D-core

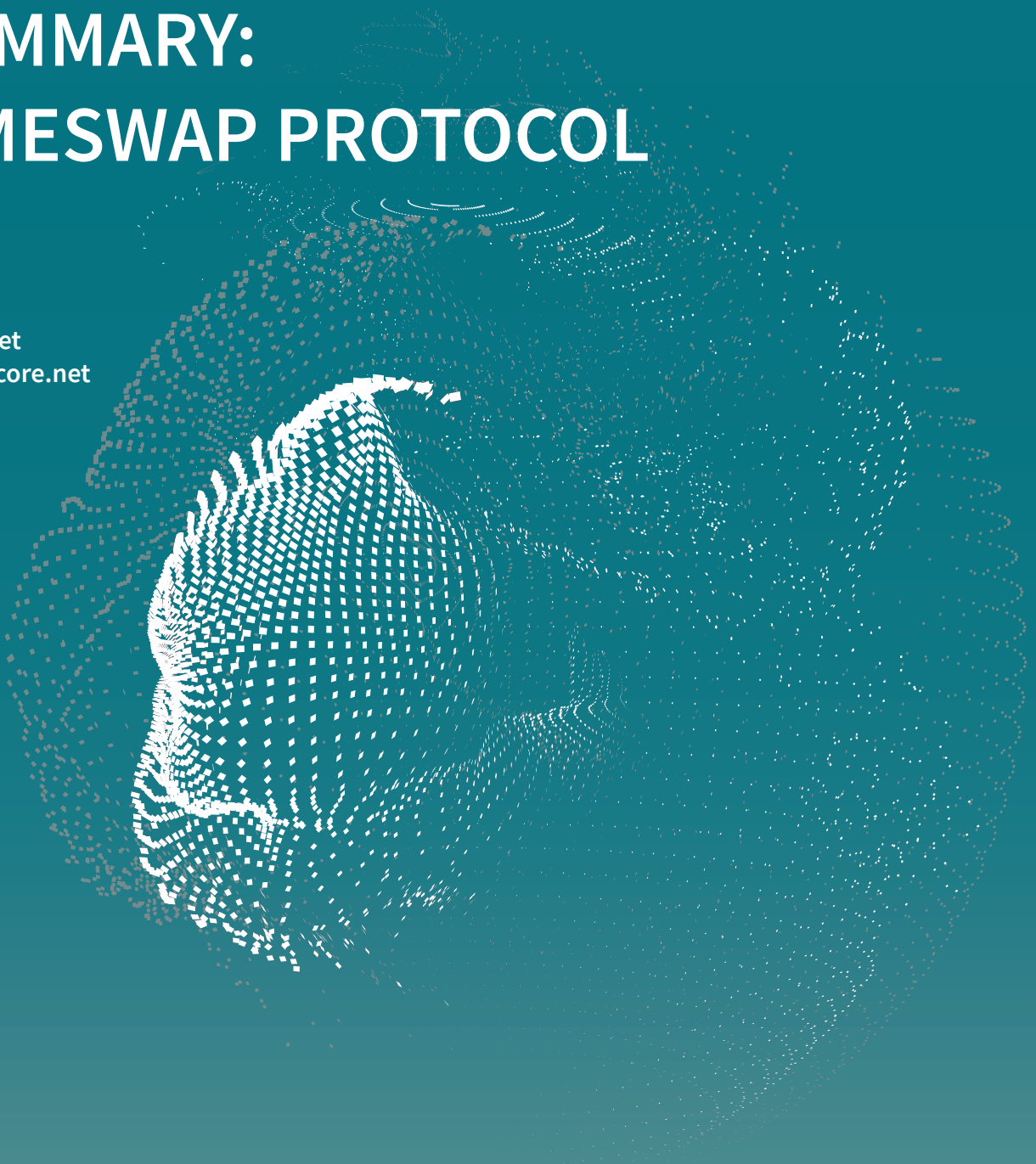## ASSET REVIEW SUMMARY: TIMESWAP PROTOCOL

d-core.net
info@d-core.net

Asset Review Summary

Timeswap Protocol

Executive Summary

Timeswap is a fully decentralized AMM-based money market protocol offering fixed maturity, non-liquidatable loans for any ERC-20 token against any other ERC-20 token as collateral.

Timeswap, the first-ever oracle-less money market protocol, is secured from any oracle manipulation attacks and can work self-sufficiently without liquidators. Timeswap's vision is to become the most secured, capital-efficient, permissionless, and oracle-less lending & borrowing platform.

According to the company's estimates, the market opportunity for Timeswap Labs amounts to $1.8 trillion in the United States alone. This is due to the increasing number of companies moving into the digital asset industry.

Its protocol, product, and overall technology aim to be "lego" blocks upon which other Decentralized Finance (DeFi) developers can build. A central element of this project is the three-variable model it uses for the AMM, differentiating it from the traditional formula used by Uniswap.

It has concluded at least five code audits since mid-2021, including one carried out by Code4rena, including a bounty program. Timeswap has a large presence across social media.

Timeswap was deployed on Polygon's Mainnet in March 2022, reducing gas costs compared to the Ethereum blockchain. User engagement with the product has demonstrated a favorable trend, with over 30,000 transactions carried out by more than 5,600 different wallets.

Timeswap plans to issue the TIME token, which will play a role in LP/fees in the protocol, strategic partnerships, future projects, and DAO treasury management.

The company behind the project is registered in the British Virgin Islands, but most of the team is based in India.

The team is highly qualified, with professionals from top crypto sector companies, well-known advisors, and highly skilled developers. Several reputable investment houses have concluded partnerships with Timeswap Labs.

