smart contract can call Mint and/or burn functions it also adds for more security by having this functionality here.

IPFS Microservice: This handles saving and loading files from the IPFS node.

LIX Database: Represents the permanent business storage that the system requires like the static and dynamic data that is needed.

PHASE 2 (2025)

3. FUTURE LIX PLATFORM DEVELOPMENT

The goal of this phase :

Our vision for the second phase of LIX is to develop our own blockchain using a fork of Ethereum. This will enable brands to mint their own branded tokens on the LIX platform and utilize them for loyalty rewards within their unique business rules. In this ecosystem, LIXX tokens will serve as the utility token, powering platform transactions as the 'gas fee.' The platform aims to simplify and transparently allow users to exchange loyalty points from various brands into fiat currencies or other tokens, subject to the completion of necessary KYC and AML checks in accordance with local regulations.



3.1 Project overview:

3.1.1 Project concept

3.1.1.1 General overview

Libra Incentix is planning to develop and launch an ecosystem of solutions that has more potential for owners and participants of loyalty systems.

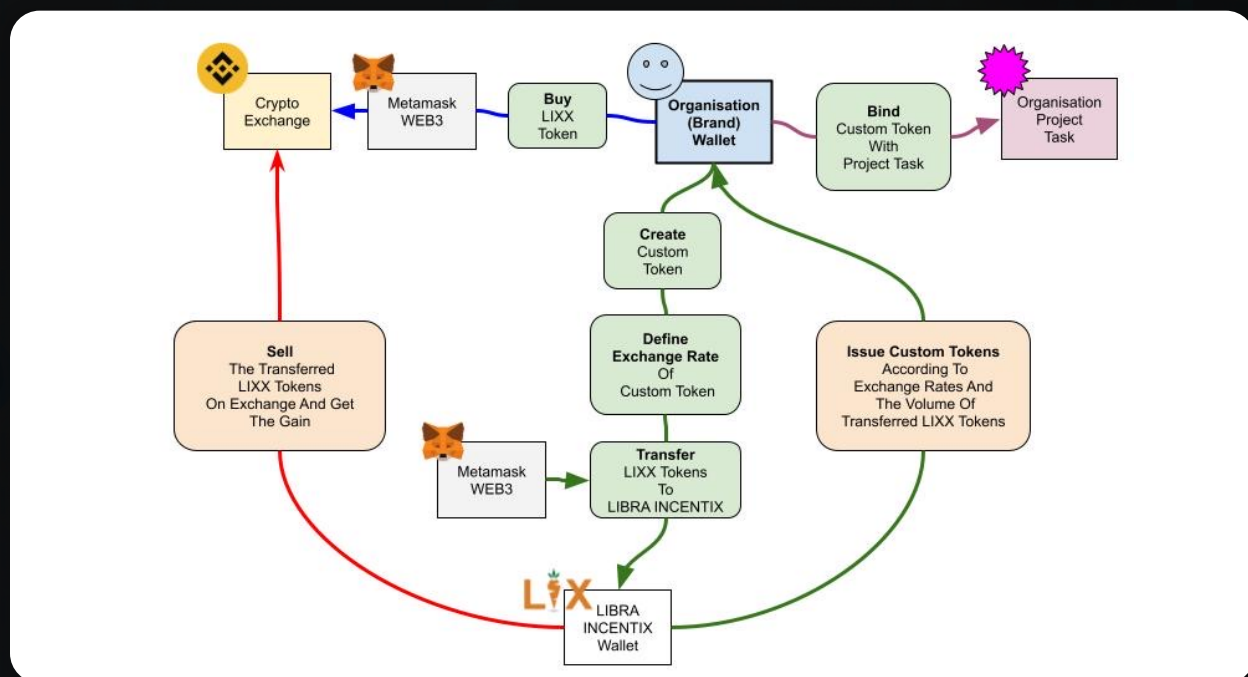
Libra Incentix launched the LIXX token as the main utility tool for all loyalty programs and reward programs for loyalty campaign owners.

The LIXX token is managed by smart contract and makes all internal transactions transparent for loyalty campaigns running on the LIX platform.

The LIXX token is a reward for loyalty campaigns and will be used in the LIX blockchain to provide access to bonuses and rewards provided by brands and shops. LIXX tokens can also be swapped to fiat currencies or other cryptocurrencies outside of the LIX ecosystem (platform) or on decentralized and centralized exchanges.

As a result, the LIXX token will have real value and utility usage on the LIX platform backed by access to rewards and bonuses from loyalty campaigns.

Schema: How custom rewards are created (phase2)



Once a brand/store issue a custom reward point the following actions occur:

- In order to create a Custom reward a brand or store must have LIXX tokens in its wallet. These tokens can be purchased in a centralized crypto exchange (blue arrow in the schema)
- Steps to create Custom Token: (green arrow on the schema)
 1. Send a request on the LIX platform to create a Custom Reward
 2. Define the exchange rate of the Custom Reward vs LIXX token. This is required in order to define the price of Custom token
 3. Transfer LIXX tokens to the LIX platform wallet
 4. Based on the number of transferred LIXX tokens and the exchange rate defined in section 2 above, a certain number of Custom tokens will be issued. The formula is the following for this transaction: $N \text{ custom token} = N \text{ LIXX} * R \text{ exchange rate}$
 5. The issued tokens get transferred to the Brand wallet
- This brand connects issued Custom token to a certain loyalty program or to a certain task in the program (brown arrow in the schema above)

3.1.2 Increase balance of LIX points or custom token

A Brand, while running a loyalty program on the LIX platform may decide to increase the number of Custom tokens. This may happen in case if the loyalty program becomes extremely popular and the demand is very high or the organizers decide that the rewards are too small.

Libra Incentix plans to list the LIXX token on major crypto exchanges to provide access to LIXX tokens for loyalty campaign users and brands.

The LIX platform is a PaaS platform with services to let brands and stores to set up, launch, and run loyalty campaigns. LIX has API services to allow developers and partners to connect to the platform.

The LIX platform also provides plug-ins to connect to the most popular platforms and services to run loyalty campaigns. For example, an owner of a store, which is based on Shopify, can install the LIX platform plug-in to attract its customers with loyalty points and rewards.

Libra Incentix is planning to use blockchain technology in its LIX platform to consolidate loyalty programs in other countries and industries. Any business rules, the cost of loyalty points, how they are distributed or earned, and where, how, and when these points can be spent will be written in smart contracts.

Brands, stores, and LIX partners can create highly flexible loyalty campaigns which help its customers attract and retain more buyers.

3.1.2.2 Technical details

A private blockchain based on the virtual Ethereum machine (EVM) will be the heart of the LIX platform. This is an EVM-compatible blockchain that supports all primary smart contract standards. EVM compatibility allows integrating LIXX token in other public blockchains such as BSC, Ethereum, Polygon, etc..

The LIX platform will implement a private blockchain to:

- Make transactions among platform participants cheaper within the LIX platform vs. in public blockchains
- Increase the speed of transactions since LIX private blockchain is focusing only on loyalty programs' smart contracts
- Get a higher level of security since loyalty tokens for brands and stores are implemented only internally in LIX blockchain, and these tokens are not accessible from outside (public blockchains)
- Enable LIXX tokens to serve as the universal medium for swapping custom reward tokens within the platform



3.1.3 Token selection:

In reviewing the two approaches and business models, a token supported by a private blockchain is preferable

1st option:

The percentage of cashback/number of loyalty points is calculated based on the purchase amount. Once calculated the points will be awarded to the customer as loyalty points.

