DEFIMEC
Decentralized Next-Generation Ecosystem
for Finance Platforms

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Abstract

Demec introduces an ecosystem that includes a whole set of decentralized applications for the creation, exchange, transfer, funding, and regulation-compliant management of tokenizable digital assets in the blockchain network. The demec mechanism, called DAO-based Tokenization, aims to develop tools for solving the problems of existing processes by ensuring that all tokenization processes take place in the end-to-end blockchain network. Demec also includes platforms such as Sportimec (a tokenization platform for the world of sports), Fanimec (a sustainable token economy for fans and celebrities/influencers), Startimec (provides a chance to be a part of the up-and-coming unicorn projects) and DeXimec (a multi-chain decentralized token exchange platform). Detailed explanations of the solutions developed and under development in this context are presented in this whitepaper.
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Chapter 1

DEFIMEC

1.1 Motivation

While the majority of investors evaluate their savings in conventional investment instruments such as foreign exchange, stocks, deposit accounts, bonds, bills, a secondary investor profile has a slightly higher risk appetite and prefers investment instruments with speculative income potential such as real estate and land. A tertiary investor profile, which is a smaller minority but has a higher risk appetite than the first two profiles, invests in very high-yielding instruments such as art, startups, hedge funds. The pass-through between these profiles is not only dependent on the risk appetite of the investors, but also directly related to the amount of savings the investor has. With the development of decentralized financial technologies, the minimum capital requirement for access to investment assets has disappeared, and it has become independent of geographical and citizenship restrictions. These blockchain-based improvements in investment processes have removed all limits, except for the risk appetite of the transition between different investor profiles, so that thanks to tokenization, savers of all levels have been able to invest in different investment instruments that can be converted into digital assets at any level. In this study; In addition to the tokenization platforms, where investment tools that were previously accessible only to privileged minorities were turned into digital assets and micro-investments were opened by the defimec team, the DAO protocol, where the masses living in high inflation regions could fund each other in-group to avoid the interest burden, was explained. In addition, the mechanism called Super Tokenization, which includes additional improvements made for the entire system to work integrated with each other, is explained in detail.

1.2 IMEC DAO Protocol

The rapid change in today's economy has led to the development of alternative financing methods in reaching financial resources. It causes banks to be reluctant to give loans due to decreasing resources and increasing risks. On the other hand, the increase in borrowing costs and risks causes loan interest rates, especially housing and vehicle loan rates, to remain high. The “Saving Based Interest-Free Financing System (SIFFS)”, which was created to facilitate the purchase of a house by citizens who want to own a house, especially those who are sensitive to interest and/or who do not have credibility in the banking system, and at the same time facilitate the sale of real estates in the form of housing and land that are not credited in the banking system. It has been spreading rapidly in the Islamic finance sector in recent years. The aim of this article is to analyze the risks posed by unregulated organizations and to improve these risks by using blockchain, smart contracts, crypto money, digital money and digital ID technologies, as well as the situation of TDFFS, whose number is increasing rapidly, in Turkey and in the world. It is to present a brief technical infrastructure-vision for the system, in which solution proposals are presented and why a system is needed. In international applications, SIFFS is based on the principle that the participants save money in a pool as much as the number of installments to enable people to own a house-car, digital asset (NFT, Token, etc.) with their own savings. SIFFS-DAO emerges as a new alternative for individuals who need housing but do not have sufficient creditworthiness for the banking system,
or who avoid interest-bearing investment and funding instruments due to the high classical funding costs or their religious belief or ideological view.

1.2.1 Issues of Current State

The simple way how the system works is as follows: People who want to buy a house/car are included in a group of people who have the same monthly savings as themselves. Each person has to put his savings at the end of the month into the pool created by these people. The fund formed in the monthly pool is delivered to the person whose turn it is by lottery, and it is ensured that they acquire housing. The person who buys his home or vehicle continues to fund the other members of the pool until the loan amount is paid. Thus, the savings accumulated in the fund pool makes one member a home/vehicle, digital asset owner every month. In the meantime, the intermediary institution reflects the intermediation cost and the support payment created for the pool members whose turn is late to all members of the pool. However, despite the solutions promised by the system, it carries significant risks as follows.

