# Leveraging Blockchain Technology to empower Creators and Fans.

Sebastian Ahrens - seba@fanatico.com

# Abstract

This white paper aims to present and detail the advantages of tokenizing incentives between participants of an active ecosystem leveraged by Blockchain technology.

# Introduction

Fanatico is a community that brings Fans to their Idols. We enable Idols to provide their Fans with exclusive content through subscriptions, participate in sweepstakes, and wager. Fans support their Idols through Fan Clubs, and Sponsors hire Idols for events and content marketing, among many other features.

Fanatico has served tens of thousands of Fans and Idols since its launch in 2016.

# Table of Contents

- Leveraging Blockchain technology to empower Creators and Fans.
- <u>Abstract</u>
- <u>Introduction</u>
- Table of Contents
  - The Ecosystem
    - o <u>Idols</u>
      - o <u>Creators</u>
      - o <u>Fans</u>
      - o <u>Sponsors</u>
      - <u>Developers</u>
  - The Creator Economy
    - Web 2.0: The Platforms
    - First steps toward Monetization
    - o <u>Creators as Businesses</u>
    - o <u>True Fans, or better, Fanatics</u>
- Background
  - <u>A commission-based ecosystem</u>
  - <u>A Commission and Token based ecosystem</u>
  - <u>The Value Proposition for Tokenization</u>
  - <u>Why Tokens?</u>
  - o <u>Game Theory and Mechanism Design</u>
  - o <u>Risks</u>
- <u>Token Issuance</u>
  - o <u>General Purpose</u>
  - o <u>Users</u>

- o <u>Idols</u>
- o <u>Fans</u>
- o <u>Sponsors</u>
- <u>Investors</u>
- <u>Developers</u>
- Token Circulation
- <u>Transparency</u>
- Network Maturity
- <u>Marketing</u>

•

•

- Decentralization
  - <u>Voting</u>
  - o <u>The Initial Development Team and the Developer Community</u>
  - o <u>Decentralized Features and Products</u>
- <u>Roadmap</u>
- Insights
- <u>Technical Overview</u>

0

- o <u>Supported Blockchains</u>
- o <u>Standards</u>
- <u>Denomination & Decimals</u>
- o Supply, Market Capitalization, Lockups, and Inflation
  - Inflation
  - Token Lockups
  - Burn
  - Token Functions
    - <u>Approve function</u>
    - Transfer Function
    - <u>IncreaseAllowance Function</u>
    - <u>Mint Function</u>
    - <u>Burn Function</u>
    - <u>Vote Function</u>
    - <u>Recover Function</u>
    - FlashLoan Function
- <u>Conclusion</u>
- <u>Legal and Compliance</u>
  - <u>Trademarks</u>
  - o <u>Utility</u>
  - o <u>Disclaimer of Liability</u>
  - o <u>No Representations and Warranties</u>
  - o <u>Representation and Warranties by the user</u>
  - <u>Cautionary Note on Forward-looking statements</u>
  - o <u>Market and Industry Information</u>
  - o <u>Terms used</u>
  - o <u>No Advice</u>
  - o <u>Restrictions and distribution dissemination</u>
  - <u>No offer of securities or registration</u>

- <u>Risks and Uncertainties</u>
- <u>Glossary</u>
  - o <u>Blockchain</u>
  - <u>Cryptography</u>
  - o <u>Smart Contract</u>
  - <u>Blockchain Transaction</u>
  - <u>Smart Contract Functions</u>
  - o <u>Centralized and Decentralized Exchange</u>
  - o <u>Ethereum</u>
  - o Binance Smart Chain (BSC)
  - o <u>Tron</u>
  - o <u>Ethereum Rollup</u>
  - o <u>ERC20 Token</u>
  - o <u>BEP20 Token</u>
  - o <u>TRC20 Token</u>
  - o <u>Denominator</u>
  - Significant Numbers
  - o <u>Market Cap</u>
  - o <u>Floor</u>
- <u>References & Citations</u>

# The Ecosystem

The Fanatico ecosystem is a world of independent Idols and their Fans empowered by proprietary software and novel technology to help Idols grow, monetize, and serve their Fans. Fans discover new ways to interact with and get closer to their Idols by showing their support and competing for their Idols' attention through innovative features.

Idols look for ways to diversify their followership off the major social networks and own their content and monetization. Thereby Idols become entrepreneurs as they build teams, employ tools they did not have access to before, and deliver a richer experience to their Fans, increasing monetization in exchange.

# Idols

We all have Idols; they are often but not necessarily celebrities, athletes, artists, or otherwise famous people. Most of us consider our parents or family members as Idols. At Fanatico, you are an Idol if you have at least one Fan.

Idols love to serve their Fans, and the best way to do so is by sharing their moments, opinions, feelings, and interests. Idols capture these moments in photos, videos, or audio, making them easily consumable and interactable for their Fans. Therefore, Idols become Creators.

# Creators

A creator is any Individual or entity that ideates and creates products and services such as content, events, or merchandise and considers these activities their principal occupation. Monetization of these products and services plays a crucial role and is what distinguishes creators.

According to different sources, there are approximately 50 million independent creators, of which 90% are amateurs, and 10% are professional career creators.

#### Fans

Fans, with their support, are what drive and inspire our Idols. In the Fanatico ecosystem, Fans can support their idols through Fan Clubs with quizzes, sweepstakes, the Sale of digital and physical goods, content subscriptions, and more. Many of our features are accessible to anybody; all it takes is to follow your Idol.