These loyalty points will be stored in the user account and connected to a digital LIX loyalty card or the LIX mobile app and can be used to obtain a discount or pay for goods/services

2nd option:

The number of loyalty points awarded to customers is calculated based on purchase amount and the type of goods or service. Depending on the number of accumulated points, a customer receives a permanent discount on all or a selected number of goods/services

3rd option:

One-time digital LIX loyalty or gift cards are issued with fixed reward values that allow paying for all or partial purchases. Alternatively, cards with a specific percentage of discount on goods/services

3.1.4 Token limitations:

1. With a limitation on time, the loyalty points will be burned after a certain expiration. Each type of loyalty point may have a different expiration rule
2. With a limitation on the number of point, customers can accumulate loyalty points only once a certain spend threshold is exceeded

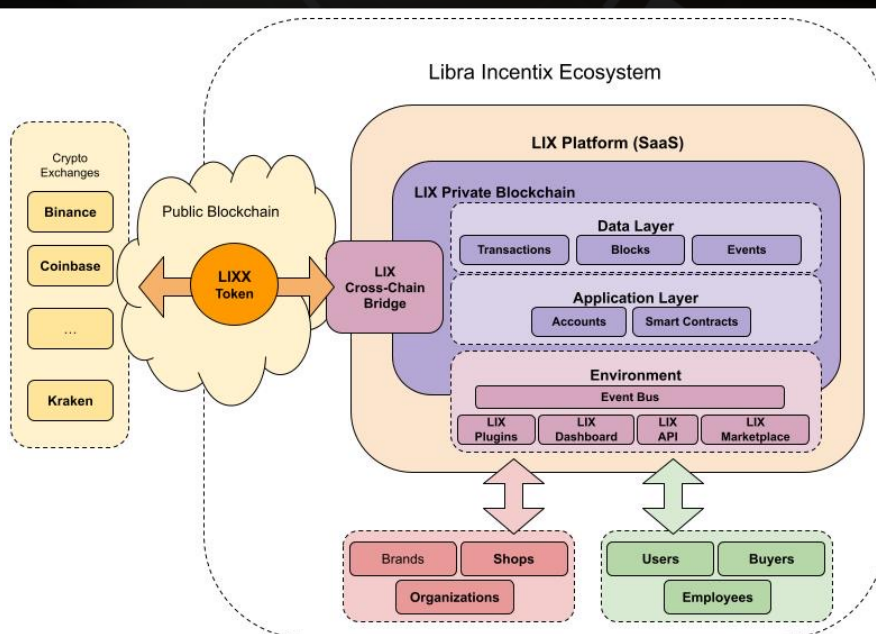
Assumptions:

- The specific number of customers is not yet defined
- It is assumed that 15 Bn LIXX tokens will be sufficient

3.1.5 LIXX Token creation:

1. A new brand/store is registered in the LIX platform, a new crypto wallet is created and assigned to the brand/store
2. A new smart contract for the brand/store is issued. This contract defines the number of loyalty points available for earning
3. The LIX platform has a set of APIs to implement the basic workflows:
 - a. Token transfer from A to B address
 - b. Receiving a certain number of tokens with address T on address A
 - c. Receiving a list of addresses of tokens belonging to address A
 - d. Receiving information about the token
4. When a purchase happens or a gift certificate is sent to a customer, an API call is made and a certain number of tokens from the brand/store wallet is transferred to the customer wallet
5. When goods/services are paid by loyalty points, an API call is made, and a certain number of tokens is transferred from the customer wallet to the brand/store wallet
6. A similar approach is used to swap loyalty points in the LIX marketplace
7. In order to purchase loyalty points LIXX tokens will be used
8. LIXX token can be transferred to a public blockchain or back

A General schema of LIX Ecosystem

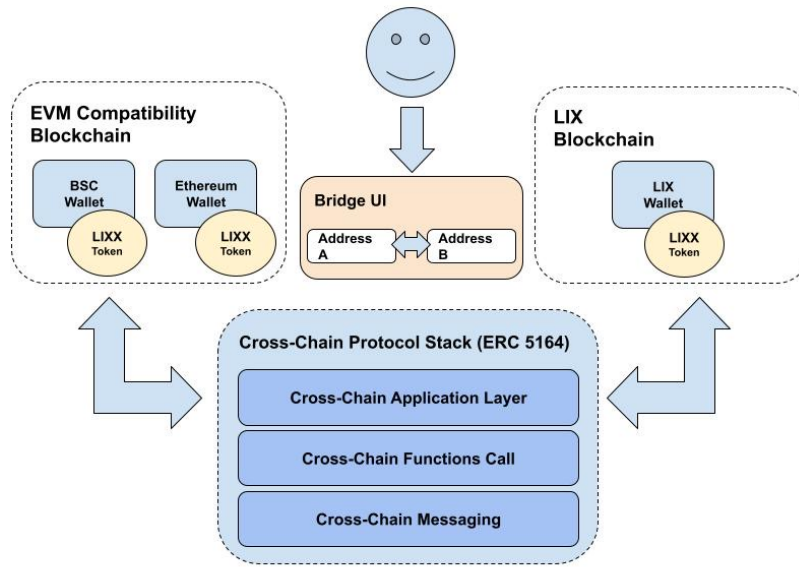


3.1.6 LIX Cross-Chain bridge

The cross-chain bridge can be used to transfer LIXX tokens from private LIX blockchains to public ones or back

EIP-5164 cross-chain protocol stack will be used as a main cross-chain bridge to connect EVM-compatible blockchains

Please see schema below:



3.2 Main components of the LIX platform

- EVM compatibility blockchain will be used based on Geth virtual machine from Ethereum
- A set of smart contracts to implement loyalty campaign creation and management
- LIX API will be used to let external applications to connect to the LIX platform
- LIX plugins - a set of plugins for most popular platforms and services which will be used by LIX
- LIX dashboard - web service which manages loyalty programs and provides detail information about transactions in LIX platform
- LIX marketplace - a web service which lets users buy, sell and swap loyalty tokens from different loyalty programs
- Event Bus - the platform core which received, registered and transfers data regarding events and conditions is based on event driven architecture
- LIX mobile application - a consumer mobile app for loyalty programs

3.3 How the LIX platform will operate in Phase 2:

Brands and stores must register in the LIX platform to launch new loyalty programs. When a user registers in the LIX platform, a crypto wallet with a unique address is automatically created. This wallet will be used to store custom loyalty tokens and LIXX tokens.

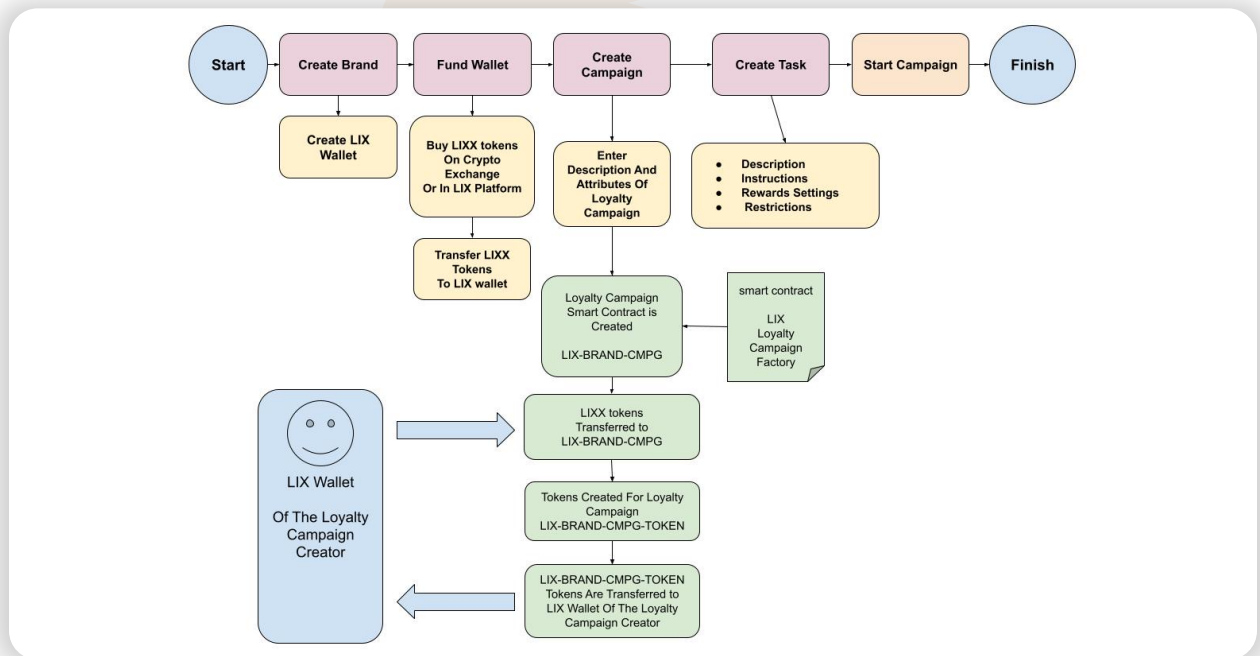
Only the LIXX token owners can use the LIX platform to create loyalty programs and to provide rewards to the employees.