Our researchers gave Timeswap a final rating of B+. The breakdown of this rating is available at the end of this report.

Product & Company Description

Introduction to Timeswap

Timeswap aims to be the world's most advanced decentralized Automated Market Maker (AMM) protocol that is self-sufficient, non-custodial, gas efficient, and does not require oracles or liquidators to function.

Timeswap developed a proprietary three variable AMM,[1] taking Uniswap's V2 AMM as a model. It is simple, elegant, gas-efficient, and permissionless, enabling anyone to create a financial market for any ERC-20 token. As the company stresses in its whitepaper, "the maturity time of deposits and loans can be set at any time, giving users astounding flexibility to make money markets that fit the time preferences of most people."[2]

Timeswap does not require oracles because a pool's interest rates and collateral factors are determined by a unique three-variable constant product AMM rather than by any asset price.

Timeswap aims to:

- Build the most secure, self-sufficient, oracle-less money market protocol.
- Be fully permissionless, thereby unlocking liquidity for untapped long tail assets.
- Build the most capital-efficient money market using market-driven interest rates & collateral ratios.

---

[1] "Introduction - Timeswap - GitBook." https://timeswap.gitbook.io/timeswap/. Accessed 13 Jul. 2022.

[2] "Whitepaper - Timeswap." https://timeswap.io/whitepaper.pdf. Accessed 12 Jul. 2022.

Fixed Maturity Time
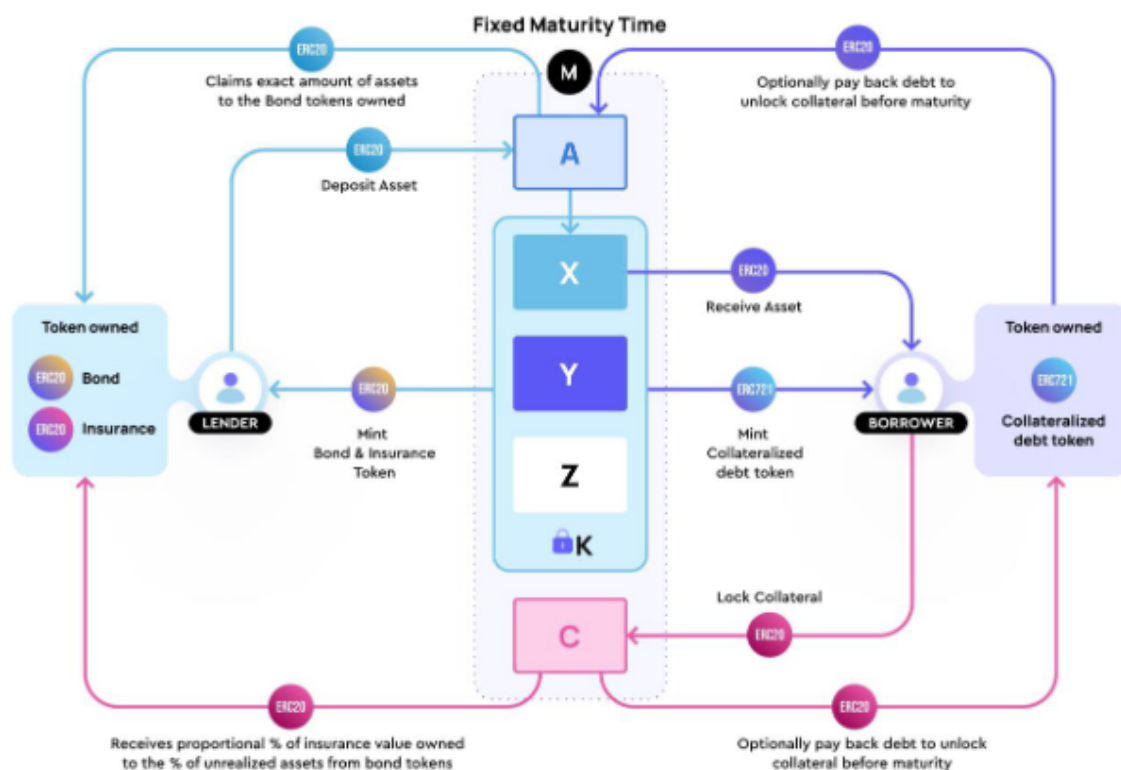
Timeswap's protocol design. Source: Timeswap Whitepaper

Salient features of Timeswap

- **Market-driven interest rates and collateral ratios:** Interest rates are determined by the demand and supply from the interaction between lenders, borrowers, and Liquidity Providers (LPs).
- **Oracle-less:** Probably, the most potent Unique Selling Proposition of the project, oracle-lessness can immunize users to any exogenous threats relating to oracle integrations.[3]
- **Permissionless:** Anyone can create pools for lending and borrowing of any ERC-20 token with any other ERC-20 token as collateral. Users can also decide on the maturity date.
- **Fixed maturity:** Fixed maturity pools enable the creation of fixed maturity financial products.
- **Isolated Markets:** Pools are secluded (going by the adage, "not all eggs in one basket"); hence, an issue in one pool does not necessarily affect the others.
- **Minimal attack vectors:** It is believed that attack vectors are minimized since the protocol is oracle-less and there are no liquidators.