# Sponsors

Companies and Individuals use the Jobs module to hire Idols for events, content marketing, video shoutouts, barters, and other deals. Our escrow system protects the Sponsor and Idol against fraudulent actors while guaranteeing deadlines and commitments.

# Developers

We plan to make Fanatico available for any third party interested in developing on top of the Fanatico ecosystem. We will provide access to our feature-rich API that allows developers to access Fanatico data and create new apps, features, or improvements.

# The Creator Economy

# Web 2.0: The Platforms

For about twenty years, networks like Facebook, Instagram, TikTok, and Snapchat provided platforms that allowed creators to reach audiences without relying on publication channels like TV, Cinema, or print media. The platforms equipped the creators with powerful content-capturing and editing tools, allowing them to reach hundreds of millions of content-consuming Individuals.

However, for the creators, the platforms have a significant downside: their business model. The business model of most platforms is based on advertising, focusing on the users or eyeballs rather than the interests of their users. Another potential risk for creators is the platform itself, as it exposes creators to their policies, codes of conduct, and guidelines, which are often ambiguous.

#### First steps toward Monetization

Creators built and nurtured large audiences on the platforms over the years, and they started to develop ways to monetize this audience. Some platforms share advertisement revenue with the creators, but payouts are often less significant than income from proprietary Monetization.

# Creators as Businesses

Out of the larger audiences, groups of Fans condensed, and those Fans followed their Idols across platforms. Idols turned into businesses with revenue channels similar to media companies. The business sophistication of the Idols allows them to augment their income and focus on their Fans.

### True Fans, or better, Fanatics

Whether it be 100 or 1000 Fans, the critical distinction is that they are die-hard Fans that follow their Idols anywhere and purchase almost anything to support their Idols. Idols love what they do and turn this love into a business creating a Fan economy by engaging with their fanatic Fans. Fanatico provides a multisided platform for Fans and Idols to engage, stimulating growth and innovation in the same time.

# Background

# A commission-based ecosystem

Conventional platforms generate billions of revenue through commissions they extract from the platform's service providers and advertisements they serve their users. These platforms are usually very profitable through their advertisement income or sales commission but give little back to those that provide the most value to the ecosystem.

We do not aim to discard the commission-based model categorically but to strengthen the platform's service level for all participants while securing a sustainable commission for service providers and the platform. We will achieve this by introducing a token Allocation model in addition to the conventional commission model.

# A Commission and Token based ecosystem

Blockchains have certain features in common with two-sided platforms: they bring together service providers like our Idols and Sponsors with our Fans. Both the Blockchains and the platforms were designed to do so for the long run, promising to deliver increasing value by growing the service level capacity and customer base.

The value of the network and the platform likewise increase as the number of participants grows. Both models feature network effects; a network effect is a dynamic in which the value or Utility a participant derives from a product or service depends on the total number of participants with compatible products.

Multisided social network effects refer to the phenomenon where a social network becomes more valuable as more people use it on multiple sides of the network. This network effect is often seen in social networks that serve as intermediaries between two or more groups, such as dating apps, professional networks, and marketplaces.

An example of a multisided social network effect is seen in dating apps; as more people use the app to find romantic partners, more potential partners are attracted to the app, which in turn leads to more matches and further growth of the network. The network effect creates a virtuous cycle where the value of the app for both users and potential partners increases as the network grows.

Multisided social network effects can have significant implications for businesses and policymakers. Companies must find ways to attract and retain users on both sides of the network in order to grow and maintain the value of the

network. Policymakers must consider how to balance the interests of different groups, such as job seekers and employers, in order to promote growth and ensure competition.

### The Value Proposition for Tokenization

Ecosystems that do not or not solely monetize their players need to develop new incentivization models to provide a superior service level compared to conventional platforms to attract and retain participants.

One such model is Token Allocation, issuing tokens that can be earned, purchased, or reserved for players within an ecosystem. Token Allocation for user incentivization refers to distributing a particular portion of the total Token supply to incentivize users to participate and engage in a project or platform. This can include rewards for creating content, referring friends, waging, or participating in games. The goal is to increase adoption and engagement, driving growth and value for the platform. Token incentives also help align users' interests with those of the platform, creating a virtuous cycle of value creation.

Tokens are a powerful means to attract, retain and empower the Fanatico ecosystem's players while providing additional cash flow for the platform in an economically attractive and transparent way for all participants.

A research paper by Gerry Tsoukalas, University of Pennsylvania, found that the platform commission approach generally leads to higher long-term profits for the platform founders. In addition, token Allocation can lead to higher service levels, benefiting the service providers and users.

# Why Tokens?

We use Cryptography to prove something that occurred in the past and economic incentives to encourage desired properties to hold into the future. Code and economics are intrinsically interlinked.

Network-based incentive systems are uniquely facilitated by tokens, as they permit coordinating and allocating resources to achieve a shared goal via various economic and cryptographic mechanisms.

Utility Tokens allow Creators and Developers to design and introduce various game theory models into the ecosystem, which aim to motivate players to perform specific actions and achieve defined goals in exchange for token rewards.

## Game Theory and Mechanism Design

Game Theory plays a crucial role in the reward system design as it provides a scheme that analyzes incentives from an economic perspective.

The suggestions allow for the design of a Mechanism. The objective function of this Mechanism is to maximize the platform's user participation. With increasing user participation, the token value will start to exist, creating powerful incentives for more Players to participate, thereby further expanding the platform's service level. Once the token appreciates, it strongly motivates developers to join the platform and contribute to the ecosystem by developing new valuable features and applications or making improvements. Eventually, this cycle accelerates and self-reinforces, leading to a continuous token appreciation.