Each loyalty program in LIX requires LIXX tokens to reward all loyalty campaign participants. The required number of tokens can be obtained from crypto exchanges or LIX platform can swap or sell LIXX tokens for fiat currencies.

Each participant of the platform can receive any information about available loyalty programs and reward benefits on the platform.

All information about ongoing loyalty programs is recorded in the blockchain and is transparent for all LIX platform participants.

The process of creating a loyalty program is shown below:



3.4 Steps to launch a loyalty campaign on the LIX platform:

- A brand is registered on the LIX platform. A crypto wallet (LIX Wallet) is automatically created in LIX private blockchain.
- In order to launch a loyalty program must have enough LIXX tokens in its LIX Wallet. The gas for transactions in the platform is also paid using LIXX tokens.
- LIXX tokens can be obtained in the following ways:
 - On crypto exchanges
 - Purchased on the LIX platform as part of a subscription package

- New loyalty campaign creation:
 - Data relating to the campaign is entered:
 - Campaign name
 - Campaign budget in LIXX tokens
 - The number of Loyalty Points which will be used in the campaign
 - Based on the loyalty campaign smart contract library a smart contract is created in the LIX platform.
 - For example - LIX-BRAND-CAMPAIGN;
 - LIXX tokens are transferred to the owner of the campaign wallet address (LIX Wallet) of the smart contract. The number of tokens is set in the campaign settings.
 - New tokens reflecting Loyalty Points of the campaign are issued. For example, LIX-BRAND-CAMPAIGN-TOKEN. The number of tokens is defined by the loyalty campaign owner.
 - Tokens LIX-BRAND-CAMPAIGN-TOKEN are transferred to LIX wallet
 - The loyalty program owner can create additional tasks for rewards or limitations in the campaign.

Once the loyalty campaign smart contract is created all transactions with the loyalty tokens are registered in the blockchain and become transparent and immutable

3.5 Loyalty smart contract library

Smart Contract Loyalty Library is used to automate the process of the creation of loyalty campaign smart contracts. The smart contracts save the campaign information and rules on the blockchain.

The smart contracts have the following options:

- createLoyaltyCampaign (campaignOwnerAddress) - an option to create a new loyalty campaign
- getListOfLoyaltyCampaigns () - an option to obtain a list of existing loyalty campaigns
- Other options are required for operations on the LIX platform

3.6 Loyalty campaign token (LIX-BRAND-CAMPAIGN-TOKEN)

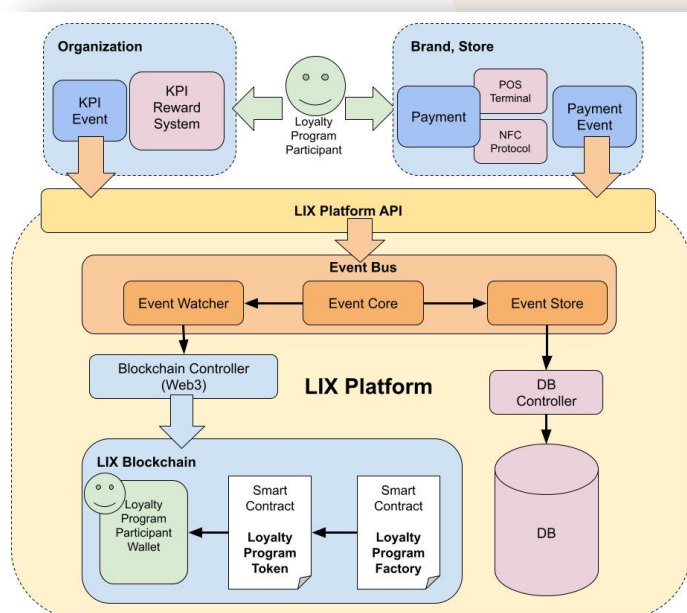
A loyalty Campaign Token is issued to be used as a reward for campaign participants.

- Loyalty Campaign Token is issued per ERC-20 standard, which is most suitable for loyalty campaign tokens
- Each loyalty campaign has its unique tokens and may have a loyalty campaign name in its name
- Each Loyalty Campaign Token is issued in numbers defined by the loyalty campaign owner

3.7 How rewards are received by campaign participants

Any loyalty campaign participant can participate in any loyalty campaign created in the LIX platform.

Schema: How rewards are awarded



Process Description:

Loyalty campaign participants can receive rewards for specific actions set by the campaign admin/owner.

These reward rules are usually set when loyalty campaigns are created. Two options are considered; the loyalty campaign participant receives a reward once they make a purchase or when a certain KPI is reached, as per the campaign rules.

Additional options will be made available to provide a customized experience. Once a loyalty campaign participant completes all requirements and becomes eligible to receive rewards, a status message is sent to the LIX platform.

Each rewards event possible contains the following data:

- Smart contract address loyalty campaign (LIX-BRAND-CAMPAIGN)
- Campaign participant's crypto wallet address (LIX-Wallet)
- Number of loyalty tokens (LIX-BRAND-CAMPAIGN-TOKEN)

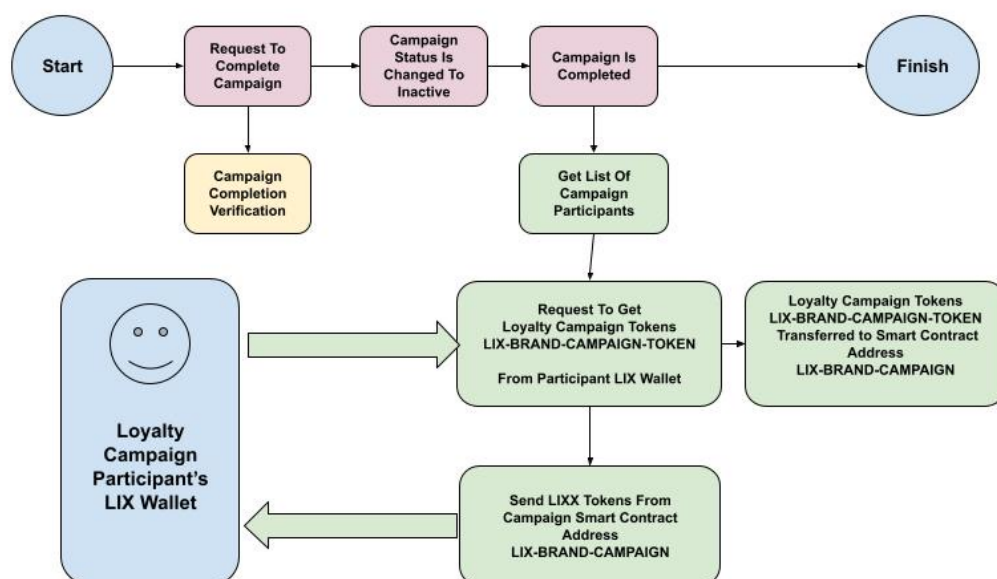
This Event is recorded in the platform database and is sent to the pipeline via Event Bus. Once this Event reaches the end in the pipeline, a call to LIX blockchain via WEB5 is made. This call sends Event data to the loyalty campaign smart contract (LIX-BRAND-CAMPAIGN).