---

[3] "So you want to use a price oracle - samczsun." 9 Nov. 2020, https://samczsun.com/so-you-want-to-use-a-price-oracle/. Accessed 13 Jul. 2022.
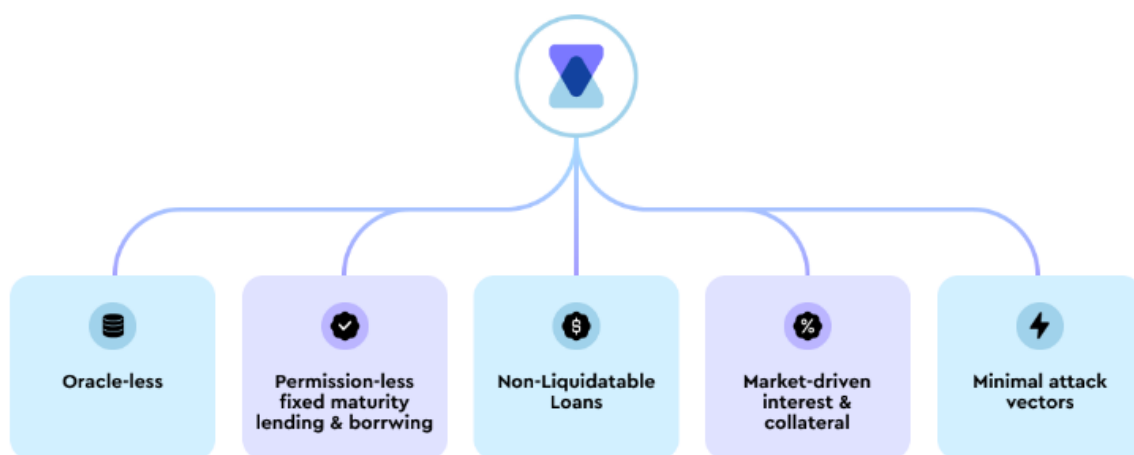
Salient features of Timeswap. Source: *Timeswap GitBook*

Timeswap attempts to improve upon the current lending and borrowing market. **Its approach to enhancing the current market status quo is by introducing a three-variable AMM model, which by design becomes oracle-less.**

Timeswap has spearheaded significant developments that not only make it stand out from its competitors but also make it much more usable in functionality terms. The methodology for getting or giving away assets is based on a novel mechanism, and an improved User Experience is a central feature of the product.
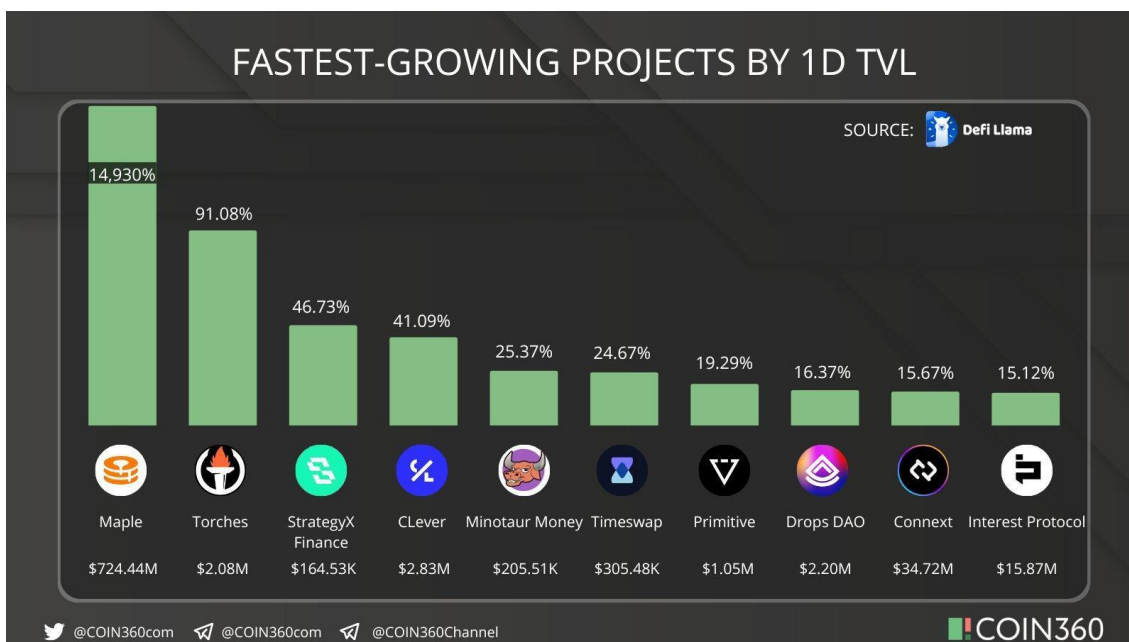
Timeswap stands among competitive projects in DeFi. Source: *COIN360com*

Success factors

These are the factors that could help the project to succeed:

- Borrowing in traditional markets has become an increasingly complex affair. Timeswap aims to address that by providing an AMM-based platform that is permissionless, easy to use, and does not penalize liquidations.
- Timeswap provides a system that works on fixed-income AMM-based protocols and is very secure: it does not rely on oracles, which have been the gateway for frequent exploits and hacks in DeFi.
- The growing DeFi market and the opportunity it offers for Timeswap.
- The project has the support of large investors in crypto. Moreover, since its inception, it can count on the help of experienced and high-skilled advisors from reputable industry companies and projects.
- Timeswap has achieved remarkable milestones in 2021 and successfully launched its app on Polygon's mainnet in March 2022. Moreover, it already counts the support of almost 30k community members and will launch its v2 in the coming weeks.

Market Conditions and Competition

Market Conditions

As stressed in the project's technical documentation, Timeswap pools are comparable to fixed income products in traditional financial markets wherein companies issue secured bonds with fixed time preference for managing their cash flow from operations.[4]

Global bond markets amount to more than $100 trillion, but it is possible to consider asset-backed bonds as an equivalent of Timeswap pools. **Asset-backed bonds represent over $1.8 trillion** in value just in the United States, according to the Securities Industry and Financial Markets Association (SIFMA). This portrays the large size of traditional bond markets. As an increasing number of companies move into the digital asset industry, Timeswap Labs believes there is a significant opportunity for seizing this market.