Lack of Transparency

Many rules pertaining to the process such as leaving the group, changing the group, etc. are unclear when you join the system, who are the other stakeholders of the fund pool you are in, who owes what cost, leaving the group.

Unreliability

The relationship between SIFFS companies and its members is based on mutual trust, and the regulation published for these institutions does not contain a state guarantee. The number of these companies is increasing and it is possible that various grievances such as non-payment of the funds accumulated in the pool will occur in the future.

Is it Savings-Based?

Since the current system is not trackable by the members and offers an unlimited number of options for each fund amount and installment requirement, there are doubts that the fund source is provided by classical financial instruments and offers interest-based solutions, not from other members.

Is it Fair?

IFFS organizations claim that the fund distribution order of the pool stakeholders is determined by drawing lots, but there are serious doubts as to whether the names included in the drawing process are real persons. Although it is said that you can become a home owner from the first day, it is not very common to find a member who wins the first place in the drawing of lots in real life.

Costs

Due to the widespread use of digital solutions in the banking system, the decreasing operational costs have not yet been reflected in this sector. All services are provided through customer representatives through branches, which causes the operation costs to increase and these increased costs to be reflected to the members in the same way.

Inflexibility

Due to the current rigid structure of the system, new products and services cannot be developed and solutions for decentralized finance applications are not produced.
Integration Hardness

The system has an autonomous structure and does not have any integration with systems such as conventional finance system, payment infrastructures, stock markets, digital assets, smart contracts, crowdfunding.

Collateral

Although your savings in the banking system can be considered as collateral, the savings of the members cannot be shown as collateral by the members, but the intermediary firm uses these savings in other projects on its own behalf.

The issues arising from the above-mentioned risks constitute an important obstacle in terms of spreading the relevant services to large masses and cause the size of the current market to be far from its real potential. Within the scope of our solution, the blockchain-based tokenization platform, which includes meaningful improvements in order to eliminate the first five of the above problems (Transparency, Reliability, Savings, Fairness, Cost-effectiveness) and to provide the appropriate infrastructure for the solution of the other three (Flexibility, Integration, Collateral) technical framework will be explained. In the second part, the tools that created this platform will be explained separately, and in the third part, the roles of these tools in the DEFIMEC architecture and their contribution to the solution will be explained.

1.2.2 Tools and Stakeholders of the System

Blockchain technologies provide us with the infrastructure to create powerful models for organizing SIFFS savings around smart contracts. In the current structure, the savings pool members make their monthly payments, but they do not have a stock or receivable-like document that is updated after each payment and shows the representation of the pool where their total payments are accumulated. In addition, these savings are not transferable and cannot be used as commercial collateral. ERC20 standard SIFFS smart contracts designed in DEFIMEC architecture consist of sub-contracts, all conditions of which are predetermined, and which are created under the main contract of the fund pool as much as the number of members. The master contract contains the basic rules of the pool, the selection algorithm, the creditor and debtor subcontractors, their IDs, the contract and platform costs, while the subcontracts represent the total savings or debt specific to each member.
These contracts, which belong to the members whose KYC and AML inquiries have been completed, can be transferred, exchanged or put up for sale based on mutual agreement. These contracts, whose ownership and share ratios can be verified in the decentralized applications ecosystem, can be traded on secondary exchanges or accepted as collateral for different debt instruments. According to the order formed as a result of the random selection algorithm in the main contract, the funds accumulated every month are transferred to the contract of the corresponding sub-contract owner independently of any intermediary. All this process is operated in the blockchain network without the risk of manipulation independent of authority. In addition, the system has the necessary flexibility to create new fund pools that can be customized for the funding of different projects such as NFT and tokens, as well as the acquisition of residential cars.