- Crypto wallet (LIX Wallet) is registered in a loyalty campaign smart contract (LIX-BRAND-CAMPAIGN)
- The loyalty campaign smart contract (LIX-BRAND-CAMPAIGN) requests the necessary number of loyalty campaign tokens (LIX-BRAND-CAMPAIGN-TOKEN) to be transferred from the loyalty campaign owner's crypto wallet to the crypto wallet address (LIX Wallet) of the campaign participant. This data is sent in the Event received by the smart contract
- A transaction to send the required number of tokens in LIX blockchain is made
- The reward is received by the loyalty campaign participant and is available in the Account

3.8 Loyalty campaign completion

Once a loyalty campaign is completed, all campaign tokens must be swapped to the internal token of the LIX platform; LIXX. The number of loyalty campaign tokens swapped should match the number of campaign tokens stored in the crypto wallets of campaign participants.

Token swap schema





When the loyalty campaign is completed, all campaign terms should be verified for correctness. If all campaign terms are successfully passed, then the campaign is closed. The following steps to complete the loyalty campaign should be executed:

- The campaign status is changed to “In Active”
- The smart contract (LIX-BRAND-CAMPAIGN) of the loyalty campaign defines the list of campaign participants that have loyalty campaign tokens (LIX-BRAND-CAMPAIGN-TOKEN) on the balance of crypto wallets (LIX Wallet)
- Each campaign participant receives an offer (LIX-BRAND-CAMPAIGN-TOKEN) to swap campaign tokens to the LIX platform (LIXX tokens)
- Once the offer is accepted, loyalty campaign tokens are transferred from the crypto wallet address (LIX Wallet) to the loyalty campaign smart contract address (LIX-BRAND-CAMPAIGN)
- The loyalty campaign smart contract then sends LIXX tokens from its address to the crypto wallet (LIX Wallet) addresses of the campaign participants

Competitive advantages

- Transparency: all transactions can be viewed in blockchain, and analytics can be created. The campaign participants can see any data about the loyalty campaigns. Currently, such information regarding participation, reward quantity and reward value is missing from traditional programs
- Security: overall, blockchain platforms are more secure
- Highly engaged loyalty communities can be created around blockchain loyalty campaigns. This will create a viral effect on growth
- The loyalty tokens transfers to campaign participants are instant and automated
- Loyalty campaigns can be created for events (Halloween, Christmas, etc..) with specific predefined options

4. COMMERCIALIZING THE LIX BLOCKCHAIN

Proof of Authority (PoA) will be used to power the private LIX Blockchain.

A consensus mechanism is a system that ensures transactions executed on the network are valid and that all participating users agree on the status of the ledger. A permissioned blockchain running PoA doesn't require "mining" of transactions. The purpose of mining is to provide an incentive for nodes to validate transactions and participate in maintaining an honest record of a decentralized public and permissionless blockchain.

But on a private blockchain where all the participating nodes are already identified and pre-authorized, there is no need to be incentivized. Therefore, there is no need for mining.

There is no need for nodes to solve complex mathematical problems to add a block to the chain. Instead, blocks are added to a permissioned chain once most of the pre-authorized nodes validate them.

To become authorized, nodes must prove their authority to meet certain conditions, thus proving their long-term commitment to maintaining the blockchain.

4.1 Advantages of Proof of Authority

In phase 2, the LIX platform plan to utilize a Proof of Authority system with assigned validators. One of the main advantages of maintaining a network through PoA is that the validation process is simplified. PoA only requires a limited number of block validators to maintain the network.

Not only is this a highly scalable system, but without mining or staking, computational power and energy consumption is greatly reduced. There is also no need for expensive equipment or sophisticated hardware.

As the LIX blockchain grows, more and more businesses will realize its benefits. As a result, LIX as a permissioned blockchain will be growing in popularity, especially since the high transaction processing speed at low costs is most desired.

4.2 Validators for proof-of-authority consensus

To be chosen as a validator, a user must meet three key requirements:

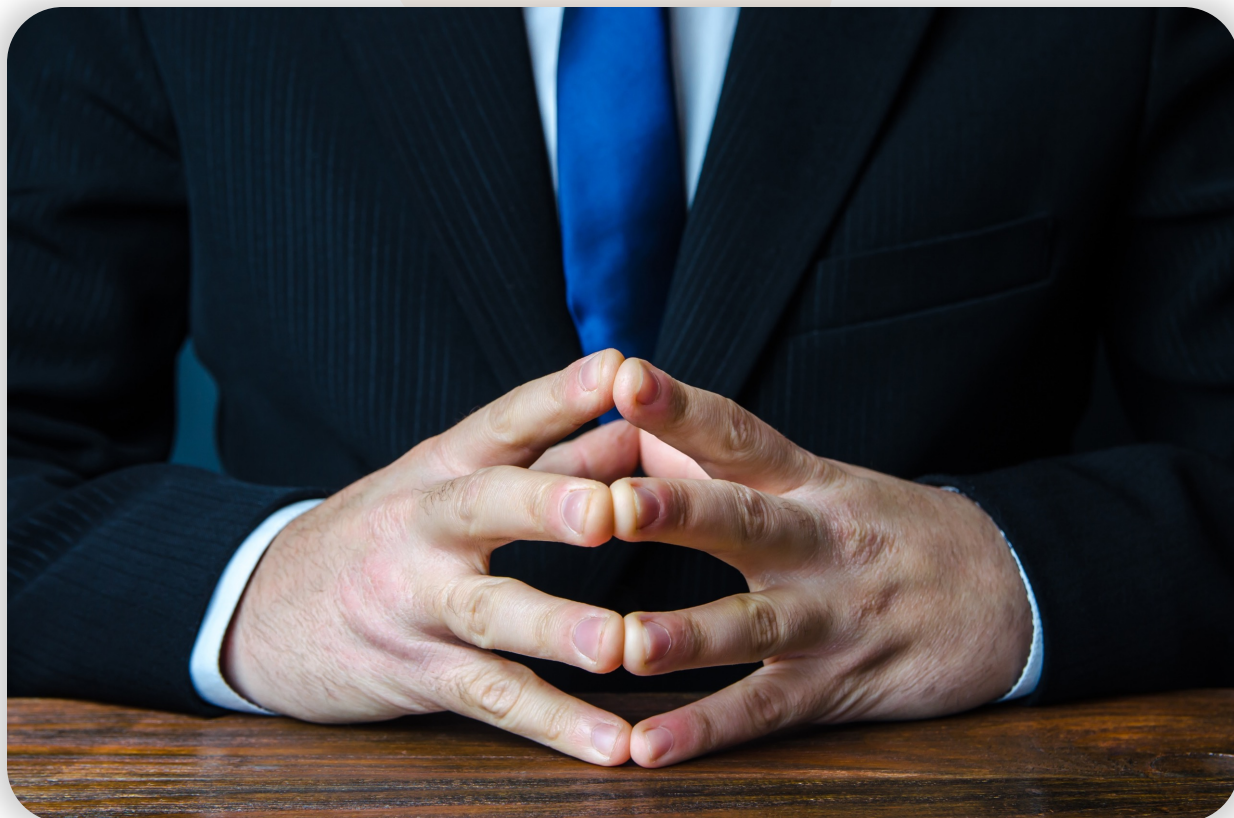
- A validator should be trustworthy, of good moral standards, and without any criminal record
- A validator's identity must be formally validated on the network, with the ability to cross-check the information in the public domain. Therefore, the real identities of validators are confirmed
- A validator candidate should be willing to invest money and stake their own reputation. A rigorous process reduces the possibility of selecting questionable validators and encourages a long-term commitment

The essence of the reputation mechanism is trust in the validator's identity. It is a complex process to ensure weak candidates are weeded out. This guarantees that all validators follow the same procedure, ensuring the system's integrity and reliability.

Since LIX private blockchain is EVM compatible blockchain, all calculation algorithms are similar per <https://ethereum.org/ru/developers/docs/gas/> document.

The base gas limit is set in the settings of the genesis block when the LIX private blockchain will be launched.

The commission payments made according to the main EVM-compatible blockchain algorithms.