# Risks

Token Allocation comes with a high risk of moral hazard as there is an incentive for the token issuer to increase the exposure to risk because it does not bear the total costs of that risk.

During the so-called ICO boom, many projects had little or no intrinsic value, thus minimizing their exposure. Still, they were able to issue millions of essentially worthless tokens.

Fanatico addresses moral hazard by putting skin in the game: Providing a developed, feature-rich, and growing ecosystem without the requirement of the costs of past development.

We believe that issuing tokens for market speculators, charging commissions for the platform to sustain healthy cash flow, and pursuing third-party verification and government regulation will further strengthen the Fanatico ecosystem.

In general, commissions and token Allocation minimize moral hazard, incentivize all players, and supercharge the ecosystem's growth.

# Token Issuance

#### General Purpose

The Fanatico, or FAN Token, is issued to facilitate access to, participation in, and the development of the Fanatico ecosystem and platform.

#### Users

All registered users receive the signup and daily bonus through freshly minted FAN tokens as soon as they register or open the app. Users may also purchase FAN Tokens via the wallet.

### Idols

Our Idols are essential to the strength of the Fanatico ecosystem; their incentivization and motivation to continue creating content for their Fans are crucial. We retain FAN tokens for our Idols by allowing them to conduct sales nominated in FAN Tokens and plan to incentivize Idols to create content regularly. Fans also may tip their Idols with FAN tokens, transfer tokens, or spend tokens to buy answers for Fan Club quizzes, among many other planned features to allot FAN tokens to our Idols.

### Fans

Fans receive FAN tokens through the signup and daily bonus, in-app purchases, and winning sales nominated in FAN tokens. Fans may also purchase FAN Tokens in bundles at attractive discount rates.

#### Sponsors

One of our planned features is to retain Sponsors that provide job opportunities for Idols with FAN tokens. The issuance of FAN tokens will directly correlate to the amount Sponsor allocate for Jobs.

# Investors

We encourage investors to purchase tokens via a centralized or decentralized exchange. We believe the FAN Token is primarily a store of wealth backed by the strength of the Fanatico ecosystem and that the FAN Token directly appreciates through growth and adoption.

# Developers

Third-party developers and supporters will be retained in FAN tokens and benefit from an appreciation in the token's value over time. We will propose a detailed developer program once the FAN Token circulates in significant volume.

# **Token Circulation**

FAN Tokens circulate within the ecosystem by exchanging them for subscriptions, sweepstakes, wagers, tipping, buying, selling, trading, or simply transferring. Initially, all transactions and contracts will be executed on the Ethereum Blockchain or one of its rollups. Following the rollout on Ethereum, we will add BSC and Tron as supported chains in due course.

While we see the FAN Token as the most valuable and functional within the Fanatico ecosystem, we will float FAN tokens on centralized and decentralized exchanges following the required approvals.

# Transparency

For any platform, transparency and regular progress reporting are essential. Compliance is imperative, primarily when the FAN Token is traded on public exchanges.

We will proactively provide the required information to the authorities and exchanges and voluntarily share specific metrics and statistics with our users, developers, and the public domain. Following this approach, we plan to issue semi-annual updates and status reports on the development disclosure and roadmap, daily generic user metrics, and insights into the FAN token market performance.

# Network Maturity

Since Fanatico's launch in 2016, Fanatico Digital Tokens already hold many functions, such as promoting participation in sales, sweepstakes, exclusive content creation, and Fan Club activities, among many others, which are being used by tens of thousands of users.

We issue Fanatico digital tokens on our proprietary and centralized ledger. We plan to convert these digital tokens in circulation into FAN tokens on the supported Blockchain while adopting and expanding the token's functions.

The primary use of the FAN token within the Fanatico ecosystem is utility, to which the price and floating amount of FAN tokens ideally correspond. We encourage outside investors to hold FAN tokens but emphasize that speculation for financial gain is less significant to the Fanatico ecosystem.

# Marketing

We do not plan to significantly market the release and distribution of FAN tokens other than by informing our users how to leverage the FAN token utility features and by creating exchange pairs with additional tokens.

# Decentralization

# Voting

We plan to develop and implement a governance system allowing FAN Token holders to vote on new features and improvement proposals. The features and improvement voting system is based on Quadric voting and will be provided as a smart contract.

Quadric voting is a voting system that aims to provide a fair and efficient way to aggregate the preferences of a group of individuals. Glen Weyl and Eric Posner in 2018 proposed it.

In quadric voting, each voter is allocated a certain number of tokens to distribute among different options or candidates. Unlike traditional voting systems, voters are not limited to allocating one token to each option or candidate. Instead, voters can distribute tokens according to their intensity of preference.

To ensure that the votes are weighted according to the intensity of preference, quadric voting uses a quadratic formula to calculate the total number of votes for each option. The formula takes the square root of the sum of the square of the number of tokens allocated by each voter to a choice.

This system rewards voters who feel strongly about an option while not wholly disregarding the preferences of those who feel less strongly. In this way, quadric voting aims to incentivize voters to be more honest about their valid preferences and to discourage strategic voting.

Quadric voting can also be extended to allow for the purchase of additional tokens, which provides an opportunity for voters who feel particularly strongly about an issue to have a more significant impact on the outcome. However, this feature raises concerns about the potential for vote buying and the influence of wealth on the work of elections.