IMEC DAO Architecture

One of the major impediments to the wide adoption of smart contracts and cryptocurrencies by the established financial system is the limited traceability of these tools. Users have various concerns regarding the protection of their personal data. At this point, DEFIMEC platform smart contracts and digital ID integration architecture aims to meet the needs of both parties. At this point, keeping the identity information and documents needed for necessary inquiries in central databases carries serious risks such as serious cyber security threats and document forgery. Ethereum contracts with digital ID integration can provide a wide range of verifiable credential data, from KYC-AML inquiries to the financial status, criminal status, citizenship status, social security and assets of the contract owner. This integration offers users the opportunity to design smart contracts suitable for all kinds of needs. DEFIMEC architecture provides an infrastructure that provides absolute guarantees such as security, flexibility, traceability and regulatory compliance for the creation of new smart contract ideas such as crowdfunding, project funding and being an investor, saving savings using verifiable data. These contracts on the Ethereum open network are kept under cryptographic encryption security. In the future, it is aimed that the blockchain-based E-Voting feature will be added to the system and the decisions of the pool will be taken as a result of the voting of the pool members. Working as Business to Business and Business to Customer, Platform allows both TTFS companies and people who want to set up their own group to create fund pools and collect requests, and enable their members to access their contracts by providing API integration with their mobile wallets.

DAO Protocol – IMEC Coin

Organizations or individuals can form communities for in-group funding. In these communities, income can be obtained from some promotions or service fees under the name of the founder of the group, organization fee. However, there are some collateral obligations in order for institutions or individuals to form fund groups. This coverage ratio is considered to be between 10% and 20% of the total fund amount of the organization. This collateral must be kept as IMEC coin.

IMEC coin investors can lend their coins to organization founders who want to establish large-volume fund groups, but who do not have enough collateral, so they can get a share of the income. Organization members can make monthly installments via IMEC coin. Income and commissions from the organization are paid to the founders and lenders as IMC Coins.
Chapter 2

SPORTIMEC

2.1 Motivation

According to the Financial Fair Play (FFP), which was created by UEFA in 2011 to strengthen the financial structure of the clubs, clubs can now only create a transfer budget equal to the income they get from the sale of players. Clubs that do not meet the financial criteria are faced with many sanctions such as reprimands, bans from tournaments, fines and confiscation of their income. This situation has led the clubs to seek additional income. Advertising and sponsorship revenues do not exceed certain targets as they are directly proportional to sportive success. As a result of various fan campaigns created by the clubs, limited and non-sustainable incomes are obtained. One of the most important income sources of sports clubs is the earnings from the sale of players. Also, the most important investment in professional football, both in sporting and commercial terms, is players. However, due to the FFP criteria, young players with potential are transferred to the club that offers the highest transfer fee, not the club that offers the best opportunities for development. While this fact increases the income gap between the clubs, it also causes many players with high development potential not to reach the expected target values.

2.2 Sportimec: Market Value Tokenization Platform

The Sportimec platform is a decentralized crypto-asset platform that enables fans to support and participate with the token supply by converting the market values of the players, the most valuable asset of sports clubs, into tokenizable digital assets on the blockchain network. By making player performance data and market valuation processes transparent and traceable, the system provides investors with functions for the creation, sale, transfer and exchange of tokens, which represent the existence of players with a potential to increase in value, and represent their presence in the contracted club, over a decentralized network. Token holders receive various rewards and incentives from player’s performance-driven value increase. Starting from the player selection, all processes related to tokenization and the obligations of the parties are explained in detail, which is the subject of this document.

Sportimec is a tokenization platform created to ameliorate financial bottlenecks in the sports industry through token supply. It enables the market value of the player to be tokenized through blockchain-based smart contracts and made available for use in a regulation-compliant manner. While providing liquidity to the player testimonial market value, it also offers its fans the opportunity to provide player-specific support to the club and win various rewards for this support.

The whole process is operated within the scope of decentralized finance applications and is carried out under cryptographic data security. In addition, the storage, transfer and transfer of all digital assets created are monitored in the blockchain network 24/7. Token holders can easily exchange or cash in their tokens on the Defimec decentralized exchange, another platform developed by Defimec.

The Sportimec platform indexes the club’s rights on the player to the market value resulting from the valuation algorithms it has developed, making it possible to tokenize it without giving third-party ownership
2.2.1 Data-Based Market Value Calculation Methodology

Player Characteristics Parameters

The physical and demographic characteristics of the player are taken into account in this calculation. Age, right foot, left foot and ability to use both feet, height, speed, weight, playing position (wing, defender, goal, striker, midfielder), nationality are the basic parameters used in this calculation. Existing studies show that the market valuation of players who are discriminated against due to their demographic characteristics is also below expectations.