5. LIX PLATFORM REVENUE:

5.1 How LIX generates revenue

- Transaction fees when cash-points are issued and redeemed
- Commissions applied to the discounts awarded through the LIX marketplace
- Subscription fees on special plug-ins and unique software features
- Fees for white labelled application development
- All loyalty campaign users of the LIX platform will pay for blockchain transactions in LIXX tokens. The same is true for brands and stores when loyalty campaigns are created

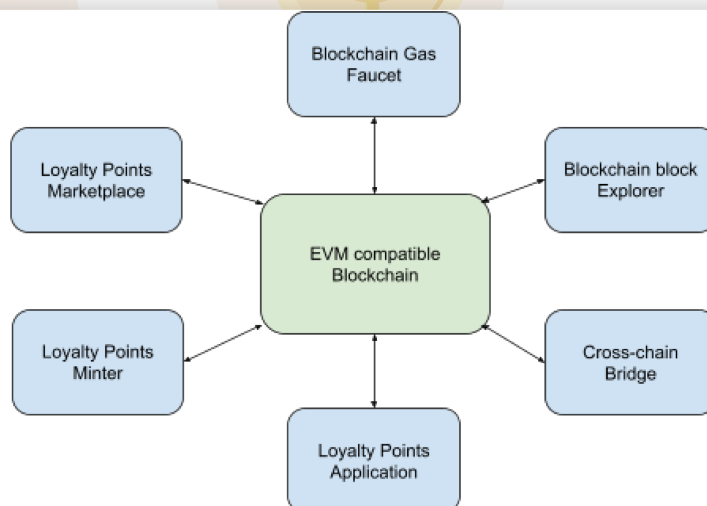
Additional payments may be introduced such as:

- Commission when a new token is minted
- Commission when a loyalty campaign is completed
- Commission when a loyalty campaign is modified
- Commission for LIXX token swap in the LIX marketplace
- Commission for LIXX token transfer from internal to external blockchain by using the LIX Cross-Chain Bridge

Commissions for custom loyalty can be added:

- A master account is created, and commissions are a percentage written in the smart contracts. These commissions will be made from user crypto wallets to the master account address
- In the instance whereby a loyalty campaign owner (brand or store) needs to change the percentage of the commission, the smart contract would be redeployed.

Schema how blockchain and services interact



5.2 EVM compatible blockchain using Geth

Technologies are under constant analysis however Ethereum Clique is currently selected as a Consensus Algorithm for the LIX blockchain, based on EVM. Clique consensus is a PoA system where new blocks can be created by authorized 'signers' only. The clique consensus protocol is specified in EIP-225. The initial set of authorized signers is configured in the genesis block. Signers can be authorized and de-authorized using a voting mechanism, thus allowing the set of signers to change while the blockchain operates. A clique can be configured to target any block time (within reasonable limits) since it isn't tied to the difficulty adjustment.

Blockchain Gas Faucet - a service that allows users to create the necessary amount of gas for transactions in the blockchain.

This gas is fuel for transactions and is needed for the system to operate. All transactions in the system must be free for the users - this is a requirement for the system to become popular (see example <https://faucet.rinkeby.io/>)

Blockchain block Explorer - this is a block explorer which provides information about transactions, smart contracts (loyalty points), addresses, and other data.

This service is required to let users verify all transactions in the blockchain instantly. This service is also handy when there is a dispute in token swaps or sales of Loyalty points.

Loyalty Points Marketplace - is a marketplace where users will be able to use the decentralized token swap service or purchase discounts on products and services using any of the loyalty points or custom tokens they have earned.

Loyalty Points Minter - a service that allows issuing new Loyalty Points (smart contracts) for sellers registered in the system. Contracts ERC20 or ERC721 or their versions can be used to issue Loyalty points.

Loyalty Points Application - web/mobile application that allows users to receive/spend Loyalty Points in many different services. As an identification point, QR codes can be used. These QR codes have user wallet addresses in the internal blockchain system.

Cross-chain bridge - a service to transfer LIXX tokens from the internal blockchain to the external blockchain and back to the token owners. This service is used to buy and sell LIXX tokens.

5.3 Cross-chain bridge architecture

The users should have the option to buy tokens for fiat currency or other tokens.

To have that we will list the main LIXX token on different centralized and DEX exchanges.

To have that, we need to set up interactions between Ethereum (external) and internal LIXX Ethereum-based blockchains by using Blockchain Bridge.



Functions:

- LIXX token back and forth transfer from the internal blockchain to the external, a public one (Ethereum)
- A total LIXX token balance support among different blockchains.

EIP-5164 standard can organize cross-chain bridges among EVM-compatible networks (BSC). The standard is currently under review but can be used as a starting point in LIX development.

<https://ethereum.org/en/bridges/>

<https://eips.ethereum.org/EIPS/eip-5164>

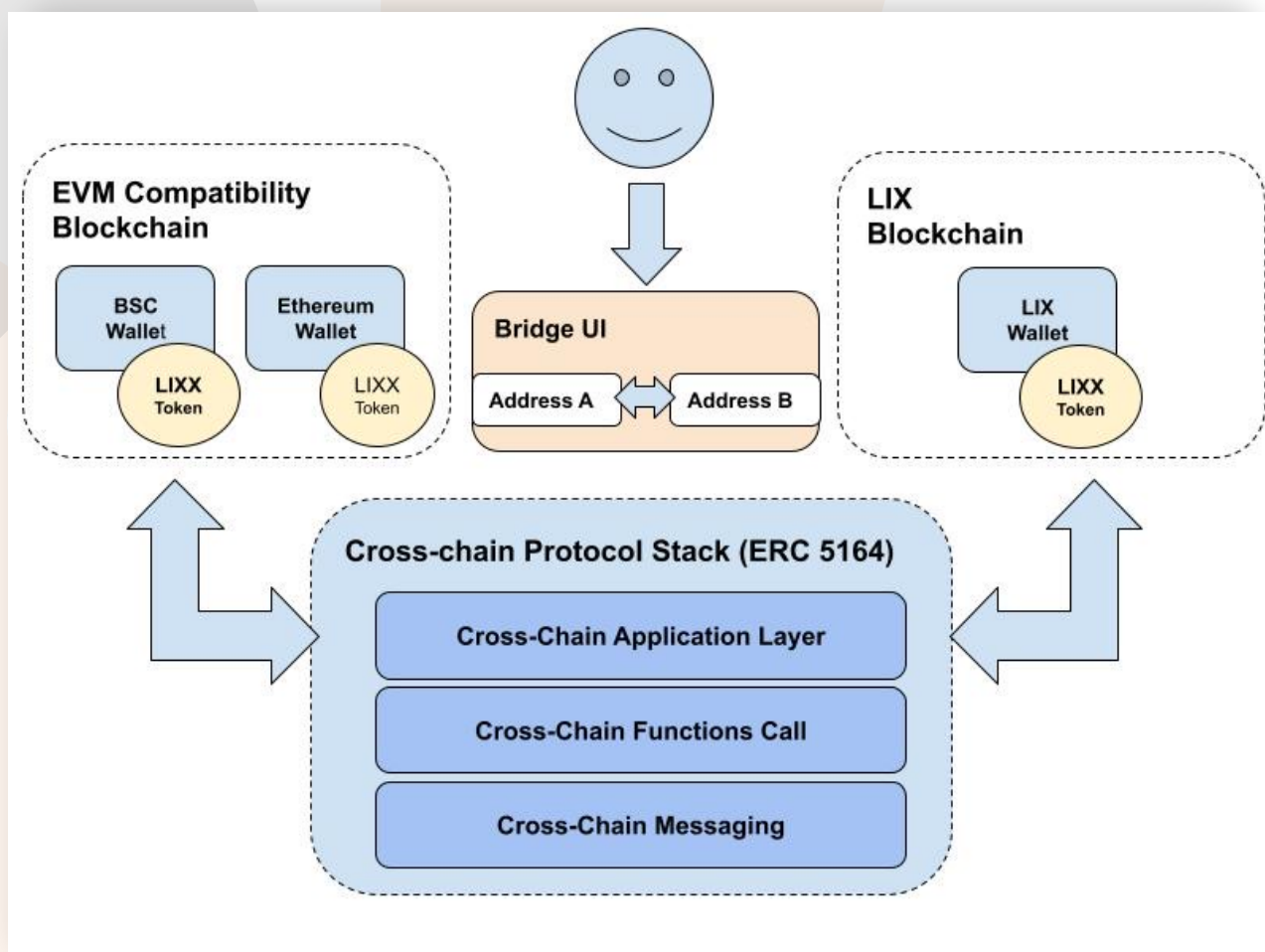
<https://ethereum-magicians.org/t/eip-5164-cross-chain-execution/9658/5>

https://entethalliance.github.io/crosschain-in-interopability/draft_crosschain_techs_pec.html

EVM-compatible blockchains

- Ethereum
- Binance Smart Chain
- Fantom
- Polygon
- Avalanche
- Cardano
- Tron

By using the EIP-5164 standard, LIX can support several popular blockchains.