Based on our proposal, users will vote on the priorities of new features or improvements, the algorithms used within the app, content curation, and verifying users' authenticities, among many other options.

In summary, the governance process at Fanatico is a decentralized, community-driven system where FAN token holders can propose and vote on features and improvements.

# The Initial Development Team and the Developer Community

The Fanatico ecosystem, on all of its supported platforms, has been developed using proprietary funding and by developers with no vested interest in the FAN token.

We have concrete plans within our product and feature roadmap to make components and modules of our platform available for permissionless development.

Permissionless software development is a model of software development where anyone can contribute to a project without needing to seek permission or approval from a central authority. This approach is often associated with open-source software development, where the source code is publicly available, and anyone can contribute to it.

In permissionless software development, developers can create and modify code independently without needing to get approval from a project manager or other gatekeeper. This can lead to a more decentralized and collaborative development process, where contributions from a diverse group of developers can lead to better software.

One of the critical benefits of permissionless software development is that it allows for rapid iteration and experimentation, as anyone can contribute new ideas and features to a project. This can help to create more innovative and flexible software that can adapt to changing user needs and preferences.

We retain the initial development team until at least 2025. We intend to extend the issuance of tokens to incentivize external developers to contribute to our development roadmap and integration with other networks and apps, providing a richer experience for Creators and Fans.

Given the size and complexity of developing a social network, it is not realistic to assume that the Initial Development team in its current size will be able to significantly progress the large backlog of features and improvements currently present. Developing new features is crucial to the network's adoption and growth, which we can only achieve through a permission-less development approach combined with proprietary development resources.

It is important to note that the Initial Development Team is retained by proprietary funding only, while the external development community is retained in FAN tokens only.

It follows that the Initial Development team has neither a vested interest nor the capacity to influence the value of the FAN token significantly.

The Initial Development Team has no material information about the network that is not publicly available either.

The Initial Development Team propagates development milestones and the roadmap via Github, an Internet hosting service for software development and version control using Git.

# Decentralized Features and Products

We plan to migrate some of our network's features into a decentralized environment, such as the popular Lowest Unique Bid sale. Participants bid on an item in a lowest unique auction, and the person who submits the Lowest Unique Bid wins. For example, if three people bid \$1.00, \$2.00, and \$2.00, respectively, the lowest unique bid would be \$1.00, and the person who made that bid would win the Auction. This type of Auction can be fascinating because it rewards creativity and strategic thinking rather than simply having the highest bid.

We will implement the logic of the Lowest Unique Bid within a smart contract and switch from our centralized backend to a public Blockchain. As a result, we increase transparency and trust in the outcome of the Auction. Traditional Auctions will be migrated to the Blockchain after the Lowest Unique Bid Auction migration has been completed.

We plan to release a new feature called CryptoMaker by the end of Q2 2023, which allows users to create a nonfungible token that links to a digital asset like an image or photo. The token smart contract's logic allows the tokens to either remain non-fungible or convert into fungible tokens if the digital asset has been accessed by anybody else but the creator.

The issuance of FAN tokens also requires that we move the Fanatico wallet from our centralized ledger to a Blockchain-based wallet.

# Roadmap

Q1 2023: The development team works on bug fixes and platform function parities and elaborates on making parts of the repositories publicly available. We will select specific platform modules to be developed with an external developer community.

We plan to issue the FAN token and DEX contracts on the Ethereum test net Goerli to test the contracts' functions and conduct an external security audit.

Q2 2023: The development team will work on new features and improvements in the Content Capture, Wallet, and Profile modules, allowing, among others, the option to Sign-in with Ethereum.

We plan to submit the FAN token to an external council for review.

Q3 2023: The development team will work on refactoring several modules and new features of the app and the web frontend.

We plan to add the option for the user to hold tokens in our proprietary wallet as a self-custodian.

Q4 2023: The development team will work on new features and improvements, including translating the app into four more languages. We plan to release our new Content Capture component to the developer community as the first component to be released for permissionless development.

2024: We plan to compile a new roadmap, including external developers, based on our users' feedback from January.

# Insights

All of the supported Blockchains provide a Block Explorer for full transparency of transactions:

Ethereum: https://etherscan.io/

BSC: https://bscscan.com/

Tron: https://tronscan.org/

# Technical Overview

#### Supported Blockchains

We plan to make FAN tokens available on the Ethereum, Tron, and BSC Blockchains and the Polygon, Arbitrum, and Optimism rollups.

# Standards

We developed FAN Token smart contract versions optimized for the below token standards:

Ethereum: ERC20

BSC: BEP20 (not deployed yet)

Tron: TRC20 (not deployed yet)

# **Denomination & Decimals**

FAN has eight (8) decimal places and 26 potential significant numbers.

FAN	10000000000000000000000000000000000 FEN
MILLIFAN	1000000000000000.00000000 FEN
MICROFAN	100000000000.00000000 FEN
GFAN	100000000.00000000 FEN
MFAN	1000000.00000000 FEN
KFAN	1000.00000000 FEN
FEN	1.00000000 FEN

# Supply, Market Capitalization, Lockups, and Inflation

The FAN Token does not have an initial supply. We aim to set the initial price of the token to its peers at the exchanges at the time of release to:

Ethereum: 0.00001 ETH

BSC: 0.00005 BNB

Tron: 0.25 TRX

We will issue FAN Tokens in accordance with the demand on the centralized exchanges. Market Capitalization is calculated by multiplying the number of FAN tokens in circulation by the FAN token's current value.