Recently, the DeFi ecosystem, dominated by protocols like Aave and Compound, has witnessed the supremacy of players which offer solutions based on algorithmic lending with variable interest rates for lenders and borrowers.

As of July 7th, 2022, the total value locked in DeFi is $77.98 billion, out of which $17.68 billion of assets are locked in lending and borrowing protocols.[5] In other words, 22.68% of the value locked in DeFi is in this sector. The most important takeaways from the above numbers are:

- Only 7.8% of crypto assets are locked in DeFi today.
- Lending and borrowing is the primary use case within DeFi.

Indeed, in mainstream DeFi money markets such as AAVE and Compound, only a few assets can be used as collateral, which results in a large unexplored long-tail asset market with billions of dollars of value that could be released. Moreover, the governance procedures for establishing new markets are costly and inefficient to face market demand and are vulnerable to anti-competitive behavior.[6]

---

[4] "The Money Market - Timeswap - GitBook." https://timeswap.gitbook.io/timeswap/getting-started/money-market. Accessed 12 Jul. 2022.

[5] "Lending TVL Rankings - DefiLlama." https://defillama.com/protocols/lending. Accessed 7 Jul. 2022.

[6] "Significance of a Permissionless & Fully Decentralized Money Market." 20 Mar. 2022, https://timeswap.medium.com/significance-of-a-permissionless-fully-decentralized-money-market-91458 34cf487. Accessed 7 Jul. 2022.

Competition

In the crypto market, lending and borrowing is not something that protocols have made easily accessible to the average user.[7] Mainstream platforms in DeFi worth mentioning are Uniswap, Aave, Compound, Maker, Yearn, and Sushiswap. They are not always fully decentralized, and capital inefficiencies abound.[8]

A couple of the distinct advantages that Timeswap has to offer its users are:

- **The protocol enables users to perform fixed maturity-based lending and borrowing**. Most importantly, any ERC-20 token can be lent or borrowed for any other ERC-20 token used as collateral.
- **Liquidators are excluded from the equation altogether, which makes things much easier for borrowers.** Users do not depend on liquidity providers to maintain their debt health.
- **Risk profiles are no longer fixed depending on users' historical records.** They have the flexibility to set interest rates.
- **Projects are allowed to take on debt using their own tokens**. This method enables many developers to launch new systems, platforms, and games without relying on third-party liquidity.
- **Increased security since it does not rely on an oracle**. A true innovation in the industry, potentially allowing Timeswap to unleash what they call "*DeFi 2.0*".

Timeswap is displaying a strong performance against other DeFi projects which — in most cases — are much larger. The project is trying to position itself in a landscape already dominated by very competitive DeFi actors: Maple, Connext, Interest Protocol, Clever, and Drops DAO. Smaller companies of interest are StrategyX Finance and Minotaur Money. However, if we narrow the market analysis down to the Polygon Ecosystem, Timeswap has recently outperformed all competitive DeFi projects (7 days TVL Growth):

---

[7] "Timeswap ICO - Pre-Sale Review, Whitelist and Price - ICODaily."
https://www.icodaily.net/ico_listing/timeswap/. Accessed 7 Jul. 2022.
[8] "Introducing Timeswap ⏳ - YouTube." 21 Oct. 2021, https://www.youtube.com/watch?v=Y1_xMf11WSl.
Accessed 12 Jul. 2022.
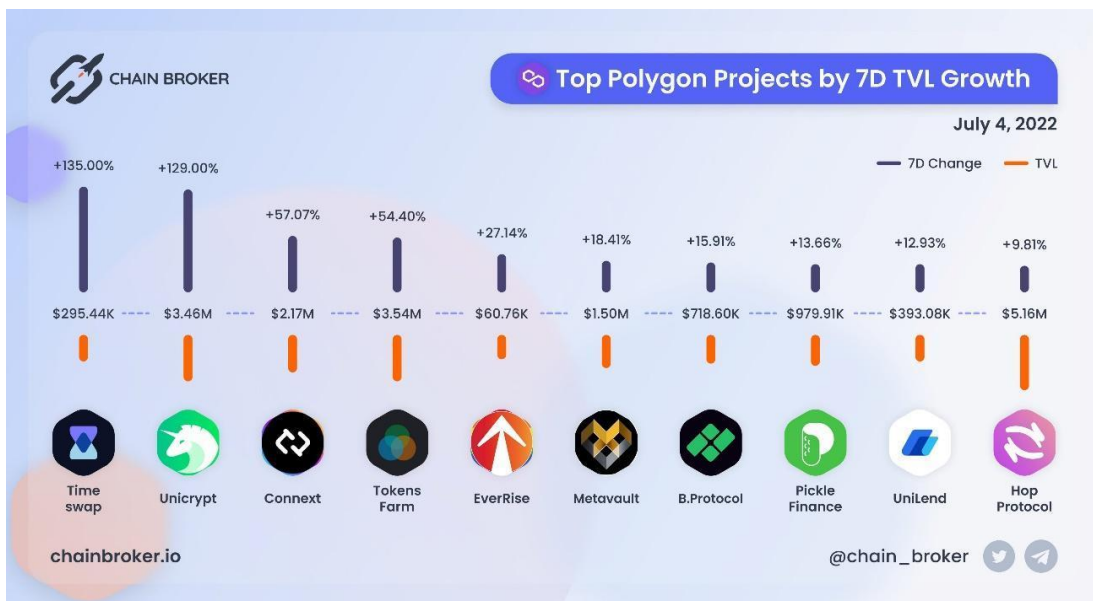
Timeswap's performance in the Polygon Ecosystem (DeFi). Source: chainbroker.io Twitter.