5.4 The EIP-5164 protocol overview:

Cross-chain Application Layer

These applications use an atomic or non-atomic Cross-chain Function Call components to execute function calls that return values and/or update state on remote blockchains.

Cross-chain Function Call Layer

Non-atomic protocols do not ensure consistency across blockchains. That is, a segment of the overall cross-chain transaction may occur on a source blockchain, with associated updates, but the transaction on the destination blockchain may fail, and hence the updates would not be applied on the destination blockchain. A cross-chain transaction segment could fail for any of the reasons described below. Non-atomic protocols must provide a mechanism to resolve failures such that consistency is restored.

A cross-chain transaction segment could fail for any of the reasons described below. Non-atomic protocols must provide a mechanism to resolve failures such that consistency is restored.

Cross-chain Messaging Layer

Cross-chain messaging ensures participants of a target blockchain can trust that information from a source blockchain did in fact come from the source blockchain. For example, cross-chain messaging mechanisms could rely on transactions on one blockchain emitting events, and the events being trusted on a target blockchain.

Private network based on EVM:

<https://geth.ethereum.org/docs/interface/private-network>



6. TYPES OF LOYALTY PROGRAMS RUNNING ON THE LIX PLATFORM

The following loyalty programs can be developed on the LIX platform via smart contracts.

6.1 Discount programs (fixed discounts on purchases)

Can be single or accumulative: typically, these programs provide a fixed discount for all purchases from stores/services. The discount can vary based on the amount of purchase or over time once certain thresholds are reached. In this case, these loyalty programs are called multilevel systems.

6.2 Bonus programs (accumulative programs)

This is the most popular type of program. The store/brand/service rewards shoppers a certain number of points for each purchase. The cost per point may vary. The user can accumulate and use the points to buy goods/services. The points may be awarded not only for purchases but also for specific activities like joining an online community, referring a friend or simply for having a birthday.

If these bonus programs are multilevel, then a users status can change.



Each status has certain privileges: additional discounts, more points for purchases, etc.. The user is awarded new statuses as they make more purchases or accumulate points. Bonus points may expire in a certain period based on the rules set by the brands encouraging users to earn and redeem their points sooner.



6.3 Cashback

Cashback is a rewards program where customers can earn back a percentage of the money they spend while shopping. Initially, a credit card feature, some debit card accounts, stores and online retailers now offer cashback rewards. The amount of cashback that can be received depends on the program policies and the amount of money spent.

LIX facilitate cashback programs and allow the logic to be configured by the organisation within the user interface. For example, a member's reward can be equal to 1% of the invoice they paid, and is received as either a cash-point, or a blockchain token. LIX offer complete automation through API integration with the Point-of-Sale software used at the store or website.

Cashback pros and cons

Pros:

- Cash back reward schemes are transparent and easily understood by consumers

Cons:

- Some cashback programs have hidden fees
- Rewards may only be applied to less popular items

6.4 Paid Loyalty program

Paid loyalty programs and memberships are growing in popularity. One recent study found that 70% of consumers would be willing to join a paid or premium loyalty program if the benefits were valuable to them.

Within the LIX platform, organizations who chose to charge for their memberships can expose their marketplace offers only once users pay for their subscription.

The Pros:

A paid loyalty membership requires members to pay a monthly or annual fee in return for great benefits. Once customers have begun paying, they are more likely to engage regularly with the program because they want to see the greatest value from their investment. Consumers are likely to see a return on their investment if they have selected a program that fits their lifestyle. This guarantees an engaged customer for as long as they are subscribed, which in turn should lead to increased average order values, higher repeat purchase rates, and more customer lifetime value. This, on top of the revenue that is generated from the initial fee can create a significant source of revenue for the loyalty provider.



The cons:

A paid loyalty program guarantees repeat visitors for as long as customers are enrolled. It is unlikely that shoppers will return to the program for a second year if they do not realize sufficient value from their investment in the first year. Any increase in customer lifetime value could be short-lived therefore membership retention is critical for long-term viability. Charging for loyalty programs can potentially limit the number of members possible to acquire because fewer consumers are comfortable with the upfront cost.

6.5 Partner loyalty program

One of the more popular strategies to foster the value of a loyalty program proposition and boost member interaction is to add external partner products/services as rewards and benefits within the same program.

There are two approaches to this.

- Partners-as-core to a proposition
- Partners-as-value-add to a proposition

a. Partners-as-core to a proposition:

The core program is established as a collection and collaboration of partners (some call it a coalition) for members to earn and redeem the core program's currency.

b. Partners-as-value-add to a proposition:

The core program is structured around the brand's internal ecosystem of products and services. The business funds rewards and benefits. It then evolves to add partner offers, adding value to its members to create more connection with the program.

Adding partners adds direct and indirect revenue to the program (the business benefits)

- Direct revenue is generated by partners paying to gain access to the host loyalty program's member base. In the case of coalition programs, the purchase of the core currency
- Indirect revenue is when the partner offers to stimulate members' purchase behavior; spending more and purchasing more often = more revenue generated

6.6 Non-commercial loyalty program

In non-commercial loyalty programs, shoppers are rewarded by earning a unique status, special access to events or voting privileges, instead of cash back or discounts. Within the LIX platform, brands can choose to plug-in the tiering feature, i.e. Bronze, Silver and Gold tiers.

6.7 Automated loyalty program

An automated loyalty program is when the program is managed on the day-to-day, in real-time, by automation. Program owners do not need to monitor CRM updates, customer tagging or customer data. Organizations in this case can focus on an omnichannel marketing strategy, customer journey lifecycle, and overall growth.

LIX is planning to use blockchain to automate loyalty programs in its platform. The business rules to reward points will be embedded in the smart contracts.

The logic of the reward programs can be built when a smart contract is deployed. These algorithms work with data that is stored within the smart contract or back-up in a decentralized database such as IPFS.

7. Diamonds, Multi-Facet Proxy

LIX is planning to use EIP-2535, EIP-2535: Diamonds, Multi-Facet Proxy

Diamonds, Multi-Facet Proxy (Diamond Pattern), see more info:

<https://eips.ethereum.org/EIPS/eip-2535>.

Upgradeable Diamond vs. Centralized Private Database

There are benefits to having an upgradeable diamond instead of a centralized, private, mutable database. Decentralized Autonomous Organizations (DAOs) and other governance systems can be used to upgrade diamonds. They offer a broad interaction and integration with the Ethereum ecosystem. With open storage data and verified source code, it is possible to show a provable history of trustworthiness. With openness, bad behavior can be spotted and reported easily. Independent security and domain experts can review the change history of contracts and vouch for their history of trustworthiness. An upgradeable diamond can become immutable and trustless.