#### Inflation

The minting of Sign Up and Daily Bonus FAN tokens create a rate at which new FAN tokens are brought into circulation. We refer to this rate as Inflation. If the rate of Inflation is high, it can lead to a devaluation of the FAN token over time, as the increased supply dilutes the value of existing units. On the other hand, a lower rate of Inflation can make the currency more attractive to investors and users, as it may retain its value better over time.

We believe that the issuance of Sign Up and Daily Bonus FAN tokens leads to higher user adoption and ecosystem growth, which in turn will contribute to an appreciation in the FAN token value.

Furthermore, FAN tokens issued as Sign Up or Daily Bonus are subject to a lockup, further restricting circulation and aiding the token value's stability.

#### Token Lockups

Users that received FAN tokens as a signup or daily bonus or purchased tokens via the app can transfer these tokens to any other account on one of the supported Blockchains after 30 days. The FAN Tokens purchased or received outside the app, for instance, via one of the exchanges, centralized or decentralized, are not subject to any restriction.

Restricting the initial circulation of specific tokens is achieved by a Solidity function that handles the staking of a token on a smart contract. Staking herein refers to the Signup and Daily Bonus. The function takes in three parameters: the address of the account that is staking, the number of tokens being staked, and a Boolean value that indicates whether the stake should be locked.

First, the function calls three internal functions to update the user's reward and locks and claims any outstanding rewards. It then checks that the amount being staked is not zero, as staking zero tokens does not make sense. If the stake is to be locked, the function calculates the unlock time for the stake based on the current time, the duration of the rewards, and a lock duration value. It then checks the user's current locks and either create a new lock or adds to an existing one, depending on whether the new unlock time is after or before the last unlock time in the user's locks.

The function then transfers the staked tokens from the user's account to the contract's address, updates the total supply of staked tokens, and emits a Staked event to indicate the successful stake. The function uses the nonReentrant modifier to prevent re-entrancy attacks where a contract repeatedly calls itself during execution.

The staking of FAN tokens does not entitle the owner or holder to receive any yield, return, or benefit other than the Sign Up and Daily bonus via the Fanatico app.

#### Burn

The FAN token smart contract provides a burn function with which FAN tokens can be burnt by the token holder, which allows for decreasing FAN tokens in circulation.

#### **Token Functions**

The FAN Token Smart Contract functions:

- approve
  - approveAndCall
- transfer
  - transferFrom
    - o transferFromAndCall
- increaseAllowance / decreaseAllowance
- mint
  - FinishMiniting
- burn
  - o burnFrom
- vote
- recover
- flashLoan

#### Approve Function

The approve function is a method that can be included in an Ethereum smart contract, specifically in contracts that implement the ERC-20 standard for tokens. This function allows the owner of a particular token to give permission for another address to spend a specified amount of that token on their behalf.

When the approve function is called, the token owner specifies the address they are giving permission to and the amount of tokens they are allowed to spend. The smart contract then updates the approved amount of tokens for that address, which other functions can check in the contract.

The approve function is often used with the transferFrom function, which allows the approved address to transfer tokens from the owner's account to another address. Together, these functions enable more complex transactions and interactions between different accounts in the Ethereum ecosystem.

#### Transfer Function

The ERC20 standard's transfer function facilitates the transfer of tokens from the token owner to another address. To comply with the standard, the transfer function must emit the Transfer event when a transfer is successful.

#### IncreaseAllowance Function

The increaseAllowance function is a part of the ERC20 smart contract standard that is used to increase the token allowance for a spender. The function takes two parameters as input - the address of the spender and the amount of tokens to be added to their current allowance.

When the increaseAllowance function is called, it first checks if the sender has the sufficient token balance to increase the allowance for the spender. If there are enough tokens, then the allowance of the spender is increased by the specified amount, and the function emits the Approval event to reflect the updated allowance.

If the allowance update is unsuccessful, then the function throws an error, and the transaction fails. The IncreaseAllowance function provides a way for users to grant additional token access to other accounts without having to set a new allowance with the Approve function.

#### Mint Function

The mint function is a part of the ERC20 smart contract standard that allows the contract owner to create new tokens and add them to the total supply of the token. The function takes the amount of tokens to be minted as an input parameter.

When the mint function is called, it first checks if the caller is authorized to mint new tokens. If the caller is authorized, then the function creates new tokens and adds them to the total supply of the token. The function then credits the new tokens to the account of the caller or another account as specified in the function call. The mint function emits a Transfer event to reflect the movement of new tokens to the recipient account.

It is important to note that the contract owner can only call the mint function, and it is generally used to distribute new tokens.

#### **Burn Function**

The burn function is a part of the ERC20 smart contract standard that allows the holder of tokens to destroy a certain amount of tokens from their account permanently. The function takes the amount of tokens to be burned as an input parameter.

When the burn function is called, it first checks if the caller has the sufficient token balance to burn the specified amount of tokens. If there are enough tokens, then the function deducts the specified amount of tokens from the caller's balance and subtracts them from the total supply of the token. The burn function emits a Transfer event to reflect the destruction of tokens.

It is important to note that the contract owner cannot call the burn function, but only by the holder of the tokens. The burn function is generally used when a user wants to reduce the total supply of tokens or remove their tokens from circulation, such as when they no longer want or need them.

#### Vote Function

The vote function is not a standard part of the ERC20 smart contract standard. However, a vote function can be added to an ERC20 contract to allow token holders to participate in the decision-making process of a project or organization that issues the token.