Technology Review

Product

The company already has a Minimum Viable Product (MVP) available on their website, the Timeswap app in Alpha. Per our research on Timeswap's dashboard, since the Mainnet launch in March 2022, a total of 30,806 transactions have been carried out in the dApp via 5,667 unique wallet addresses.

Moreover, a total of $845,184 has been lent on the platform, while $851,530 were borrowed. As the company explains on its technical documentation website, "borrowers lock collateral stakes at whatever amount they are comfortable over and above a minimum collateral derived by the AMM. The collateral locked will never be liquidated in the life of the debt."[9] Borrowers must pay the debt before maturity to recover their collateral stake. Otherwise, their collateral will be distributed to lenders.

Judging by the lending and borrowing activity, the protocol fees are minuscule: $242.60 spent on "Total fees in" and $45.41 on "Total protocol fees."[10]
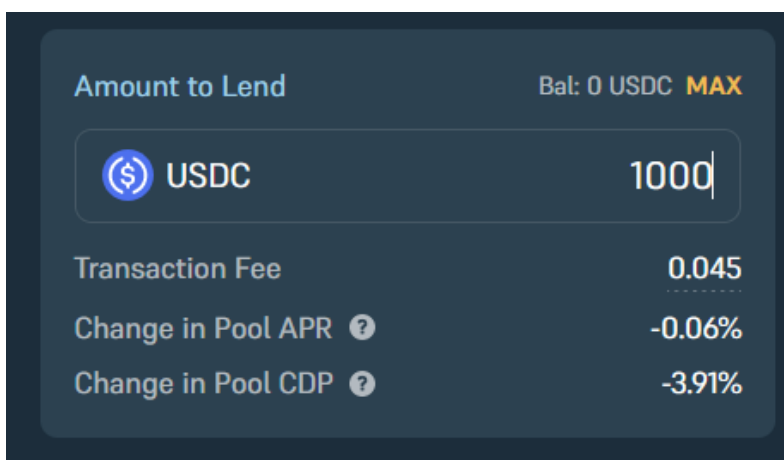
Updated User Interface of Timeswap. Source: Medium

Timeswap V2

According to a recent post on the project's Medium blog, Timeswap V2, a more capital-efficient version of the protocol, is under active development.[11] It expects to launch the testnet within the

---

[9] "Timeswap 101: A simplified explainer."
https://timeswap.medium.com/timeswap-101-a-simplified-explainer-fe098a2ec378. Accessed 13 Jul. 2022.

[10] "Timeswap Dashboard" https://dune.com/ameeth/Timeswap. Accessed 6 Jul. 2022.

[11] "Timeswap – Medium." https://timeswap.medium.com/. Accessed 7 Jul. 2022.

next 1-2 months with features such as bidirectional pools — the same pool can be used to lend or borrow either of the assets instead of needing two separate pools as before, and an early exit mechanism for LPs and lenders — the user doesn't have to wait until maturity to withdraw capital.

As we stressed in the introduction of this report, Timeswap AMM is inspired by Uniswap's Constant Product Market Maker model. However, it uses a three-variable constant product:

$$X * Y * Z = K$$

Where:

- K is the Constant Product.
- X is the Principal Parameter, equal to the amount of borrowable assets in the pool.
- Y is the Interest Rate Parameter, equal to the interest amount per second.
- Z is the Collateralization Pool, equal to the insurance claims for lenders and collateral required by borrowers.

Additionally, there are two other pools:

- C= Collateral Pool, which is equal to the amount of collateral locked by the borrowers.
- A= Asset Pool, which is equal to the amount of assets in the pool. It is the sum of assets lent by the lenders and the debt paid by the borrowers.

While interacting with the pools, **lenders & borrowers change the variables such that constant product is always maintained**. Lending more assets into the asset pool **decreases the interest & collateral value to be locked**, whereas borrowing more assets from the asset pool **increases the interest & collateral value to be locked**.[12]

---

[12] "3 variable AMM - Timeswap - GitBook." https://timeswap.gitbook.io/timeswap/getting-started/amm. Accessed 7 Jul. 2022.

TVL in Timeswap. Note the 135% growth in the first week of July 2022. Source: Defilama

Blockchain

Timeswap has already launched its dApp on Polygon, a relatively cheaper and faster network compared with Ethereum.

Security Audit

Timeswap has conducted a third-party audit with Code4rena in Q1 2022. The process covered nine smart contracts.[13] This audit found a total of four vulnerabilities, of which one was of high severity and the remaining three of medium severity. Moreover, Code4rena also found ten vulnerabilities classified as low severity.

Moreover, as a team member explained on the project's Discord server, in 2021, Timeswap underwent numerous audits with top audit firms like Trail of Bits, PeckShield, and Quantstamp.[14] The reports for those three audits are not made public.

---

[13] "code-423n4/2022-03-timeswap - GitHub." 6 Mar. 2022, https://github.com/code-423n4/2022-03-timeswap. Accessed 12 Jul. 2022.

[14] Source: Timeswap Discord server

Roadmap

Team members discuss their project's roadmap frequently in community calls. These events take place via Timeswap's Discord server. However, there is no clear roadmap available in the project documentation.

A recent post of June 21st, 2022, did a recap of milestones achieved since the launch of the dApp on the Polygon Mainnet. Timeswap also states that it will continue introducing newer features to its community, including a major update within two months to its protocol (V2).[15]

Team

Most of the 15-strong team is based in India and have reputable careers in top companies in finance, engineering, and technology.

Ricsson Ngo,[16] Co-Founder. He also founded Einstar,[17] a software company, and Bondle Inc.,[18] a business communication platform that keeps discussions, decisions, and documents "at your fingertips."