Diamond benefits

- A stable contract address that provides the needed functionality
- A single address with the functionality of multiple contracts (facets) that are independent of each other but can share internal functions, libraries, and state variables
- Emitting events from a single address can simplify event handling
- A way to add, replace and remove multiple external functions routinely (in the same transaction)
- Fine-grained upgrades, so only the parts of a diamond that need to be changed can be changed
- Have greater control over when and what functions exist
- Decentralized Autonomous Organizations (DAOs), multisign contracts, and other governance systems can be used to upgrade diamonds
- An event that shows what functions are added, replaced, and removed
- The ability to show all changes made to a diamond
- Increase trust over time by showing all changes made to a diamond
- A way to look at a diamond is to see its current facets and functions
- Have an immutable, trustless diamond
- Solves the 24KB maximum contract size limitation as Diamonds can be any size
- Separate functionality can be implemented in separate facets and used together in a diamond
- Diamonds can be created from already deployed, existing on-chain contracts
- Larger contracts must reduce their size by removing error messages
- Maintain the full functionality that is required
- Enables zero, partial or full diamond immutability as desired
- The ability to develop and improve an application over time with an upgradeable diamond and then make it immutable and trustless if desired
- Develop incrementally and let the diamond grow with the application
- Upgrade diamonds to fix bugs, add functionality, and implement new standards
- Organize code with a diamond and facets
- Diamonds can be large (have many functions) but still be modular because they are compartmented with facets
- Contract architectures that call multiple contracts in a single transaction can save gas by condensing those contracts into a single diamond and accessing state variables directly
- Save gas by converting external functions to internal functions. This is done by sharing internal functions between facets
- Save gas by creating external functions for gas-optimized specific use cases, such as bulk transfers
- Diamonds are designed for tooling and user-interface software



As a result, Libra Incentix can build an algorithmic schema for smart contracts of different loyalty programs. With this approach loyalty program logic can be altered without changing the main smart contract and losing data.

8. TOKENOMICS

8.1 LIXX token is the main element of the LIX ecosystem

The LIXX token is a BEP20 token. BEP-20 is the token standard in BNB Smart Chain (BSC), which extends ERC-20, the most popular token standard in Ethereum. Utilizing the ERC-20 standard allows for future token interaction in the LIX platform. Crypto exchanges and crypto wallets use this standard to support the simple integration and swapping of multiple different tokens.

The LIXX token is the primary utility token of the LIX platform.

- LIXX tokens are earned for participating in loyalty programs
- LIXX tokens are used to unlock discounts or special access to brand offers. The discount value within the LIX marketplace is often going to be higher than the monetary equivalent on the the exchange.
- LIXX tokens are being used as a gas for the future LIX blockchain and used as rewards for validators
- LIXX tokens can be used in exchange for access to events, tickets, games and raffle draws.
- LIXX tokens will be used between the internal LIX blockchain and public blockchain by using LIX Cross-Chain bridge
- LIXX tokens will be listed and traded on many top crypto exchanges



LIXX is a native token in the LIX ecosystem, the common reserve asset facilitating automated trading between any two integrated tokens on the platform and allowing brands/stores to facilitate loyalty campaign creation and trading that occurs via the protocol.

In future, the LIXX token as a reserve token can be held as collateral to back the value of other custom tokens. Effectively it makes the LIX platform a DeFi platform (decentralized finance) to provide stability to the value of the tokens being used as loyalty rewards on the LIX platform.

The LIX platform offers two primary features:

1. **Loyalty Projects (Tokens)** — LIX offers a framework with comprehensive tooling for Brands and Stores to implement their own Loyalty projects
2. **Slot Auctions** To participate in LIX, Brands and Stores may have to submit their Loyalty project proposals and bid on the auction to secure their Loyalty Projects (Tokens) slot. As more Loyalty projects are submitted, the LIXX token valued will increase therefore the highest bidder earns the slot. This auction mechanism helps maintain a high standard of loyalty program on the LIX platform.

8.2 What LIXX holders can do with their tokens

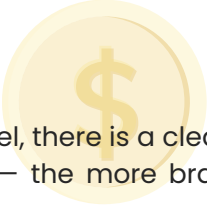
Within the LIX ecosystem, LIXX holders can:

- Redeem discounts from the LIX marketplace on brands that accept LIXX tokens
- Create bespoke reward programs and use their LIXX tokens to incentivize specific actions
- Participate in the governance of their Loyalty projects on LIX blockchain. LIXX token holders will have certain voting entitlements within the governance framework of their Loyalty projects

8.3 What makes the LIXX tokenomics model stand out?

The whole LIX system is designed to incentivize shoppers and Brands. Brands/Stores are incentivized to buy LIXX to submit their projects to LIX Marketplace. The LIXX are then locked for certain amount of time on the chain.

In using the LIXX token, brands can assign real-world value to their rewards which in turn create excitement to members. The use of the above mechanisms create buying pressure for LIXX. By setting a high entry bar for loyalty projects' submissions, LIX maintains a high standard for loyalty projects in its LIX ecosystem. This, in turn, attracts other brands and stores.



In the LIX model, there is a clear correlation between LIX ecosystem growth and LIXX token price growth — the more brands/stores and shoppers there are on LIX, the higher the utility.

8.4 LIXX token distribution

LIXX tokens are distributed:

- At the token generation event
- Based on subscriptions
- Based on the completion of tasks within a loyalty program campaign
- Based on consumer spend at brands which utilize the LIX platform
- Sold via centralized exchanges
- Via token swap in the LIX platform

8.5 LIXX token utility

LIXX tokens are required to power all transactions in LIX blockchain and platform. The LIXX token is used internally in the LIX platform and externally on exchanges (ERC - 20 / BEP - 20 externally, ERC-20 internally. Token multiplication in the ecosystem makes payments for gas cheaper.

Libra Incentix (company behind LIX platform and LIXX token) has successfully completed a private pre-sale in 2022.

Currently the LIX team is working on listing LIXX token on top exchanges.

8.6 LIXX token distribution details:

- SYMBOL: LIXX
- PRICE PER LIXX TOKEN: \$0.003
- NETWORK: Binance Smartchain(BEP20)
- TOTAL TOKEN SUPPLY: 15 billion LIXX
- NUMBER OF TOKENS FOR SALE:
5.6 billion LIXX
- PRE-SALE STARTED: in February 2022
- PRE-SALE ENDED ON: 31-May