When a vote function is added to an ERC20 contract, token holders can use their tokens to cast votes on various proposals, such as changes to the token's features, community initiatives, or major decisions affecting the organization's future. The vote function takes the proposal's ID and the number of votes to be cast as input parameters.

When a vote is cast, the smart contract deducts the number of tokens used to cast a vote from the voter's account and updates the vote count for the proposal. After a voting period, the proposal with the most votes wins, and the smart contract executes the associated action, such as implementing a new feature or allocating funds for a community initiative.

Adding a vote function to an ERC20 contract allows us to enhance the transparency and decentralization of Fanatico, giving token holders a more active role in shaping the project's direction and future.

#### **Recover Function**

The recover function is not a standard part of the ERC20 smart contract standard. However, a recover function can be added to an ERC20 contract to allow token holders to recover their tokens in certain situations, such as when they lose access to their account or private key.

When a recover function is added to an ERC20 contract, it allows the token holder to initiate a recovery process by providing certain identifying information to the contract, such as their address, transaction history, or other account details. Once the contract verifies the user's identity, it can then transfer the user's token balance to a new address specified by the user.

The recover function is generally used as a failsafe mechanism to ensure that users can recover their tokens if they lose access to their account or private key. However, the recover function must be implemented with strict security measures to prevent fraudulent or unauthorized recoveries.

The recover function of an ERC20 contract increases user trust and confidence in Fanatico, as it provides a safety net for users in case of unforeseen circumstances.

#### FlashLoan Function

The flash loan function is a type of smart contract feature that allows users to borrow tokens or assets from a lending pool within the smart contract for a very short period of time (typically a single transaction), without the need for collateral or credit history. The flash loan function is not a standard part of the ERC20 contract standard, but it can be implemented in an ERC20 contract using various lending protocols or third-party services.

When a user calls the flash loan function, the contract provides them with the required tokens or assets from the lending pool, and the user can then use the borrowed funds to perform arbitrage or other trading strategies, taking advantage of price differences in the market. The user is required to return the borrowed funds and pay a small fee within the same transaction; otherwise, the transaction is reversed, and the borrowed funds are returned to the lending pool.

The flash loan function is typically used by experienced traders and arbitrageurs who can leverage short-term market inefficiencies to generate profits without the need for large amounts of capital. However, the flash loan function can also be used for malicious purposes, such as attempting to manipulate markets or exploit vulnerabilities in other smart contracts.

The flash loan function increases the FAN token's functionality and allows for more sophisticated financial transactions.

# Conclusion

We have proposed a FAN Token incentivization model that allows Fans, Idols, Sponsors, Investors, and Developers to participate in an established and growing ecosystem.

# Legal and Compliance

### Trademarks

Fanatico is a registered trademark with the USPTO (United States Patent and Trademark Office), the EUTM (European Union Trade Mark), and UKTM (United Kingdom Trade Mark).

### Utility

The Fanatico (FAN) tokens are not considered securities in any jurisdiction. The information in this White Paper is not intended to be a prospectus or investment offer and should not be viewed as such. It is not an offer to sell securities or a solicitation for investment. The Distributor of Fanatico tokens is not making any investment recommendations or offering to purchase any tokens. This White Paper does not form the basis of any legal obligation or an investment decision and is not binding.

By holding a token, the holders consent that the Fanatico Token is a utility token that primarily provides value to the Fanatico ecosystem. The Token does not bear the right of full or fractional ownership in Fanatico nor provides any promise or expectation of value appreciation. The administrational, operational, and development levels of Fanaticos

are economically and operationally entirely detached from the Fiat value or values of other tokens related to the Fanatico Token.

This White Paper has not been reviewed or approved by any regulatory authority. No action has been taken or will be taken under any jurisdiction's laws, regulations, or rules. Fanatico and its operations, including the Fanatico tokens, are subject to risks and uncertainties.

The distribution or dissemination of this White Paper is prohibited or restricted in certain countries. No part of this White Paper should be reproduced or distributed without including the sections on liability, representations, and warranties, forward-looking statements, market information, terms used, no advice, no further information, restrictions on distribution, no offer of securities, and risks and uncertainties.

### Disclaimer of Liability

As allowed by applicable laws, regulations, and rules, Fanatico is not responsible for any indirect, special, incidental, or other losses of any kind, in tort, contract, or otherwise, including but not limited to loss of revenue, income, profits, or data, arising from or in connection with your acceptance or reliance on this White Paper or any part of it.

#### No Representations and Warranties

Fanatico does not make any representations, warranties, or undertakings and expressly denies such for the information in this White Paper. There is no guarantee of the information's accuracy, truthfulness, or completeness.

#### Representation and Warranties by the user

By accessing and accepting any information in the White Paper, you represent to Fanatico that:

(a) You acknowledge that Fanatico tokens do not constitute securities in any form or jurisdiction. (b) The White Paper is not a prospectus, offer document, or solicitation for investment in securities, and no payment is to be accepted based on the White Paper. (c) No regulatory authority has examined or approved the information in the White Paper, and it does not imply compliance with laws, regulations, or rules. (d) The completion of the White Paper or future trading of Fanatico tokens does not indicate their value. (e) Possession or distribution of the White Paper and its parts is not restricted or prohibited by laws or regulations in your jurisdiction, and you have followed any applicable restrictions at your own expense. (f) You understand the basic workings, features, usage, storage, transmission, and essential elements of cryptocurrencies, Blockchain software, cryptocurrency wallets, and other related token storage systems, as well as Blockchain and smart contract technology.