Performance Indicators

It contains data for the analysis of the match performances of the players. It mainly consists of data on shots, assists, distance run, time played, number of goals, number of fouls, number of yellow and red cards, percentage of passes, steals and losses.

Current Team and League Parameters

Data such as the country where the players are located, the league and the team they play and the success ranking of the team are included in the market valuation.

Player Popularity

The player’s social media interactions, analytics, and the number of followers and news content are included in the calculation by reference.

2.2.2 Market Value Calculation

A player’s market value (PMV) is a function of $PCh$ (player’s characteristics), $PPer$ (player’s performance) and $PPop$ (player’s popularity). PMV is calculated as follows:

$$PMV_{i(t(l)*p*c)}[s] = \alpha_i(t(l)*p*c)[s] + \beta \times PMV_{i(t(l)*p*c)}[s-1] + \chi' \times PCh_{i(t(l)*p*c)}[s] + \delta' \times PPer_{i(t(l)*p*c)}[s] + \gamma' \times PPop_{i(t(l)*p*c)}[s] + u_i(t(l)*p*c)[s] + u_i(t)*u_p + u_c + u_s + u_{i(t(l)*p*c)}[s]$$

where $i(t(l)*p*c)[s]$ indexes a player $i$, who is nested within each of three factors that are crossed with each other: a team $t$ (which is further nested in a league $l$), a position $p$, and the continent of origin $c$ corresponding to season observations $s$ (adapted from [1, 2]).

2.3 Player Tokenization Process

2.3.1 ICO

The first step of the process starts with the market value analysis as a result of the aforementioned data of the player to be tokenized by the sports club. This value analysis is also reviewed by the player expert commission consisting of professional scouting teams and approved after the price valuation and the ICO process is started. ICO applications for player profiles that are not approved by the Scouting teams and do not have sufficient potential for value increase will not be accepted. The transfer cost of the accepted player is tokenized at rates ranging from 70% to 20%, but the club only sells the amount of funds it needs.
Table 2.1: Notation

\begin{align*}
W & \quad \text{player token offering valuation} \\
W' & \quad \text{player token burn valuation} \\
S & \quad \text{total token supply} \\
s[i] & \quad \text{club token ownership amount} \\
s[k] & \quad \text{platform token ownership amount} \\
s[l] & \quad \text{player token ownership amount} \\
s[n] & \quad \text{fun token ownership amount} \\
p & \quad \text{initial token sale unit price} \\
p' & \quad \text{token closing unit price} \\
t & \quad \text{token lifetime} \\
r & \quad \text{tokenization rate}
\end{align*}

Table 2.2: Notation

\begin{align*}
i, k, l, n & \quad \text{a value } [0, 1] \in \mathbb{R} \\
S & \quad \text{supply distribution} \\
u & \quad \text{initial investment percentage for fun tokens} \\
p & \quad \text{initial token price} \\
p' & \quad \text{token burn price}
\end{align*}

2.3.2 Contract Process

ERC20-based tokens are designed to include the obligations of the parties. ICO contracts have the same validity as the player’s contract with his club. In case of transferring the player to another club before the contract period expires, smart contracts from the investors are burned in exchange for the prize and promotion to be distributed. In the case of a free transfer, the contracts are burned and removed from circulation, as the team does not have any property rights over the player.

2.3.3 Award and Promotion Model

Depending on the club’s revenue as a result of the player’s transfer to another team, various rewards are given to token holders. These awards could be in the following forms:

- NFT
- Token of other player(s)
- Cryptocurrency
- Attending social events with the club or team
- Match tickets

The prize volume to be distributed is distributed proportionally to the amount of tokens held by the token holders after the token burn price is defined. We have revisited [2] and provide a more precise calculation for the token initial offering price and token burn prices as follows.