Harshita Singh,[19] Co-Founder. A management graduate from NITIE-Mumbai and a Mechanical Engineer from Aligarh Muslim University. Having worked across industries like Technology, FMCG & Retail, she got diverse industrial experience across areas like Marketing, Branding, and Supply & Production Planning. Previously worked with Walmart as Manager of Supply Budgeting & Planning for Walmart India.

Ameeth Devadas,[20] Co-Founder. Previously Head of Product & Technology at Aurigin. He was an Angel Investor in Polygon and responsible for the area of Corporate and Institutional Banking at Yes Bank.

---

[15] **"Time traveling with Time Machine - Medium."** 27 Jun. 2022, https://medium.com/timeswap/time-traveling-with-time-machine-d21c2c7c6a49. Accessed 7 Jul. 2022.

[16] "Ricsson Ngo - Founder - Timeswap Labs | LinkedIn." https://ph.linkedin.com/in/ricssontimeswap. Accessed 6 Jul. 2022.

[17] https://www.linkedin.com/company/einstar/

[18] "Bondle." https://bondle.app/. Accessed 7 Jul. 2022.

[19] "Harshita Singh - Co-Founder - Timeswap Labs - LinkedIn." https://in.linkedin.com/in/harshita-singh-a1561a79. Accessed 7 Jul. 2022.

[20] "Ameeth Devadas - Co-Founder - Timeswap Labs | LinkedIn." https://ae.linkedin.com/in/ameeth-devadas-9717679. Accessed 7 Jul. 2022.

Anupama Singh,[21] Operations Manager. She is key in leading the project's operation and hiring-related activities. Prior to working at Timeswap, Anupama held various professorship positions in Engineering at Indian Universities.

Emmanuel Antony,[22] is a smart contract developer. He is a Rust Developer and a free and open-source development (FOSS) enthusiast.

Advisors

Sandeep Nailwal[23] and Jaynti Kanani[24] are listed as advisors. Both were Co-Founders of Polygon Technology, where they have worked for almost five years, and have a strong background in software design.

General Comments on the Team

The team has a strong leadership group and advisors already working on the project. However, they are looking to fill several openings: Smart Contract Developer, Business Developer, Quantitative Researcher, and Chief Marketing Officer.

As of the time of writing, no team members had previously or currently participated in activities that were controversial or had legal implications.

---

[21] "ANUPAMA SINGH - Operations Manager - Timeswap Labs | LinkedIn." 2 May. 2022, https://in.linkedin.com/in/anupama-singh-855619a1. Accessed 12 Jul. 2022.

[22] "Emmanuel Antony - Smart Contract Developer - Timeswap Labs." https://in.linkedin.com/in/emmanuel-antony?trk=public_profile_browsemap. Accessed 6 Jul. 2022.

[23] "Sandeep Nailwal - Co-Founder - Polygon Technology | LinkedIn." https://ae.linkedin.com/in/sandeep-nailwal-60709a33. Accessed 3 Jul. 2022.

[24] "Jaynti Kanani - Co-Founder - Polygon Technology | LinkedIn." https://ae.linkedin.com/in/jdkanani. Accessed 7 Jul. 2022.

Legal and Compliance Specifics

Jurisdiction

Timeswap is registered in the British Virgin Islands (BVI), a crypto-friendly jurisdiction. The government has discussed the prospects for the crypto industry and a regulatory framework for this sector. Currently, most crypto companies have to register as an "international business company" in the country.

The most recent framework of interest to the crypto industry is the "Guidance on the Regulation of Virtual Assets," published in 2020 by the Financial Services Commission. If an entity demonstrates that its activities are carried out outside the BVI, it is entitled to tax exemption.

The combination of these factors strengthens the view of the BVI as an attractive location for cryptocurrency businesses.

Partnerships

The quality of partners is of a high standard, as well as their quantity. Having at least three reputable partners, such as Multicoin Capital, Mechanism Capital, and Defiance Capital, the project has secured crucial resources for its first stages of development.[25] However, the precise amount raised on the seed round in October 2021 has not been disclosed to the public.

An extended list of reputable personnel contributed to the project as angel investors. Some of the names of them are Balaji Srinivasan (ex-CTO Coinbase), Surojit Chatterjee (CPO, Coinbase), Sina Habibian (Ethereum Foundation), Mihailo Bjelic (Co-Founder, Polygon), Alex Svanevik (CEO & Co-Founder, Nansen), and Calvin Liu (Strategy Lead, Compound Labs).

Timeswap has announced a partnership with Biconomy to integrate their Gasless function with its product.[26] This partnership aims to improve the experience for users of the Timeswap dApp.

---

[25] "Introducing Timeswap: Fully Decentralized AMM based money ...." 21 Oct. 2021, https://timeswap.medium.com/introducing-timeswap-fully-decentralized-amm-based-money-market-protocol-9912e472fb1d. Accessed 13 Jul. 2022.
[26] "Biconomy X Timeswap - Medium." 29 Jun. 2022, https://medium.com/timeswap/biconomy-x-timeswap-2af26ccd95e5. Accessed 7 Jul. 2022.

Legal Advisors

Keyur Shah[27] is listed as responsible for legal affairs at Timeswap. He was VP of Finance and Treasury at Polygon. Keyur is the founder and CEO of Ascent Advisors, a consulting firm incorporated in October 2020 and based in India. On his LinkedIn profile, he has received impressive endorsements for his skills in Accounting, Auditing and Financial Reporting.

KYC & AML

The project intends to carry out a KYC process before the token sale. However, the token sale is not publicly announced yet.