(g) You acknowledge and agree that Fanatico and the distributor will not be held responsible for any indirect, incidental, special, consequential, or other damages arising from a contract, tort, or otherwise (including, but not limited to, loss of revenue, income, or profits, and loss of use or data) in relation to your acceptance of or reliance on this white paper or any part thereof. (h) You confirm that all of the above representations and warranties are accurate, truthful, complete, and not misleading from the moment you obtain or accept this white paper or any part of it.

#### Cautionary Note on Forward-looking statements

This White Paper, public press releases, and statements made by Fanatico or its representatives may contain "forwardlooking statements" which are not historical facts. Terms like "aim," "target," "anticipate," etc. are used to identify such statements. These statements relate to Fanatico's financial position, business strategies, plans, and prospects, as well as industry trends. They are predictions and not actual facts. These statements carry known and unknown risks and uncertainties that may affect Fanatico's future results, performance, and achievements, causing them to differ materially from the expectations expressed in these forward-looking statements. These factors include, among others:

(a) Political, social, economic, stock, and cryptocurrency market changes and changes in the regulatory environment in the countries where Fanatico operates; (b) Fanatico's potential inability to implement its business strategies and plans; (c) Variations in fiat and cryptocurrency interest and exchange rates. (a) Political, social, economic, and stock/cryptocurrency market conditions and regulatory environment changes in the countries where Fanatico operates; (b) Fanatico's inability to execute/implement their business strategies and plans; (c) Changes in fiat/cryptocurrency interest and exchange rates; (d) Changes in Fanatico's anticipated growth strategies and internal growth; (e) Changes in fees paid to distributors for Fanatico's operations; (f) Changes in salaries of Torum's employees; (g) Changes in Fanatico's customer preferences; (h) Changes in Fanatico's competitive conditions and ability to compete; (i) Changes in Fanatico's capital needs and financing availability; (j) Wars/terrorism; (k) Natural disasters/acts of God affecting Fanatico's operations; (l) Factors outside of Fanatico's control; (m) Risks/uncertainties related to Fanatico, its operations, and Fanatico tokens.

All forward-looking statements in this White Paper are qualified by the potential risks and uncertainties that may cause actual future results to differ from what is expressed or implied. Reliance on these forward-looking statements should be limited as they only apply to the date of this White Paper and are subject to change. Fanatico does not guarantee that its future results, performance, or achievements will align with the statements made in this White Paper, and actual outcomes may differ significantly.

This White Paper does not guarantee the future performance or policies of Fanatico and may not be relied upon as a promise or representation. Fanatico is not responsible for updating any forward-looking statements or announcing any revisions to them, even if new information becomes available or other events occur in the future.

#### Market and Industry Information

This White Paper includes market and industry data and projections based on internal surveys, reports, studies, and publicly available sources such as market research and industry publications. Although these sources are believed to be reliable, there is no guarantee of their accuracy or completeness. Information attributed to individuals other than Torum's directors, officers, and employees have not been verified, and those individuals have not consented to the use of their information. Fanatico has taken steps to ensure the accuracy of information from third-party sources but has not independently reviewed or verified this information or the underlying assumptions. Fanatico's directors, officers, and employees do not make any representations or warranties about the accuracy or completeness of the information and are not obligated to provide updates.

#### Terms used

This White Paper uses technical terms and abbreviations to help readers understand Fanatico tokens and the company's operations. These definitions and designations are not definitive and may differ from industry standards.

#### No Advice

The information in this White Paper is not intended to be taken as commercial, legal, financial or tax advice regarding Fanatico and its Fanatico tokens. You should seek the advice of professional advisers for such matters. Be aware that holding Fanatico tokens may entail an indefinite financial risk.

#### No Further Information or update

No one has been authorized to provide any information or make any statements not found in this White Paper regarding Fanatico, its business, and operations, or the Fanatico tokens. Any such information or statements, if given,

should not be trusted as having been approved by Torum. The Token Sale mentioned in the White Paper shall in no way imply a continuous representation or suggest that no significant changes or developments have occurred in Fanatico's affairs, conditions, or prospects since the date of this White Paper.

# Restrictions and distribution dissemination

The sharing or distribution of this White Paper, or any part of it, may be restricted or prohibited by laws, regulations, and rules of any jurisdiction. If any restriction applies, you are responsible for learning about and adhering to any relevant restrictions, at your own cost, with no liability to Torum. Anyone who receives a copy of this White Paper must not pass it along to others, reproduce it, or otherwise distribute it for any reason and must not allow or cause others to do so.

# No offer of securities or registration

This White Paper is not a prospectus or offer document and does not intend to offer securities or solicit investment in any jurisdiction. No obligations or commitments are established, and no cryptocurrency or payment should be accepted based on this White Paper. The sale and purchase of XTM tokens will only be governed by the agreement's terms and no other document, with the agreement prevailing in case of any inconsistencies with the White Paper. No actions have been or will be taken in compliance with any jurisdiction's laws, regulations, or rules. The distribution of this White Paper does not imply compliance with applicable laws, regulations, or rules.

# **Risks and Uncertainties**

Potential buyers of Fanatico tokens (as stated in this White Paper) should carefully examine and assess all the risks and uncertainties associated with Torum's business, operations, Fanatico tokens, and the information provided in this White Paper and the Terms before making any purchase. If any of these risks and uncertainties materialize, Fanatico's business, finances, performance, and prospects could suffer significant harm. As a result, you may lose some or all of the value of your Fanatico tokens.