2.3.4 Insurance Model

All sports clubs are required to create an insurance fund of their own player tokens. Reserved for token holders who have received their tokens but are unable to obtain any rewards from these tokens, this fund is used to reduce token holders’ losses while zero-yielding tokens are burned.
Insurance fund reserve per token calculation

Insurance fund reserve per token (IFR) is calculated as follows:

\[
IFR(W, W') = \begin{cases} 
(W' - W) \times 0.3, & \text{if } W' > W \\
(W - W') \times 0.1, & \text{otherwise}
\end{cases}
\]

Distribution of Circulating Tokens

The player contract with the T time period is divided into six-period periods and it is aimed to keep the inflationary pressure on the amount of tokens in circulation under control by means of locked tokens. For this purpose, while the club can circulate only half of its tokens in T4 and T5 periods, the tokens owned by the Player are kept locked. Investors, on the other hand, can circulate their tokens in other time periods apart from the first two periods, T1 and T2 periods.

2.3.5 Gamification

![Figure 2.1: Challenge Team Illustration](image)

Token holders are entitled to establish their own fantasy football teams when the number of tokens they own exceeds 11. Thanks to this fantasy football team they have, they gain the right to participate in competitions with different awards and promotions. The total market value of each fantasy team is calculated daily by summing the market valuation resulting from the real-life performance and success of the players. As a result of this valuation, daily, weekly, monthly and seasonal prizes are distributed to the most valuable fantasy teams. Each fantasy football team competes with other teams in a similar budget range in leagues divided into categories according to the budget value it has.

2.3.6 Token Marketplace

Token holders can sell their tokens in the marketplace after the lock period of their tokens expires after the initial supply. The tokens that are put up for sale are purchased by the buyers who accept the offered sale price and transferred to their accounts.

2.3.7 Price Formation

Until the token burning process, pricing is determined by the supply and demand situation on the token exchange platform. The most recent sale transaction determines the current price of the token. In the token
burning process, the closing price is determined by dividing the value created by the player’s closing market value calculation by the number of tokens offered, and a fixed value calculation is made.

2.3.8 Token Burning

In the case of the player’s contract ends with his current team, the tokens in circulation are collected against their fixed values over the calculated token burn fixed price, and the burning process is carried out to be removed from circulation. For this purpose, the value of the token and the unit valuation announcement per token are announced on the Sportimec and DeXimec platforms. A purchase order is created up to the token supply amount over the fixed valuation price of the token to be burned. In this way, all the tokens in circulation are collected from the market and the reward and promotion sharing process takes place. All collected tokens are burned and removed from circulation.

2.4 User Interfaces

2.4.1 Player Profile Page

The profile page containing the necessary information, documents, statistical data, analysis videos and reports of the player whose ICO process has been approved is created as follows and the token is opened for sale.

![Figure 2.2: Player Profile Interface](image-url)

2.4.2 Wallet Integration and Purchase

Investors must have an account in one of the supported decentralized wallet types in order to transact on the Sportimec platform. Thus, users can easily transfer their tokens to dex platforms. However, for users who do not want to use a decentralized wallet, the Sportimec platform also provides digital asset custody services. Tokens owned by users can be kept in cold wallets and locked until the burning process.

After completing the post-member wallet linking process from the relevant menu, the investors can proceed to the purchase process and purchase the token of the player they want with one of the payment methods they choose.
ERC20 type tokens are transferred to the account after the payment is made to the investors’ decentralized wallet accounts. Thus, the relevant players gain the right to have a share in the revenues to be obtained after the transfer. All obligations of the parties are guaranteed by legal agreements and recorded in the blockchain network through smart contracts. Investors can easily sell their tokens on decentralized clearing exchanges such as deximec. Developed by the Definec team, the DeXimec multi-chain decentralized exchange supports exchange of player tokens.
Chapter 3