Token Classification

The TIME token will be a central tool in the protocol's governance.
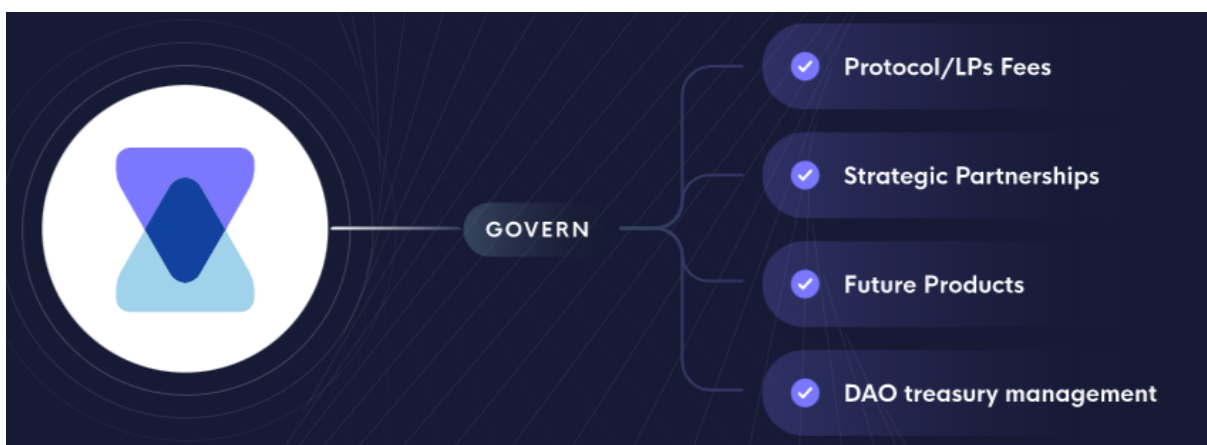
TIME token key features. Source: Timeswap

[27] "Keyur Shah - Founder & CEO - Ascent Advisors (IN) | LinkedIn."
https://in.linkedin.com/in/keyur-shah-551b31b3. Accessed 7 Jul. 2022.

Tokenomics

The TIME token has not been issued yet.

Per the publicly available communications,[28] the purpose of $TIME will be to facilitate the participation in the "Timeswap" protocol/network, which, when fully developed, is envisaged to be a fixed maturity lending and borrowing protocol for ERC-20 tokens built on the Ethereum blockchain.

It also stresses that "the Timeswap Protocol is not, and will in no case be, an enterprise, corporation, partnership or other entity or body corporate established under the laws of any jurisdiction, but a computerized consensus protocol based on which a public transaction ledger is generated."
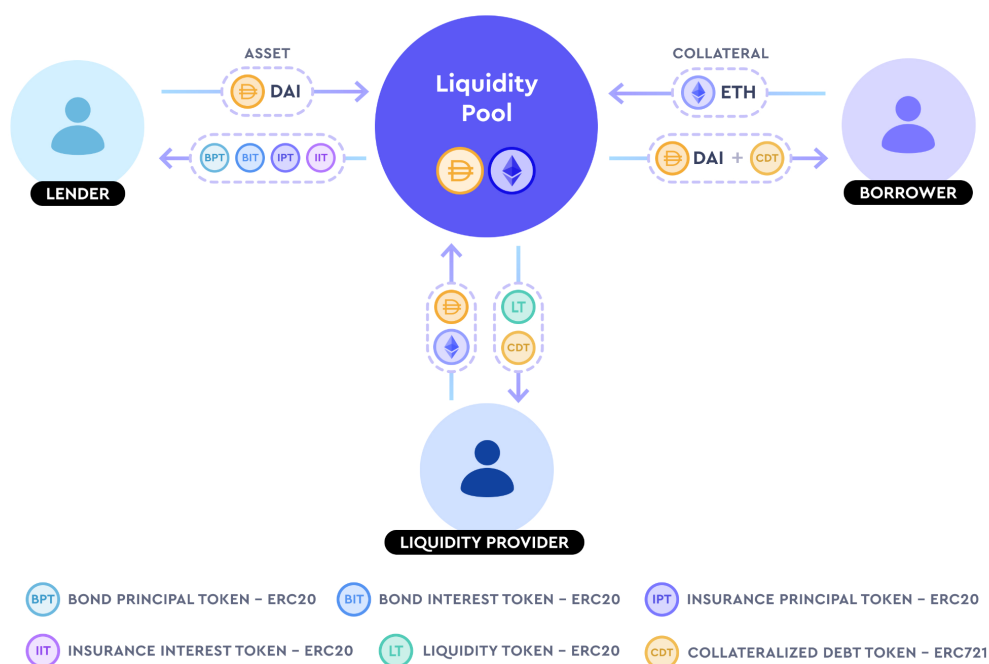
Time token and its role in the Timeswap project. Source: Timeswap Whitepaper

The protocol offers four kinds of native tokens to manage pool economics.[29] Each of the native tokens offers a unique utility and is minted according to the type of user interaction:

ERC-20 tokens:

---

[28] "Terms and Service - Timeswap." 22 Jan. 2021, https://timeswap.io/terms/. Accessed 7 Jul. 2022.

[29] "Native Tokens - Timeswap - GitBook." https://timeswap.gitbook.io/timeswap/getting-started/tokens. Accessed 7 Jul. 2022.

- Bond principal token;
- Bond interest token;
- Insurance principal token;
- Insurance Interest token and liquidity tokens;

Timeswap also features ERC721 collateralized debt tokens. They have an underlying debt in terms of an ERC-20 token, underlying collateral in the paired ERC-20 token, and a fixed maturity date.