# Glossary

# Blockchain

A Blockchain is a database of transactions that is updated and shared across many computers in a network.

# Cryptography

Cryptography is a crucial tool that enables greater functionality, security, efficiency, and audibility in decentralized settings.

# Smart Contract

A "smart contract" is a program that runs on the Ethereum Blockchain. It's a collection of code (its functions) and data (its state) that resides at a specific address on a given Blockchain.

# **Blockchain Transaction**

Transactions are cryptographically signed instructions from accounts. An account will initiate a transaction to update the state of the Blockchain network. The most straightforward transaction is transferring a value from one account to another.

# **Smart Contract Functions**

In simplistic terms, functions can get or set information in response to incoming transactions.

# Centralized and Decentralized Exchange

Centralized and decentralized exchanges both exist to enable users to trade digital assets. They do so in very different ways, one by handling and verifying all transactions through centralized servers while the other by running as a permissionless smart contract.

# Ethereum

Ethereum is a decentralized, open-source Blockchain with smart contract functionality. Ether is the native cryptocurrency of the platform.

# Binance Smart Chain (BSC)

Binance Smart Chain (BSC) is a Blockchain platform developed by the cryptocurrency exchange Binance. It is a parallel Blockchain to Binance Chain, which allows for the creation of smart contracts and decentralized applications (dApps). BSC uses a Proof of Staked Authority (PoSA) consensus mechanism that combines Proof of Stake (PoS) and Byzantine Fault Tolerance (BFT) algorithms to achieve faster transaction speeds and lower fees compared to other Blockchains. It also supports the Ethereum Virtual Machine (EVM), which means that dApps built on Ethereum can be easily ported to BSC. BSC's native token is Binance Coin (BNB), which is used to pay transaction fees and to participate in the platform's governance.

# Tron

Tron is a decentralized Blockchain platform for building decentralized applications and running smart contracts. It aims to provide high-throughput and low latency for decentralized applications, and to allow content creators to own and control their own data. Tron is designed to be a scalable and flexible platform, and it supports various programming languages, including Solidity, the language used by Ethereum.

#### Ethereum Rollup

Rollups perform transaction execution outside Ethereum, and then the data is posted to Ethereum, where consensus is reached. As transaction data is included in Ethereum's blocks, this allows rollups to be secured by native Ethereum security.

# ERC20 Token

ERC20 is a technical standard used for smart contracts on the Ethereum Blockchain for implementing tokens. It defines a set of rules and functions that all ERC20 tokens must follow, including how tokens are transferred, how users can access data about a token, and how tokens can be approved so they can be used with other smart contracts.

This standard makes it easier for developers to create and manage tokens on the Ethereum network and ensures compatibility with other Ethereum-based systems.

#### BEP20 Token

BEP20 is a token standard for the Binance Smart Chain (BSC), a high-performance Blockchain network for decentralized applications. BEP20 is similar to the ERC20 token standard in Ethereum, but it is specifically designed for Binance Smart Chain. BEP20 tokens can be used for a variety of purposes, including as a store of value, a medium of exchange, or to represent assets in decentralized applications built on the Binance Smart Chain.

# TRC20 Token

TRC20 is a technical standard used for smart contracts on the TRON Blockchain network. It is used to create tokens that are fully compatible with TRON's virtual machine and decentralized exchange. TRC20 tokens offer faster transaction speeds and lower fees compared to Ethereum's ERC20 standard, and they can also be used to create decentralized applications and digital assets on the TRON network.

### Denominator

A denominator is a number in a fraction that represents the total number of equal parts into which a whole is divided. It appears below the line (the numerator) in a fraction and indicates how many parts make up the whole. The value of the fraction is calculated by dividing the numerator by the denominator. For example, in the fraction 1/2, the denominator is 2, which represents that the whole is divided into 2 equal parts, and the numerator is 1, which represents one of those parts.

#### Significant Numbers

In finance and economics, significant numbers are used to denote specific thresholds or benchmarks that are important to the analysis and evaluation of financial performance.

### Market Cap

Market cap, short for Market Capitalization, is a metric used to measure the value of a publicly traded company or cryptocurrency. It is calculated by multiplying the current price of the asset by its total number of outstanding shares or tokens. The market cap provides a quick and easy way to compare the relative size of different assets and is widely used to rank cryptocurrencies and publicly traded companies. A higher market cap generally indicates a more valuable asset with a greater perceived level of risk and potential for future growth.

# Floor

A floor in finance refers to the minimum price or value that an asset, such as a security or commodity, can reach before the owner of the asset can no longer benefit from it. This concept is often used in options trading, where a floor is established to limit the potential losses of an investor in a declining market. The floor provides a level of protection against further loss but also limits the potential for profit if the asset increases in value beyond the floor price.

# **References & Citations**

Financing Platforms with Cryptocurrency

Token Retention, Sales Commission, and ICO Caps: Jingxing (Rowena) Gan, Gerry Tsoukalas, Serguei Netessine

Quadratic Voting: How Mechanism Design Can Radicalize Democracy. By STEVEN P. LALLEY AND E. GLEN WEYL

https://kk.org/thetechnium/1000-true-fans/

https://blog.oceanprotocol.com/towards-a-practice-of-token-engineering-b02feeeff7ca

https://medium.com/the-coinbase-blog/the-emergence-of-cryptoeconomic-primitives-14ef3300cc10

https://github.com/CommissionerPeirce/SafeHarbor2.0