FANIMEC

3.1 Motivation

Although the concepts of social media, NFT, fan token and metaverse are growing rapidly, influencer marketing methods are still in their infancy. As brands continue to seek more transparent, data-driven and performance-driven solutions in celebrity/influencer marketing, people with a follower base need more effective ways to profit from their influence. However, both brands and celebrities/influencers face numerous challenges (e.g. fraudulent social media activities, lack of data-driven solutions, lower earnings by impact, brokerage commissions, payment issues, limited engagement space) etc.). The lack of a common solution suitable for the needs of brands, celebrities/influencers and their followers hinders the sustainable growth of celebrity and influencer marketing in the digital age. Creating a token specific to the name of people with each follower and creating a sustainable token economy will both close a big financial/economic gap and prevent many fraudulent situations that social media giants cannot find a solution. In addition to being an important platform for determining the real market value of celebrities and influencers, our solution aims to reduce costs for brands by eliminating intermediaries in brand-person collaborations, and to increase the revenues of celebrities/influencers. As part of this project, we propose a celebrity/influencer-centric ecosystem within the metaverse that will not only allow for better monetization mechanisms for celebrity and social media influencers, but will also address brand and follower challenges, enabling all parties to succeed in Web 3.0.

3.2 Fanimec: Sustainable Token Economy for Fans

Fanimec embodies the abstract concept of individual brand value and transforms it into real market value. In today’s conditions, these subjective valuations based only on social media trend analysis can be obtained as a result of the formation of a certain volume of cumulative data, while it is far from defining the exact equivalent of the brand value in the current conditions. However, it is certainly possible to build an influencer-centric metaverse on top of leading SM platforms that will address common challenges from all active parties (influencers, brands, and followers) and offer a better incentive-based business solution on the blockchain. As social media (SM) moves into the metaverse, our vision is to build an ecosystem centered on the micro-economies of audiences within the metaverse, where SM influencers, brands, and followers can easily interact in a transparent and encouraging way. Fanimec is the ecosystem where corporate brands and their fans who can represent these brands and their followers meet in the metaverse universe and their activities are accessible with fan tokens. A platform where brand values can be opened to the masses and traded 24/7 will allow those brand values to reflect the market equivalent and interaction potential instantly. Through Fanimec, we aim to transform SM Influencers into metaverse entrepreneurs and enable all stakeholders, influencers, brands and followers to experience the next level digital economy.
3.2.1 Current Issues and Limitations

Despite the social media trends of the metaverse, fan token, and NFT concepts, celebrity/phenomenal/influencer marketing is still in its infancy and there are still unaddressed challenges within the audience, brand, and follower triangle. Also, the vast majority of celebrities and social media influencers are not leveraging the concepts of NFTs, Metaverse and blockchain. To highlight, the Influencer market alone is still only worth $15 billion, while the estimated addressable market of metaverses and NFTs is more than $1 trillion. Below we highlight the current issues from each side’s perspective.

Issues related to brands

There are following issues:

- High commissions paid to intermediary institutions and organizations
- The real market value of the influencer/phenomenon/celebrity is subjective and the exact value cannot be determined
- Difficulty and loss of time in finding the right brand representatives
- Fake SM activity and fake following of an influencer. Lack of in-depth SM audience analytics
- Lack of established standards and quality of published content when it comes to delayed communications to brand representatives and contracts that can significantly affect the management of content requirements.
- Difficulties in processing payments (including government regulations), especially if the parties are located in different countries.
- Trust concerns between brands and their representatives. It is a common problem where one of the parties is anonymous.
- High saturation rate (highly sponsored posts) and no disclosure of past sponsorships by a brand representative.
- Difficulty tracking overall campaign results, particularly sales.
- Inability to follow the product rating of a follower who bought the product.

Issues related to fan owners

- Giving a commission share of the income of intermediary organizations or people
- Brand offerings that demand higher quality posts but offer lower rates.
- Difficulty monetizing their audiences directly (selling products and services or generating advertising revenue). Lack of commercially oriented solutions.
- Uncertainty in the product quality of the brand, which may lead to the loss of credibility of the target audience.
- Risk of losing credibility due to sponsored posts. If the sponsor becomes the target of public backlash, this can become a major issue for the audience member.
- Inability to gather all followers in one place and address them.
- Audience owners’ content is not valued as much as it should on leading SM platforms.
Issues related to followers

The parasocial relationship between celebrities/influencers and followers, beyond opinion leadership, followers are often more eager to engage if celebrity content is more authentic. However, in the context of commercialized celebrity-follower relationships within the narrow scope of instant messaging, follower engagement is mostly limited to SM features such as “likes”, “comments” and “shares”. While some popular SM platforms have already implemented rewarding systems like badges or karma points, and even the ability to tip celebrities, a comprehensive solution for audience owners and communities is lacking. Additionally, followers are more interested in interacting and supporting all SM channels of an influencer in one place without constantly visiting different platforms. The methods mentioned above are far from fostering the sense of belonging of the followers and cannot offer a solution based on loyalty.