ERC 721 token on Timeswap Protocol. Source: opensea.io

Social Media and Virality

Timeswap has a presence on LinkedIn.[30] At the time of research, it has 533 Followers and 15 employees listed on its profile. However, the company is not very active on the platform: its last post was four months ago.

Timeswap has been on Twitter since September 2020 and has 28.4K followers.[31] The project is very active on this platform, with 745 tweets.

Timeswap is active on Discord and conducts weekly community calls to receive input from its supporters, referred to as "time travelers." At the time of research, it had 3k Telegram subscribers and 27k Discord members.[32] Timeswap also has minted NFTs to reward community members. These tokens are part of a collection of 32 items the project has on OpenSea.[33] Over 11,000 wallets hold these NFTs — which have witnessed an uptick in value in the past three weeks.

The project's YouTube channel[34] hasn't gathered significant traction. Nonetheless, the channel features helpful explanatory videos on conducting a borrowing or a lending transaction and community call recordings (so far, only one out of the 18 calls is available). The Superteam Podcast, a channel with more than 80k followers, recently invited the Timeswap leadership to one of its transmissions. This video earned 4,652 views.[35]

The company is active on Medium, where its profile has 1.9k followers.

---

[30] "Timeswap Labs - LinkedIn." https://vg.linkedin.com/company/timeswap-labs. Accessed 5 Jul. 2022.

[31] "Timeswap (@TimeswapLabs) / Twitter." https://twitter.com/timeswaplabs. Accessed 7 Jul. 2022.

[32] Telegram: https://t.me/timeswap. Discord: http://discord.gg/timeswap

[33] "Timeswap - Collection | OpenSea." https://opensea.io/collection/timeswap. Accessed 3 Jul. 2022.

[34] "Timeswap Labs - YouTube." https://m.youtube.com/channel/UCY8rACVXfPNP-P3M0cCvuEw. Accessed 7 Jul. 2022.

[35] "Meet DeFi 2.0 ft. Timeswap - YouTube." 2 Jun. 2022, https://www.youtube.com/watch?v=rxkMj2M00g8. Accessed 12 Jul. 2022.

Risks to the Project

We have identified the following list of risks, which does not intend to be exhaustive. Furthermore, some of these risks may or may not materialize:

- **Industry Risks:** The success of Timeswap protocol is dependent mainly on cryptocurrency's widespread adoption. Therefore, given the current market conditions, it could take a long time for more users to engage with the dApp for lending and borrowing transactions. The majority of digital currency holders entered the market after 2021. Most of these people lack the knowledge to perform financial transactions in DeFi and could continue to use traditional finance to cater to their immediate needs. This scenario is further strengthened by the lack of liquidity in crypto and the broader global financial system in 2022.
- **Intense Competition:** Although Timeswap intends to explore a multibillion niche of DeFi, the landscape is dominated by large companies who have heavily invested in security and UI/UX. Thus, they could outperform Timeswap — even with relatively old technological solutions at the protocol level.
- **Hacks/Exploits:** the DeFi sector is frequently targeted by attacks, including on the Polygon ecosystem, which hosts Timeswap. The project could be the target of attacks such as wallet hacks, phishing, and smart contract bug exploits. Comparatively, however, it is important to stress that this project is not exposed to hacks that explore oracle vulnerabilities.
- **Third-party Risks**: the basis of this project is the Ethereum blockchain. Thus, there are risks associated with the network's evolution: notably the increasing difficulty time-bomb, a 51% attack after the transition to proof-of-stake, and competition with DeFi projects based on other Layer 1 blockchains, for example, Cardano and Polkadot.
- **Lending/Borrowing risks:** This may involve several risks relevant to lending markets. For example, there is a risk that loans are not adequately collateralized, exposing the lender to credit risk, and there may not be sufficient liquidity and a deep market for lending products. As per the documentation, the default risk is mitigated via the insurance token model.

Ratings

Everything you see in this report is the aggregate result of an extensive research process carried out by a distributed team of researchers and crypto enthusiasts around the world. The process consists of 60 questions divided into three phases. Researchers are called to answer these questions about a project while providing links or screenshots as evidence to support their answers. For every answer, they also provide a rating from zero to ten. The average of their ratings is detailed below.

Our researchers gave Timeswap a final rating of B+.

SCORE BRACKET	PROJECT RATING
86 - 100	AAA
81 - 85	AA+
76 - 80	AA
71 - 75	A+
66 - 70	A
61 - 65	**B+**
56 - 60	B
50 - 55	C
31 - 49	D

Disclaimer

This Report is for informational purposes only and/or all or any of its content thereof, should not, may not and will not be taken to constitute, either as a whole or in part, any investment advice or recommendation or similar, regulated, or authorized advice, and D-Core by producing, disseminating, giving away, or making available this Report does not, should not, may not and will not be taken to advise on investments, or carry out any similar activity, or any regulated activity or any other authorized activity. D-Core is not authorized by the Financial Conduct Authority or by any other competent EU or elsewhere or otherwise competent authority to carry out any regulated activities and/or any activities within the scope of these authorities' competence.

D-Core excludes and disclaims all liability and/or responsibility whatsoever and/or howsoever caused, arising out of any actions, or omissions taken, or made by any authorized and/or other recipient of this Report in reliance on, or arising out of, or in connection with any or all content of this Report. Any authorized and/or other recipient of this Report acknowledges, accepts and agrees that they carry out their own independent research and act in their own sole risk in reading or using any or all information contained in this Report. In any event, recipients of this Report are urged to seek professional advice before making any potential investment decision in relation to the project described herein. Any authorized and/or other recipient of this Report accepts this Disclaimer in full. For the avoidance of doubt, this Disclaimer is binding against any recipient of this Report whatsoever.