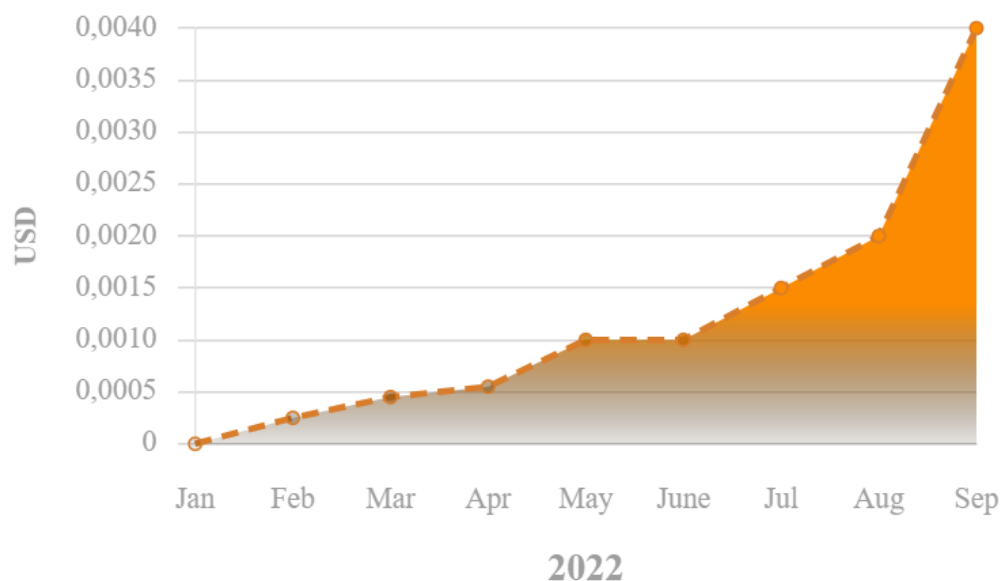
Tokens Sold : 3,100,000,000

Last sale price : 0.004

Tokens Available : 2,500,000,000

Current sale price : 0.004

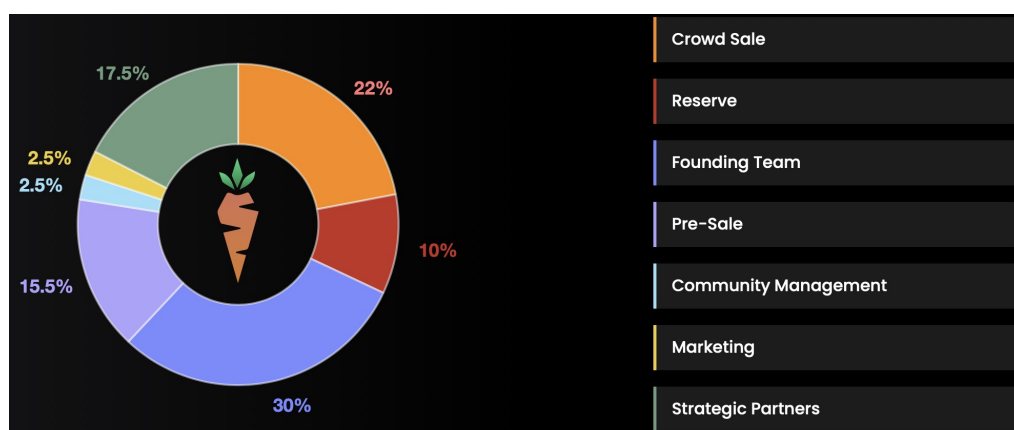
8.7 LIXX Token Price growth:



8.8 Smart CONTRACT Address:

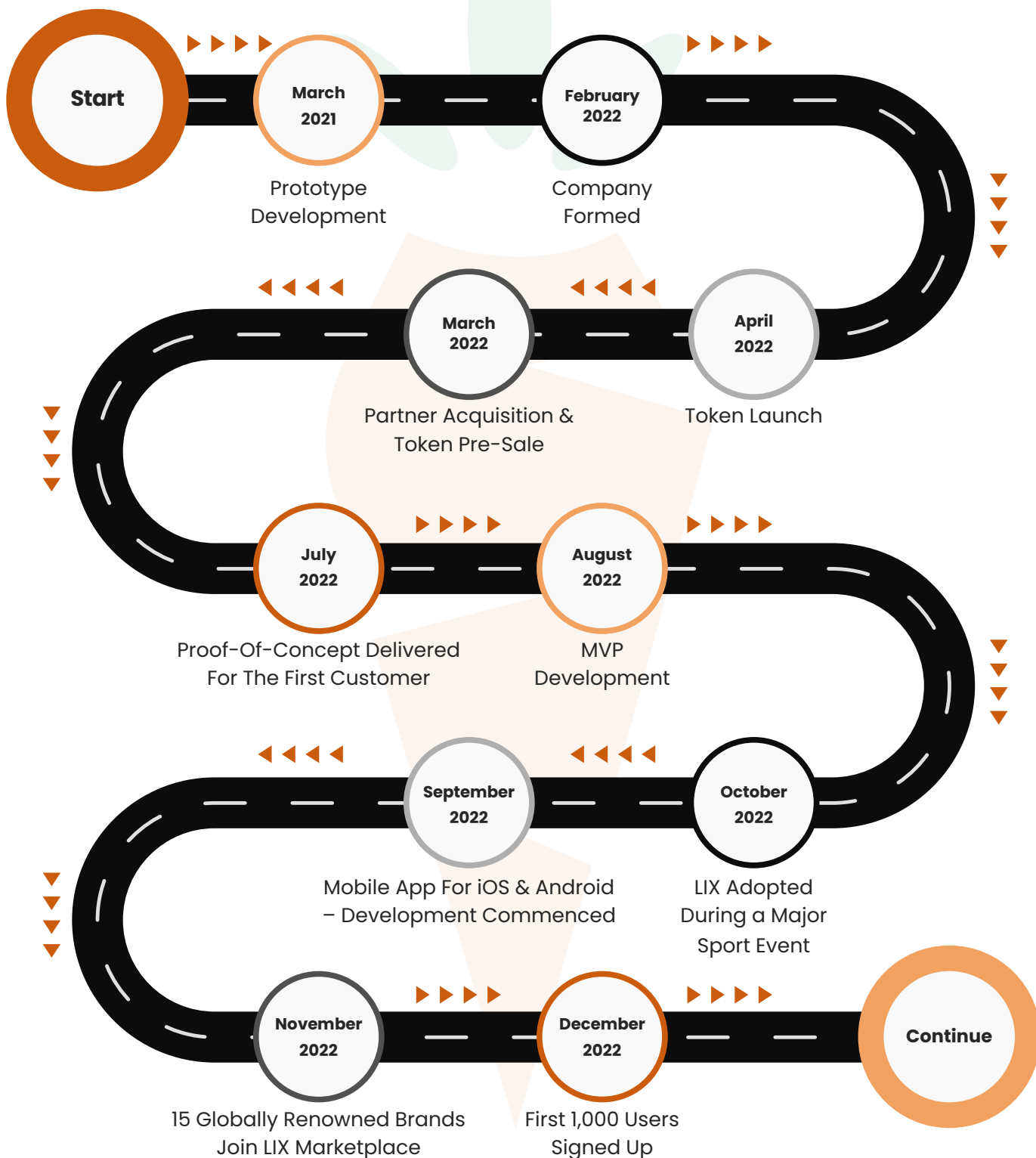
0x16530b5C105fcB7c50BC84A039a0a4ed806a5124

8.9 INITIAL TOKEN ALLOCATIONS



9. ROADMAP

The LIX team is currently working towards making LIX a fully functional and useful global brand.



10. MEET THE TEAM



Ahmed Sulaiti
Co-Founder



Andrew Doxsey
Co-Founder & CEO



David Ozoalor
CTO



Florin Mandache
Security Advisor



Barry Gray
Brand Ambassador



Brian Tham
*Head of New Business
Development*



Kresimir Rados
Product Owner



Wael Latiri
Software Developer



Kirsty Adams
Media Manager



Rafael Soultanov
Strategic Advisor



Domagoj Samardzic
Software Developer



Ez Balci
Consultant



Robin Bnsal
Mobile Developer



**Oluwagbenga
Akinbami**
Software Developer



Edo kanizic
Software Developer

11. LIBRA INCENTIX IN THE PRESS



Forbes

What Leaders Should Know
About Emerging Technologies

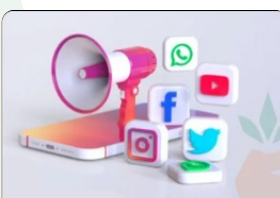
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RetailWeek

Five reasons why loyalty
programmes are broken –
and how to fix them

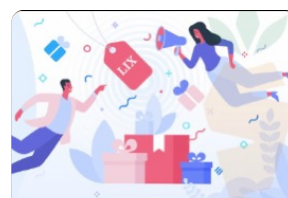
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Yahoo!Finance

Libra Incentix's LIX platform
enters numerous high-profile
partnerships

[Read More →](#)



Bitcoin Garden

How the LIX Marketplace
boosts Customer
Engagement

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Forbes

<https://www.forbes.com/sites/benjaminlaker/2022/11/17/what-leaders-should-know-about-emerging-technologies/?sh=79f9e46e62d1>

RetailWeek

<https://www.retail-week.com/retail-voice/five-reasons-why-loyalty-programmes-are-broken-and-how-to-fix-them/7042432.article?authent=1>

yahoo! finance

<https://finance.yahoo.com/news/libra-incentix-lix-platform-enters-204300458.html>



Bitcoin Garden

<https://bitcoingarden.org/how-the-lix-marketplace-boosts-customer-engagement-strengthens-marketing-strategies-and-creates-a-solid-pro-technology-foundation-in-workplaces/>



TechBullion

<https://techbullion.com/how-tokenization-will-transform-the-loyalty-management-industry/>

TECH TIMES

<https://www.techtimes.com/articles/285369/20221223/the-evolution-of-crypto.html>

BENZINGA

<https://www.benzinga.com/pressreleases/23/01/ab30303069/libra-incentix-lix-took-part-in-a-major-tech-conference-techex-global>