3.2.2 Fanimec Ecosystem Fan Tokens

The Fanimec platform offers community leaders individual ERC20 type fan tokens to be made available to their followers. Token holders thus gain access to the interactions, products, and services of the issuer. These owned tokens can be easily exchanged according to the trading pair on the exchange platform.

3.2.3 Investing in Potential of Influencers

Revenues from the community leader’s initial supply of the fan token are transferred to the relevant token pool, which we call the insurance reserve, in the range of 3 – 10%. On the other hand, 5% of the trade revenues generated as a result of the tokens being circulated and opened for buy/sell transactions are transferred to this pool. As long as the fan owner continues to interact on the Fanimec platform, the revenue stream continues to this pool. As a result of this design, the valuation in the potential of fan community leaders with future potential is also reflected in the token unit price. The increase in the value of the token unit price and the interaction variety of the person and the volume also increase the revenues coming to the pool from buy/sell transactions. Income flow to this reserve pool continues as long as the tokens are circulating on the blockchain network. When these reserve tokens are decided to be removed from circulation, that is, in case the tokens are burned, they are distributed to the token holders at the rate of the token they have. In the management process of the reserve pool, the token holder is jointly managed by community decisions. According to these joint decisions, issues such as burning some tokens, distribution of some reserves to token holders, managing the reserve resource, sponsorships and brand agreements can be decided.

3.2.4 Embodying the Brand Value and Rating of the Influencers

As a result of the tokenization of a celebrity/phenomenon/influencer name, the unit valuation of the fan tokens opened for trading is multiplied by the total token supply, resulting in the market value of the person based on the real supply and demand. Since this resulting market value is calculated according to supply and demand, it allows it to be used as a real-time value analysis and rating calculation tool. This market value, which emerges in terms of choosing the right person for the cooperation of the brands, will be used in the rating of the influence level of the community leaders when evaluated with parameters such as the sector, demographics and country.
Chapter 4

DEXIMEC


The motivation of a multi-chain decentralized exchange comes from the fact that automatic market-making algorithms in different blockchain networks that operate independently of each other can be run on a single platform through optional network selection. Users can perform clearing, liquidity pool and transfer transactions through decentralized wallet integrations. The Deximec platform supports decentralized exchange and liquidity pool transactions conducted on the following blockchain networks:

- Ethereum - Active
- Solana
- Avalanche - In development phase
- Binance Chain - In development phase
- Uniswap protocol for Ethereum network transactions

4.2 Super Tokenization

Super Tokenization is a tokenization process in which all processes from issuance to clearing transactions in decentralized exchanges are carried out on the blockchain network, including the integration of Digital-ID and DAO protocol. The Defimec team aims to make the following improvements to the classical tokenization processes.

4.2.1 KYC-AML and Digital-ID

Existing Know Your Customer and Anti-Money Laundering (KYC-AML) checks and user approval processes are based on uploading user documents to the central database and querying the information contained therein. However, this structure carries serious cyber security risks and creates a weakness in terms of the tokenization process. In addition to smart wallet account information, contract ownership can be defined in two ways by adding Digital-ID information to the ownership functions of ERC20 type smart contracts. The Id-no included in the smart contract allows for verifiable data query in the decentralized digital identity network. In this way, only the data required for verification, not all the identity data of the contract owner, can be obtained from the blockchain network. In this way, KYC-AML processes can be carried out without the need for central database records.
The name Imece refers to a voluntary cooperation to meet the common needs of a member or community in the community. This common cooperation culture from ancient times to the present came together with blockchain technologies and created the IMEC DAO protocol. The main usage areas of IMEC Coin, designed as the digital money of the Definec ecosystem, which emerged from the combination of the words Decentralized Finance and Imece:

- It can be transferred without the need for a third party authority
- Allows traceable and transparent transactions in the blockchain network
- Provides low-cost early access to digital assets produced within the ecosystem
- Participates in DAO organizations
- Staking rewards
- Gives a voice in community decisions
- Profit from swap income in liquidity pools
- It can create passive income by lending to groups that want to establish a DAO organization for collateral purposes.

### 4.3.1 Token Economy

The amount of tokens to be distributed, tokens to be locked, and tokens to be produced are presented in the table below. Definec, Funding and cooperation reserves in the table require long-term holding, with a minimum of 1 year. Token sales can be made on the condition that they adhere to the period of unlocking periods. The Dex Pool reserve is reserved for creating liquidity pools in decentralized exchanges.
DEFIMEC White Paper

4.4 Conclusion

Defimec introduces an ecosystem that includes a whole set of decentralized applications for the creation, exchange, transfer, funding, and regulation-compliant management of tokenizable digital assets in the blockchain network. You will see a grounded world of dreams at Defimec Blockchain Technologies.

Sportimec is a specialized platform that combines tokenization and fantasy football, which offers all participants of the sports ecosystem the opportunity to support the sports ecosystem and obtain various rewards and promotions from it. Sportimec Tokens are primarily a platform where utility tokens are generated that enable clubs, fans and investors to support and invest in current or prospective contract players of football clubs and the club through the token supply. It is a sportive success investment tool and support mechanism on the axis of financial sports support and incentives, which does not have the characteristics of a capital market instrument that gives rights to partnership, shareholding, stock, etc.

With this system, fans get tokens based on their support amount, while users support their teams and users support the sports ecosystem. Thanks to the sportive success of the club and the player, which is the subject of the amount of support, the value of the tokens in their hands will vary depending on supply and demand, and thus they will have the chance to make a profit. Thanks to the Sportimec system, sports clubs can obtain alternative earnings in accordance with all local and international sports law, capital market law and banking law rules.

Fanimec is an ecosystem where community leaders, brands and followers come together without intermediaries and where relevant interactions take place in the meta universe, as well as providing the solution to many problems such as payment and transfer costs, investment in potential, choosing the right campaign and the right person, using the blockchain infrastructure and web3 plugin.

We have introduced DeXimec, our decentralized exchange platform, in order to provide liquidity to high-value assets that cannot be easily exchanged and for them to be traded safely. We have created IMECCOIN in order to be used as a way of interchange in all of our products and services.

In order for the system to comply with the scientific, rational and accountability principles of valuation and supply, the Defimec system and its operation operate on a special scouting system. Here, the tokenization parameters of the stardom whose market value will be tokenized will be determined according to sporting and

<table>
<thead>
<tr>
<th>Vesting</th>
<th>Supplied Token</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M1</td>
</tr>
<tr>
<td>Staking</td>
<td>10,000,000</td>
</tr>
<tr>
<td>Pre-Sale</td>
<td>30,000,000</td>
</tr>
<tr>
<td>Private Sale</td>
<td>50,000,000</td>
</tr>
<tr>
<td>Community Sale</td>
<td>20,000,000</td>
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<tr>
<td>Dev.Team</td>
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<tr>
<td>Marketing</td>
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<td>Defimec Platforms</td>
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<tr>
<td>Collaboration</td>
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<tr>
<td>Ecosystem Fund</td>
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<tr>
<td>DAO Fund</td>
<td>10,000,000</td>
</tr>
<tr>
<td>DeX Pool</td>
<td>20,000,000</td>
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<tr>
<td>Non Profit Fund</td>
<td>10,000,000</td>
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<tr>
<td>Total Supply</td>
<td>40,000,000</td>
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<tr>
<td>TOPLAM</td>
<td>650,000,000</td>
</tr>
</tbody>
</table>

Figure 4.2: Token Economy Table
financial criteria, and these reports will be made available to those who want to players/clubs, fans and investors. Since the Defimec tokenization will be subject to the offering subject to the minimum and maximum eligibility and valuation criteria, there is no supply of every player’s token in the system.
Bibliography
